Band 1

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)

MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDGLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*

>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV
>TRINITY_DN1676_c0_g1_i12.p1   type:complete   len:1631   gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD

DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*

>TRINITY_DN1676_c0_g1_i6.p1   type:complete   len:1631   gc:universal
TRINITY_DN1676_c0_g1_i6:206-5098(+)

MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*

>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)

MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*

>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)

MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP

VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN319_c2_g1_i1.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i1:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD

MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMPVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPWDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)
MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN585_c0_g1_i5.p1 type:internal len:250 gc:universal TRINITY_DN585_c0_g1_i5:747-1(-)
KIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPS
DTIENVKSKENVKSKIQDKEGIPPDQIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLV
LRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQ
KESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN585_c0_g2_i1.p1   type:5prime_partial   len:152   gc:universal
TRINITY_DN585_c0_g2_i1:598-143(-)

LTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRG
GGKKRKKKNYTTPKKIKHKRKKVKLAVLKYYKVDENGKITRLRRECPSESCGAGIFMAQHFDRQ
YCGKCCLTYVFSKPGQDAK*
>TRINITY_DN554_c0_g1_i3.p2 type:complete len:268 gc:universal TRINITY_DN554_c0_g1_i3:1464-661(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVLEVEPSDTIENVKSKIQDKEGIPPD
QQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVTITRRDANFCQNLNWKNNNTRS*
>TRINITY_DN585_c0_g1_i8.p1 type:3prime_partial len:337 gc:universal
TRINITY_DN585_c0_g1_i8:1008-1(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLE
DGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQR
LIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN585_c0_g1_i2.p1 type:internal len:184 gc:universal TRINITY_DN585_c0_g1_i2:549-1(-)
KIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPS
DTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGK
TITLEVEPSDTILRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN101_c0_g1_i1.p1 type:complete len:129 gc:universal TRINITY_DN101_c0_g1_i1:416-30(-)
MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTL
HLVLRLRGGVIEPSLRILAQKYNCDKMICRKCYARLHPRAKNCRKKKCGHSNNLRPKKKLK*
>TRINITY_DN585_c0_g1_i4.p1 type:complete len:232 gc:universal TRINITY_DN585_c0_g1_i4:847-152(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFGECKIK
NSRQGRNSTRPAKIDFCRKTIGRWKNIE*
>TRINITY_DN554_c0_g1_i5.p1 type:3prime_partial len:373 gc:universal
TRINITY_DN554_c0_g1_i5:1118-3(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLE
DGRTLSDYNIQKESTLHLVLRLRGGMQIFTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLE
DGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLT
>TRINITY_DN40728_c1_g1_i1.p2 type:5prime_partial len:124 gc:universal
TRINITY_DN40728_c1_g1_i1:1-372(+)
KTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGVIEPSLAVFARKYNCDKMICRKCYARLPARAVNCRKKKCGHTNMLRPKKKLK*
>TRINITY_DN152_c0_g1_i15.p1 type:internal len:141 gc:universal TRINITY_DN152_c0_g1_i15:2-421(+)
FGSRNIGPSHHCSHAGVAQHHQFDRRPIAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGI
PPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLDVEASDTIDNV
KAKIQDKE
>TRINITY_DN152_c0_g1_i2.p1 type:internal len:105 gc:universal TRINITY_DN152_c0_g1_i2:1-312(+)
QRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLDVEASDTIDNVKAKIQ
DKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
>TRINITY_DN152_c0_g1_i10.p1 type:internal len:180 gc:universal TRINITY_DN152_c0_g1_i10:1-537(+)

QRLIFAGKQLEDGRTLSDYNIQKERPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGHA
PPCLAPARRHADLRQDADRHPARPAAPDLRREAARGWAHPFGLQHPEGIDAALGGKTITLDVE
ASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
>TRINITY_DN173718_c0_g1_i1.p1   type:3prime_partial   len:112   gc:universal
TRINITY_DN173718_c0_g1_i1:37-369(+)
MQIFVKTLTGKTITLEVEPSDSIENVKTKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGAKKRKKKNYTTPKKIKHKRKKVKLAVLKYYKVDEN
>TRINITY_DN1580_c0_g1_i3.p1   type:5prime_partial   len:179   gc:universal
TRINITY_DN1580_c0_g1_i3:1-537(+)
RLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGRGGHCQVPCGIFDDPKLVADVKEAVATITKA
MAEITRLSAEALSPLSINQITRWVNTKEEHCGKIISLMSEYCMCQRVKPPSDPKSPFKGTATEKAED
QYIAALQSHHKVMLCAVKCKQTVDPANAEAMEAAVATMSKMYLPA*
>TRINITY_DN40728_c0_g1_i1.p1 type:internal len:105 gc:universal TRINITY_DN40728_c0_g1_i1:1-
312(+)
HAVSGGGAGPESGPQRAQPALAVMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQR
LIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFV
>TRINITY_DN1465_c1_g1_i1.p1 type:internal len:102 gc:universal TRINITY_DN1465_c1_g1_i1:2-
304(+)
QRAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQ
KESTLHLVLRLRGGVIEPSLAVLARKYNCDKMICR
>TRINITY_DN152_c0_g1_i9.p1   type:5prime_partial   len:152   gc:universal
TRINITY_DN152_c0_g1_i9:1-456(+)
QRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLDVEASDTIDNVKAKIQ
DKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGHAPPCLAPARRHADLRQDAD
GEDHHARRRGERHDRQCQG*
>TRINITY_DN10545_c0_g1_i1.p3   type:5prime_partial   len:162   gc:universal
TRINITY_DN10545_c0_g1_i1:3-488(+)
QLEDGRTLSDYNIQKESTLHLVLRLRGGHCQVPCGIFDDPKLVADVKEAVSTITKAMTQIGELSAT
MNAININQMTRWVNTKEEHCSKIISLMSEYCLCQRVKPIGDPKCPFKSAEDYVAALESHHKVML
AAVKCKQNVDPAIGAALSEAVAEMSKMYMPA*
>TRINITY_DN103165_c0_g1_i1.p1   type:internal   len:242   gc:universal
TRINITY_DN103165_c0_g1_i1:723-1(-)
QLEDGRTLSDYNIQKESTLHLVLRLRGGMPIVGLGNFQEAGESEGASGKELPPWGPGGIYHEKQV
GSMCAVHCVNNMLQGPLFDYGDFGMVAQQLDQKERQLLGGSADLDYGNARADGFFNVQVIR
TVLERAGYTMEPMTNDAVQNGKMDTAKETAYILNKREHWFSVRRIGREWFDLNSCLKTPRHYT
DRDVRWHIGDGVKEGYSVFVVRGDFPRCALEEDSKKLVEAVQGCGRPDQGCS
>TRINITY_DN8227_c0_g1_i1.p1 type:internal len:135 gc:universal TRINITY_DN8227_c0_g1_i1:404-
3(-)
GPGRAGGRWKPPGGGGAAARHGAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQ
QRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGVIEPSLAVLARKYNCDKMICRKCYARLPAR
AVNC
>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)
MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGGQQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA

QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP
PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA
DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*
>TRINITY_DN1030_c0_g1_i1.p1   type:complete   len:1439   gc:universal
TRINITY_DN1030_c0_g1_i1:4522-206(-)
MAKVRVLALLMLICVTASNTQDGVSVKIGDASIVSKEEVFPFDVQKGEKGQPGDDGEPGNNGAP
GRQGSEGPQGPDGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGP
KGYQGETGEPGSPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQR
GPKGSKGEVGELGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPI
GPAGPDGPAGPQGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQA
GPAGQDGVDGAVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGQQGEQGSTGVQGSVGGR
GEKGPRGLTGQAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERG
FNGPRGEKGSRGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIP
GSQGAAGSKGDKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARG
GQGLPGPPGAQGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRK
GPSGRPGQKGSRGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGP
RGAMGQRGAPGPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAG
APGESGLKGFKGNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPI
GLPGEQGPQGPPGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRP
GPRGKQGPTGYVGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPG
ADGADGLPGRNGNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGA
DGEKGADGIKGETGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMG
PQGDIGDKGPIGPPGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPS
MLPPWMGGGLADGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNV
MENKFKTKVEELKTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTC
TFSVNEDDEPTVTTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLG
LLSKTATQDVKVHCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITD
GCSANSNSVAHTHLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA

MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVKDQGNPVLSARTLIDIFVNDVNDNPPVFISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV

TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS

SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL
>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)
MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN3795_c0_g1_i1.p1   type:5prime_partial   len:867   gc:universal
TRINITY_DN3795_c0_g1_i1:2719-119(-)
LEFIGKLKASFTGELEISMQMVGMIYEPFGVEKVAFGNLFMSLGVTIAAGLPSFQIGAKIMVGKGV
ANKGSSEADMFIFEGYFGFNPADPTDNYIYAKRSGDPLTLGNFIKNFEIDATLPQKIADSGFYGETIF
SFSAAGKEVEELGLEIQAGIYFKGALKILDFDIYAELNINTDPENLKIYANITLSPISWIGGLLRISRSA
SDDKNGPFLIVDIDAESVALEIQGFIYVLGISNEIAVMINETHFYFHIAGNLFSVLSASLTVEASYGVE
TLEDMSYSFRGCVTLDLRRIGEIVFQTMQDAQKAVSRAMAKAQQKIDDAKLAVANAFKKVKEW

KQGIENYKARLRARSAELERKKAELNYSCKDRCGKVCIGFLDWNPHCWKVWGHWCGCPKWN
SCKWKADDIICIAGCELKRAWGKFVTWAEQVGVQIMLGLSEVAQTLLSGLDFFEAIAQGVLSFAS
GFLSVVETFTNAVLNGIGEIVRAAANVIVVEHFCLSGHLRPVESACVACDAKIRIFNQPIEWKGEF
CIDLSFFQVIGHKTAVQHTPEIAEIDAKVQEFESEGNKVDAQVGDMKTEENKQNKEVGDKTSKN
VNDENFRARRSHVPTEEEAYYYRLAYDRLPEVNTRSFATEQSMKDGAPWLLTQTWTPSKRSLTPD
PSTLHRRILETDNEDHCKNVENLYSNYQNVAVGFGTFLKSADKEKAGFEAMRRSYIQGMNYLKN
EFEYGDKKHNVTDEEREHVKYWEEYVKNGLNSHIEKTESLLKTQRKSYIPDFRNQVNQIFKEQTK
STLPEYIKKMKSHVIGFYQKRSDIPKDHLEKQLKKWNILHQVLTDISSSETASYRDLSLQVASVNN
MLTDLRRSDIPCAA*
>TRINITY_DN2577_c1_g1_i1.p1   type:complete   len:937   gc:universal
TRINITY_DN2577_c1_g1_i1:3082-272(-)
MKTKLGQDTKLTIEGTFSRSGFTLAAGITTSLELAKDLSLTEAKLELEFTKDERSVALSCTLKYNNK
ELSGKEGLEFIGTLKVSFSGELEISMQMKGMVYEPFGVEKLAFGNIFLSLGVTIAGGLPSFQIGAKIM
IGKGVKNKGGEGVFIFEGYFGFNPADPTDNYIYAKRSGDPLTIGNFIKNFEIEATVPKKIANSGFYG
ETIISFSAAGKKVDELDLEIEAGFYFKGALKILDFDIYAELKVNPDPENRALFANITLSPLNWVMGL
LRISRSKDDDKNGPFLIVDIDSEKTAVQFEGFGYCLGIGAEIAVVVNETHFYFHFAGDLFTVLHASL
TVESAYGGDSISDMSFSFKGCVGLDLRKIADIVFKTMQDASKAVSLALGKARKKVENARGAVTAA
FDKVRKWRQGIESYKARLRARSAELERKKKELNYSCRDRCGKVCVGFLDWNPYCWKVWNTWH
GCPKWNPCRWKVDDIICIAGCELKKGWNKFVTWAEQVGIQIMLGLSEVAQFLLKGVEAFEKVAQ
GVLTFAVGVLNVVESFAKGVLAGVGAIVKAASNVIVIDRFCLSGNLKPVESACVGIDAKFSIFKVPI
EWKGEFCIDLNFFQIIGKKTAVKHTPAIAEIDSKVQEFESQGNEIDSKVGDMKDEESKQGNEVETE
TEKPYDINRRKRSHVPTAEEVYFHKLAYDRLPKVNTRSFETETSMKDGAPWILSKTWKPSKRDIVK
EESTLEKRILKTDSPDHCKNIENLYSNYQNIAEGFGTFLKNADKQKAGFQAMKRSYIDGMNYLKD
EFNYGDKRQNVTDEEREHVKYWEEYVKNGLTSHIEDTESLLKAQRKTYIPSFRKQVNQLFMEQT
KSTLPTYINKMKNTVIKSYHKRSDIPKEHMERQLRKWNNLHEALGEIASSETASYRDLSQHVASV
NYLLTNLRRSDIPCAA*
>TRINITY_DN2577_c1_g1_i2.p1   type:5prime_partial   len:1087   gc:universal
TRINITY_DN2577_c1_g1_i2:3532-272(-)
VTRKLYKEEEEEEGEGEEEEGEEGEKDGKEKNGKDGDKSKKKIVDGKKSSRVVKKASKTSNKKIV
QKGRTLKKKNQVKGEAKQKLAKGRALISKRSDGEEEGGEGEAEEEEEGGDFSLSHLSQVDLVRG
LQVSAEFALPGECKKDKLCEWMKTKLGQDTKLTIEGTFSRSGFTLAAGITTSLELAKDLSLTEAKL
ELEFTKDERSVALSCTLKYNNKELSGKEGLEFIGTLKVSFSGELEISMQMKGMVYEPFGVEKLAFG
NIFLSLGVTIAGGLPSFQIGAKIMIGKGVKNKGGEGVFIFEGYFGFNPADPTDNYIYAKRSGDPLTIG
NFIKNFEIEATVPKKIANSGFYGETIISFSAAGKKVDELDLEIEAGFYFKGALKILDFDIYAELKVNPD
PENRALFANITLSPLNWVMGLLRISRSKDDDKNGPFLIVDIDSEKTAVQFEGFGYCLGIGAEIAVVV
NETHFYFHFAGDLFTVLHASLTVESAYGGDSISDMSFSFKGCVGLDLRKIADIVFKTMQDASKAVS
LALGKARKKVENARGAVTAAFDKVRKWRQGIESYKARLRARSAELERKKKELNYSCRDRCGKV
CVGFLDWNPYCWKVWNTWHGCPKWNPCRWKVDDIICIAGCELKKGWNKFVTWAEQVGIQIM
LGLSEVAQFLLKGVEAFEKVAQGVLTFAVGVLNVVESFAKGVLAGVGAIVKAASNVIVIDRFCLSG
NLKPVESACVGIDAKFSIFKVPIEWKGEFCIDLNFFQIIGKKTAVKHTPAIAEIDSKVQEFESQGNEI
DSKVGDMKDEESKQGNEVETETEKPYDINRRKRSHVPTAEEVYFHKLAYDRLPKVNTRSFETETS
MKDGAPWILSKTWKPSKRDIVKEESTLEKRILKTDSPDHCKNIENLYSNYQNIAEGFGTFLKNAD
KQKAGFQAMKRSYIDGMNYLKDEFNYGDKRQNVTDEEREHVKYWEEYVKNGLTSHIEDTESLL
KAQRKTYIPSFRKQVNQLFMEQTKSTLPTYINKMKNTVIKSYHKRSDIPKEHMERQLRKWNNLH
EALGEIASSETASYRDLSQHVASVNYLLTNLRRSDIPCAA*
>TRINITY_DN286_c0_g1_i4.p1 type:complete len:224 gc:universal TRINITY_DN286_c0_g1_i4:40-
711(+)
MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNSHKAMTDCEESLCKGHNCNSDVNDAEQVERKRVGPYENTLKCTTGL
QTKWPSIPFASANIPTAVEECFPGTKDCVTVEYDYIFQFESKIATLYNQFRLPTVQKMCNRPNVDQ
CYKWCTILSIHQNMDNCRVKCCQSDNCNA*

>TRINITY_DN286_c0_g1_i2.p1 type:3prime_partial len:106 gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)
MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN
>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-559(+)
MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*
>TRINITY_DN1058_c3_g1_i1.p1 type:internal len:485 gc:universal
TRINITY_DN1058_c3_g1_i1:1452-1(-)
IGSLTDWRCVCNAPGYYADANNSRRCRKEMCSENDIDAEKICGTGAISCVGPVVSPICFCDVKKN
VVSSTDGSRCIPASCKTNKTAITQCGNGNSCTGSSDNYICVCNSYGYKLDDNNNQACVEKTCSDS
DADFIEICGQGGLSCTGTMKKPVCECDHTKNFVPSDDRRSCVLASCRANPVVDAACGNMNTCY
GSESSWICLCNAPGSMLNPNNVRECLTGTCENGDIDVQTVCGRGALSCKGSVASLTCECNNHKG
YVQSPDRRSCLPSGCRQNTTMQEQCGEVNECIGSLTDWSCICSAPGYRPHDSDQMKCHRRMCY
DANVNPVEVCGVGAIGCNGSVVTPQCTCNTSAYYVPSLDGSMCIPAPCHSNKDALKKCGVGNS
CFGTTNNYVCVCDSFGYRLDDTDPHKCVEIQCDDDGVDIEKICGQGSTICDGTARKPFCQCDHA
SHFVPSLDSSSCLLASCRANGTVTDMCKDGNTCFGSM
>TRINITY_DN2971_c0_g1_i1.p1 type:complete len:239 gc:universal
TRINITY_DN2971_c0_g1_i1:125-841(+)
MDAIFGERPISFKALTDFSKLEASTKKHLKNVYASLAISLTSAAVGAGLHVLTNILKGGILAGLGTI
GFMLAIAFTSNEPKNQLKRLGFLIGMAFCTGLSLGPLMDAVIQIEPTIISTAFFSSAMIFVCFSLCALL
VEDRSFLYMGGSLLSGMSIMMVMGLMNIFFQSQLIFDLNLYLGLFLFCGFILYDTQLIIEKRRNGDT
DFIWHSVDLFLDFINIFRRIMIILANKEKKNKRKN*
>TRINITY_DN8155_c0_g1_i1.p1 type:internal len:249 gc:universal TRINITY_DN8155_c0_g1_i1:744-1(-)
DPDSEECQEEEEEEGGEEEATEGEEGNSTSKTSEGGNKKKKKKTQKKKVGKVLGKGQRKLRNKR
KNLKKKNKSKPKKKGVNKKVALSKRSDDETTDDEEEEEEEEDSGDFSLSHLGSVDLVRGLYISAEF
AIPEDCKKDKLCEWLKNKVGAEAKLTIEGTFDTNGFKIAAGITMNLALSDDLFLTEAALELEFTKS
ERSVALACKLQYNNVELSGKEGLEFIGKLKASFTGELEISMQMVGMIYEPFG
>TRINITY_DN161_c0_g1_i2.p1 type:5prime_partial len:399 gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN161_c0_g1_i3.p1 type:5prime_partial len:399 gc:universal
TRINITY_DN161_c0_g1_i3:1450-254(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKEEYDESGPSIVHR
KCF*
>TRINITY_DN161_c0_g1_i1.p1 type:complete len:377 gc:universal TRINITY_DN161_c0_g1_i1:1384-254(-)

MADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQS
KRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKMTQIMFE
TFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGYALPHAIIRLDLAGRDLTDYLMKI
LTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLEKSYELPDGQVITIGNERFRCPETL
FQPSFIGMESAGIHETTYNSIMKCDVDIRKDLYANTVLSGGTTMFPGIADRMQKEISALAPPTMKI
KIIAPPERKYSVWIGGSILASLSTFQQMWISKEEYDESGPSIVHRKCF*

>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)

MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*

>TRINITY_DN1058_c0_g1_i1.p2   type:complete   len:117   gc:universal
TRINITY_DN1058_c0_g1_i1:5843-5493(-)

MLIPMMVQNVCYGHIDTLVVLLFQYIQCFLVRKSPLSQHLHHCMKFQYIVYYCCHQACNQVHC
KCKQNYQLCRCMYFHFHIALMPFCWFGNFLVYNKFHLATVRSKLQCHMYIEVL*

>TRINITY_DN1058_c0_g1_i1.p3 type:complete len:115 gc:universal
TRINITY_DN1058_c0_g1_i1:1992-2336(+)
MQLQCVVKKLQVVRDILQNQYVHVMRQHNIYHHLIAPVVLRLPVKKMMLLGKHVFQATLALV
VMTNLYAYVINLAIIKILLTIENVSEKNAKILLLIMTMKKFVVWVVSVAQDM*

>TRINITY_DN1058_c0_g1_i1.p4 type:complete len:111 gc:universal
TRINITY_DN1058_c0_g1_i1:5265-4933(-)
MPFGDCTYPMLLSHSQVTLLIVPLHPNAPLPHTIIGSSFPLSQVSCKHSLILLGFSMVPGELQSHIQD
DLLPKHPLTFPQATATSELALQLARTQDRLSSDGIKNISLLH*

>TRINITY_DN1058_c0_g1_i1.p5 type:complete len:102 gc:universal
TRINITY_DN1058_c0_g1_i1:1240-935(-)
MTSIKSWYVVFCCITYASSLAQKSSTTSNSSATESQNVNIWIITFCFNTFLWISWIISKTICTTNTSPIYF
ASFACVSRKTLNTNCWICVTWHWYATFFIF*

>TRINITY_DN1058_c0_g1_i3.p1 type:complete len:2581 gc:universal
TRINITY_DN1058_c0_g1_i3:134-7876(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY

KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTGIKHTLPEIDGLISDINENLRSV
DQTKLYTITARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSS
CTKDSKVGWLSSIFS*
>TRINITY_DN1058_c0_g1_i3.p1   type:complete   len:2581   gc:universal
TRINITY_DN1058_c0_g1_i3:134-7876(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTGIKHTLPEIDGLISDINENLRSV
DQTKLYTITARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSS
CTKDSKVGWLSSIFS*
>TRINITY_DN1058_c0_g1_i4.p1   type:complete   len:723   gc:universal
TRINITY_DN1058_c0_g1_i4:366-2534(+)
MDRCRMGNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTL
MNLTCQCDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHAT

DEKVCSKKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNC
GFGNTCRGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCG
EFYHPAHDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPC
RIEQCGSGKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISC
EGTYFKYKCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKY
GLYGSGTSKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSV
VQPCDKTCGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRP
YFVHEYVEPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVD
QTKLYTITARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSC
TKDSKVGWLSSIFS*
>TRINITY_DN1058_c0_g1_i2.p2   type:complete   len:1300   gc:universal
TRINITY_DN1058_c0_g1_i2:4090-7989(+)
MAACGNENKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTM
YHFECECNNTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPH
KTNFQMCHQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTN
ETIMAQCGEGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIG
TMRDPICQCNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNP
NNIRECLHETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNS
TMHELCGDGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCV
GSITEPRCTCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLD
DSNNKRCIEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDT
IMDRCRMGNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTL
MNLTCQCDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHAT
DEKVCSKKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNC
GFGNTCRGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCG
EFYHPAHDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPC
RIEQCGSGKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISC
EGTYFKYKCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKY
GLYGSGTSKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSV
VQPCDKTCGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRP
YFVHEYVEPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVD
QTKLYTITARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSC
TKDSKVGWLSSIFS*
>TRINITY_DN691_c0_g1_i1.p1   type:complete   len:1726   gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGTGPRGQSGGKGAVGFPGKPGPPGVVTIDEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD

RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG
QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*
>TRINITY_DN691_c0_g1_i2.p1   type:complete   len:1673   gc:universal
TRINITY_DN691_c0_g1_i2:5503-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEP
GLDGDVGEKGEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVR
GETGEEGPKGDRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPG
AQGEKGDQGQKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGP
DGPKGNEGEKGDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVK
HSQTTIVPSCPAGMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVAS
RNDYSFWLSTDEPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAG
YSFLMYNSAGADGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPK
SETLKAGNLKTRVSRCSVCMKTVRNGNFP
>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG

QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE
>TRINITY_DN1616_c0_g1_i3.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i3:218-11782(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE

CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR

>TRINITY_DN1616_c0_g1_i7.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i7:218-11782(+)

MIIFLAFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANEGNKASQDTNGKVEKDGEKVETLKVDISDINKAI
KDLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKF
NSTSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNT
GDVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNV
YVGYHPSTPNQRPNFDGCINQRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVE
FDLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDL
GNGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLP
QRAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNL
KQNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWH
TLSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEI

22

NLASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPK
ETTTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGS
TTTAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPT
TPEELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTA
ENDGMMISSEPSNLYDYEVVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTL
TIDGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITE
AYDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDR
KVVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPA
FGGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN1616_c0_g1_i6.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i6:218-11782(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK

DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAESITTTAAPITTTATEPITTTESITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTLEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN11377_c0_g1_i1.p1   type:complete   len:804   gc:universal
TRINITY_DN11377_c0_g1_i1:3179-768(-)
MKQNWYNYFLLVTFAVCIIQYTNGQEERDSNPCVQATTCEACMQANPDCYWCRDVNYTEGEN
FSRDRCNLLIEFNDGCANLTSISSAFEPGQNSNFSDTVQVQPQTVTLDLRPGQPAVFNISVKPAPDF
PVDIYFLFDASFSMKDDLEKLEQLGAAIAQSINNITKNYRLGFGTFVDKKAVPFVEGPLFPTFPCSR
QVKVDNCAPVFPFRHTFSFSKNTTLFQQAVADQPLSGDLDRPEGSFDGLMQVVVCDQKIGWQPR
GKARRIVLLATDALPKIAGDGRLIGDLLQNDETCHLSPLNSDRSVLEYSESLTMDYPSISQLREAM
KKYEITPIIAVTEDVQDVYKDIANSWESLLAAFGVLNNDSSNIVDLVRENYKKISSTVRLLETKNEY
LDFEYKQLSPECQETLTSPNECEKVAIGQQVDFQVSVTLKKCPPEEENAANRGDIDIPGFGQVKIN
LNYLCTCPCSNNAIPNSVLCNTTGSLDCGICKCNQGFFGSKCECDETTVSRNDTLKCQSDQNDPS
FICSNQGICLCGVCDCFRVAAPRIISGKYCECKNFGCPKSRGQECGGDERGTCVCGQCKCKKEYA
GVDCGNFNCTEIEGPRCTKDGVQCSNRGFCDCTLGGCNCNQGYQGKYCEKCVTKNCKCNDLR
NCVLCKAYDRDDLNCTGCEYLDLQRVNDTQKTCTVQFNETCSAYYHYEIDPTQNQTQTQNVTV
YLEDDFFCVVPIVAGEPNSLWIILGIIAGIVLIGLLLLLIWKLLLILQGRREYNKFETSRTGSQWEQDQ
NPIYAPPDQKFDNPVFGGEF*
>TRINITY_DN1071_c0_g1_i3.p1   type:internal   len:375   gc:universal
TRINITY_DN1071_c0_g1_i3:1124-3(-)
DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTPATTTESTTTTLPTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTQATTTTTKATTTTP
ATTTTKATTTTKATTTTPATTTTKATTTTKATTTPATTTTKATTTTEATTTPTTKPCECKVLQPVGV
SDGRIPDNQMTANSVLVNVSGPTFTGASQARLNNKPSKDGVGAWEPAQQEEIYLEVHFNKIEDV
REIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDEDLYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVS
VGDPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPT
>TRINITY_DN51907_c0_g1_i1.p1   type:3prime_partial   len:421   gc:universal
TRINITY_DN51907_c0_g1_i1:1262-3(-)

MITRGVTSITLELQDLQRNFNGSYKCIAKNLLGKREKILTLIVFDNPDPPINLKTESSTSTSILVTWES
PIFIGNSPITNYTVYYRLSNESIVINRTTTALYFNLTELVPAQEYIIKVMTSNRYFDSDFSGVIIRNTGE
AVPGEPTNFSAKHNNQSQQLYLNWDTPNPTNGMVSSYNYCYQMTGEKAWICKDTTDNSTTMI
NIKNLEKYTLYNVKVQARTSAGFGNFAVLNDIRTREEVPDNVCGIRKYIESRKIIVRWKPPLNKFG
ELRNYKVDFKNDDDSSDYFNICDTLETSCTIAKYILPFQKYVVRIETRNYLFSNSTTIAVTTQAEPPP
APSESLPAPSDDYVKEKHFTIKLVEFNESNGPIQKFDVIVVKRLENSSPVDSPSSYTNNDIASGVNG
LYIALRKNGAPKQNQEVQ

>TRINITY_DN4364_c0_g1_i1.p1   type:complete   len:545   gc:universal
TRINITY_DN4364_c0_g1_i1:1962-328(-)
MEMSPPDNKSPAELSEAGTSYFDEKIPIPSEESEPTGKFKFSFKKLWAFTGPGFLMSIAYLDPGNIES
DLQQGAVAQYKLLWVLLVSTVIGLLMQVLAARLGTVSGKHLAEVCHERYPKVPRIILWLMVEMA
IIGSDMQEVIGTAVAFYLISNGKIPLYGGVLITICDTFVFLLLDKYGLRKLEVFFGFLITVMAVTFGYE
YVTVAPNQGQLLKGMFVPGCSDCNKDAATQAVGIVGAVIMPHNFYLHSALVKSRDVDRENRRS
VKEANIYYFIESAIALLVSFIINVFVVSVFAQAFYGKTYGDVYQNCLAHHNPHASYFNKTGDHMN
DPIEGDLFNGGIFLGCQFGSFAMYIWAIGLFASGQSSTMTGTYSGQFAMEGFLKLSWKRWKRVLLT
RSIAIIPTFALAFFQGIRNLTGMNDWLNVLQSLQLPFAVLPLLTFTNDITVMKEFKNPRSVKIITWIL
AIVIIGINMYFSALNLTNITMKILYLPAILFTIIWLTFYALMAYYALDLKFLDSISWLRRPKVSYEKFK
NYQTVGDDSRDT*

>TRINITY_DN11595_c0_g1_i1.p1   type:complete   len:510   gc:universal
TRINITY_DN11595_c0_g1_i1:1768-239(-)
MLLLLIFCFVGHVYSFYVPAMAPHEFRKGDTVELKAVKMTSVKTQIPYDYYTLAFCDPAEKHYVP
ENLGEILRGDRIVNTPYNIKMDTEAKCQTVCPKKKISAKDSDVFIKRIREGYHVHMIIDNLPAATK
FQTEDGTPQFSHGFLLGAINNKRVFLYNHLQMIIYYNRDEKKDLYRVVGFEVYPTSVKNAESLDN
NQCKYPEKGQAEVLELNENAENEVQYSYSVQFKASTIRWASRWDNYLKMDNTQVHWFSIINSIV
IVLFLTGIMAIIIIRTLRRDIANYNKEDDMEDNIEETGWKLVHGDVFRPPRYPMLLSALIGSGVQLF
CMVLITIGFAALGMLSPASRGSLMTAIIFLYVFMGLFAGYYAGRLYKTLKGCHWKRAALMTGLLYP
GFVFSISFFLNFFLWGKESSAAIPFTTMIALFCLLFGISIPLVHLGYFFGYRKAPYTHPVRTNQIPRQV
PDQVWYMNPFVRIIIGGGDHFLCLDHVHYTYFSMQCSTLCQSWRLST*

>TRINITY_DN79126_c0_g1_i1.p1   type:complete   len:115   gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)
MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS*

>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK

MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYVIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN121418_c0_g1_i1.p1   type:complete   len:259   gc:universal
TRINITY_DN121418_c0_g1_i1:1061-285(-)
MAENDIGDWFRSIPIISRWWFVLSIAFPLLGRFGLLPIYYMILDFNLVIYKFQIWRLFTSIVFFPLSPM
NGFHYLINLYFLYNYSTRLETGVFDGRPADYLFVLVFNSIALILLGFALNLYLLMDPLILSVLYIWCQ
LNKDTIVSFWFGSQFKAMYLPWVLAAFNMILGQGGLMEIIGICVGHLYFFLMFKYPQDFGGRRFI
STPSFFYNYLPNRRGGVAGFGQAPVGRRNPDEGRGRGGGGGFRGMFPGGGQRLGDQ*
>TRINITY_DN1936_c0_g1_i3.p1   type:internal   len:1070   gc:universal
TRINITY_DN1936_c0_g1_i3:3208-2(-)
GEYKPTLGRCLSFWYHMYGSHVGELNVLVLQNKSRSAPIWNLKGNQGNVWRPSRVTIKSAVNH
NIIFEGRTGDGYMGDIAIDDVMMSEGPCTDYGNCDFERDLCGYTNKKNIDQFDWQLGSGGTSSV

TTGPSNDHSTQTALGQYMFVESSYPRLPHETAIIGSETIPVSGSGKCLQFWYHMYGEHIGSLEVNM
RVANDLSETIVWKLEGNQGNKWLQGQAPLLSRGQNMEVRFEGIRGTGYKGDIAIDDITVVDYSG
ACAITPKSAKPWGCNFELDFCKWQQSRADKFDWLRNQGATGSAGTGPKADHTTNTTQGYYAY
VETSFPRQPNDTAAIISPTIKGNGTKQTYCMWFAYHMYGPHVDTLKVYTRSQGSDKPVLWRRRGS
QGLNWNHAEVQVTVLYDTKVIIEAVRGKDYKGDIAIDDIDIWFGDCFSSGICTFEGADLCFWYVP
KNGQLYWQRASGATPSVKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYSPWYYNTGQKC
VQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNNVYFQIIVRGTKG
NGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGSTNSFLTGPSIDHT
TQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNLTIYLRKVSNTKT
LSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVVIEGVRGSSYDGDIGIDDIEFTSGSCSFLPKGA
WPSGRSTPAPTQASTTLGPTIGNKGFDCNFDKEFCKTWMRNSTRTNFQWKRHQGSTSSVGTGPH
HDHTTNTDQGYYVYIESSSPAQPNDTAYLIGKDIPNNNGFCLSYWYHMYGPHVGSFRVYVVNKT
NAEARFVRVGTQGDKWKHGQLYISPKAGNPITIRFEGVRGSSFMGDIALDDISVRYGNQCPAPRE
CTFEHDNNGGSSSTCGWTQEKQKDSFDWSIGSGDTPSVLTGPNFDHTLETKQGHYFYIETSYPRK
FGENATIISQSYQQTLGKCFSFWYHMYGSTIGNLTLFLRRD
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*
>TRINITY_DN2490_c0_g1_i1.p1   type:complete   len:1044   gc:universal
TRINITY_DN2490_c0_g1_i1:354-3485(+)
MDVNKKVNQAYIDDDDDITINFNPKSGDPNPQAQRFKISKLPSQSDSNNSMEDIEEADDVDGLE
KDNVQNTVSKHVQLTIPAEHYHNDHNDTRRASHTHTQTIGYMTHDAVPMSVFYRNQASMENA
ANGDMRPTLDQLHKGQGLDEARKRHWDALNEEDEQQDAERGTSNTKTKLGWIKGVLFPTLLN
IWGVILFLRMPWIVGQAGIGLSSVIVLLATVVTTVTALSMSAVCTNGEVKGGGAYFLISRSLGPQFG
GSIGIIFSVANAVAVALYLVGFGETVQALMARSDTYMVDATNDIRIIGLIALILIFVIAMIGLEWVIHT
QTFLLLLLVAAILCVAVGCVYPAPQESREKALAWGLPGYKSKSFADNFVPDYRDGEEFFGVFAIFFP
AATGIMAGSNLSGDLKDPQKAIPLGTLLAIGMTSTSYVALSWILGSFVMRDASGIIPVINVTVNGTT
MNSHTCEIGSCEYGSVNDLQIIEKISLWGPLVLIGIFAATLSSALASLVSAPKVFQAVCKDKIFPHIEL
FGKEYGKNGEPRNGYLLTLVISACFIAIGELNVIAPIISNFFLMAYALINYSVFAASIAKSPGWRPSFK
YYNKWCALVGFFLCIVIMFMINWWAALITIIVVAALYKYVDVRKPDINWGSSGQAHTYLKALRFT
RRLEDTDEHVKNFRLQVLCLTGQPSLRPNLVHFCSHITKHLGLLVCGEVNVTDKILSPSGNEGKW
LKKQKIKAFHQIIHSATLRNGAQSMLQSVGLGKLKPNTLIMGYLNRWQSIEVAKVDEYVHIIHDA
FHLRYGVGILRLQDGFDITDGVVDDQIENGVVENHEPDWYTEDWDENQKDTRGSDGDGSDQA
KEERQETFKPPDIVSAFPKKRKGYIDVWWLYDDGGLTILAPHLLALSSHWRGCKLRIFTPASDKKI
KANQIRMANLLKKFRIDFSSVVEFRGINKHPKEDSINQFKQLRRGEHLPQDGLLDKKTLRQIRLGE
LLHEHSSEAKLIVLTLPIPKEGMVTSLMYLSWLEVLSADLPPVLMLRGNQTSVLTFYS*
>TRINITY_DN17721_c0_g1_i2.p1   type:5prime_partial   len:364   gc:universal
TRINITY_DN17721_c0_g1_i2:2-1093(+)
FAPSSRRPAPSAAARRCTGAMQQYNSQTFKDVKPASAGPSAALQVGLFCFFVMTRAIHPTIIDASK
SVDPESGKKYFAYGEMTVVLGETIVTLVIAQLMALGLGGMKEWKAIWSPAPMKVFSFIGFVYALG
DFLEMASMGSLGGAAYQVLLQSKLLITALMMWGIKGAKQSSLQWNILILVMLSMCVYMIGGSSD
SGSGGGIPIMGVVNVLLKVTVSCFCAVLSDKYMKDFKSEPIYMQLVQFKCAWCATILALSFVDGK
TWQNGFFTGWNATTVGVLASFTVKGWSTMYLLAILDSVLKNIGEAVSVLVIYFMQVFLPVFEDTF
EVPKFLSVMVVILSVTAYVGSKSVVEKAAKYDKQSAGK*

>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN1785_c0_g1_i1.p1   type:complete   len:615   gc:universal
TRINITY_DN1785_c0_g1_i1:2316-472(-)

MEKEKKISHDAGNVNLSYDHEKGANGKANTDIPLGDFHIAKNEETEKIKEKDPFDAVDDFKPAG
KPWIELTTGGKIKRVSVTVGKIVALLALLYFFICSLSFLSSAFRLLGGKTAGEAFKENDVISNPIAGL
MMGVVATVLLQSSSTTTSIVVTMVASGILEVDPAIPIIMGANIGTSVTNTIVAIGQIADKEQFRRAFA
GATVHDMFNLLCVLILLPLELVSGYLFRLTDAIISSLHLKDGDKSLKKEFLKAITKPFTNVIIQLDKKI
IEKVAQGDEEAVKKSLIKYWCDKGTKTTTFVNVTTLQNVTSTQNNITTYMMKNVTNLESKTETVF
KEPCEFLFHDTGMSDTAVGIIMLVISLTILCVCLVLIVKTLHSLLRGQIAIIIRKTFNSDFPKPFGFLTG
YVAILVGAGLTILVQSSSIFTSALTPLVGLGIVSLDRVYPLTLGANIGTTATGVLAALASSSSKLGSAL
QIALCHLFFNISGIAIWYPIPKLRRLPIKLAKKLGNTTAEYRWFAIAYLIFVFFLLPAFIFLLSLAGWK
VFVGIMVPIVTILLIIIIINVIQSKKPSLLPSKLQDWSWAPRACRSLEPYDRVACKIQKVLRIKKKKAT
VNA*

>TRINITY_DN2487_c1_g1_i3.p1 type:internal len:317 gc:universal TRINITY_DN2487_c1_g1_i3:1-
948(+)

EINNGRLAMVAIIGMWFQNGLTGSAWGDWALYTDSPLRAAAPDFSKEIGACPPLGFWDPLGFSV
YKDPELAAAQFRRRRLVELQHGRVSMIACIGYIVPEYFRWPGFISPSEKLAFEDIPNGLGAAAKVPI
LGWGQMIGFAGAIEISNLSSPSSKTPGDYAGYGAFGLPFGKGIDDPAKREKSLLAEINNGRLAMVA
IIGMWFQNGLTGSAWGDWALYTDSPLRAAAPDFSKEIGACPPLGFWDPLGFSVYKDPELAAAQF
RRRRLVELQHGRVSMIACIGYIVPEYFRWPGFISPSEGLAFEDIPNGLGAAAKVP

>TRINITY_DN2433_c0_g1_i1.p1   type:5prime_partial   len:267   gc:universal
TRINITY_DN2433_c0_g1_i1:1-801(+)

LTFIESLRLRIDVYIVIKMQLISVIFGCLVVLLNLNNQYEASKKSSQRNDYYTYYKYYYYFKQPYHYK
PRNWPKVRGRCDVVADFKINGTNPIKEEAAKGRVVLLYLMKRTCLSCYAQLATLNDYAAYYRKV
NMPISIIALNHRKQPLPDTVLKKFPLVKFYDEPVDQNIFGKLKSKWRSTMVFDICGRQQYKFGYPY
SLLSYPFTRSGVMNTLNHHVSLCGKCNATLTTTPKETRPPTQVPRETRPKTTETPMELFLANNRLT
RV*

>TRINITY_DN17714_c0_g1_i1.p1   type:complete   len:644   gc:universal
TRINITY_DN17714_c0_g1_i1:102-2033(+)

MADVEQNGTYDDSNEKTKLHSNGTELEEKVEMNPPVVVEGEDRGGWGNKIEFLLASVGLAVGL
GNVWRFPYLCQQNGGGAFLIPYFIMMVIEGIPLFYIEFAIGQRFRRSAIGCWSKIHPALMGVGISCV
VISLLLCIYYIAVIAWCFYYFFVSFTSKLPWNIKNCPEYDRYKLLDNACKANGTATSCNATKTFSDC
CVHDPQLYYFYRKALNISPSIEDLGDGVQWKLFGCLVLSWIVVYACIVKGVKSSGKAVYFTATFPY
LILVILFFYGVTLEGADIGVTLFKPDFSKLLEPSIWMDAATQMFFTLSLGFGALISFASYMPIKNNC
VRDAYTVVLINCGTSIFAGIVVFSILGHRELMLGEKADKVGGGPGLAFITFCDAFLQMPISPLWSILF
FTMLILLGIDSEFGTLEGLITPFYDMKWVKMRKELFTALVAFGMFLIGIGLVSSTGFYIFQIFDDFSVS
LGLLFIAFFQVIAVSWVYGNDKFANDIEYMTGSRPNLFWMICWKYISPLAIFVIFVSNCIKMASNSP
KYAAYVGCEFQSVDFSSVAKGIKGSIAKVDYPGWASIIIFIFVTASMVPIIIFLVKDFVSNRQGWIDGF
KRKLGNRYEYLPDPSVADPSRRKSPEEMEFQIQKEEELF*

>TRINITY_DN12627_c0_g1_i1.p1   type:5prime_partial   len:1061   gc:universal
TRINITY_DN12627_c0_g1_i1:3456-274(-)

YGENNRLKFNDARQYCQQWKDDQGDLVAIHSNYENSFIMSQLYDVNEPMYIGLTDSFSERTFLW
VDQSSVVYTNWYARQPSFVGNEDCVEMMPYFKTHGRWNDIGCSAERGFICQRTPSKTPLPTPEP
VKDSKPCPAGYRKFMKACYRVVHTPMTYDDAVKDCRTSVGGELGDLVSLHNQFEQSFVFSQFAK
FDFHSWIGLKKIKGEKEFKWSDETPYDYRYWLSLRYDNTVYNDDKCTTQEFSSKVDGKWKVTDC
TQKHPYMCKIERDFDQPHLTFIGNCTDGWTKFYDKCYKLQNYFSNWPAAREKCKGFGGNLVTIT

NSDIQKQMEYLARDAYRSVWIGLNDRAKEYVFEWSSGIPLLPDSYQNWGPNEPNDNSGTENCV
HMTTESSGGKWNDLSCSQRMPYICEHPLECNSALGMEDGSIPDTNINATSYVGTYFPKYARLNAK
SDNNRNTAWCTNITTGAESLTINLGEVMQITRISTQGLLDSSLGFSRGGYVVSYMLEYSNDGTTW
MTYISEDAYDQKPIALPGNIDASKIDGTTINLKAAYLRFIPKLYKNIICMRVELYGCKSVCSRALGM
TNFAISDKQLSVSSSQAGSEKAQLRPNIDGSWCAKDDDYSPFVRIDLPRLTKITRVTAISSSKVQYKI
AYSDDGELFTRFQTLTNEERVFSTVPSTHDLETAISAKHVKFDLLKKDQGKLCLKVELYGCLKDCD
AVLGMETKIIPDRLITASSAKPSNPARNARLSVGVYGDNSWCSSETDNAQYLQLDFVQEAHLTEIA
TQGFNGDSAKYVSKYNVQFSDDGDFWHQYSEELPGNSNGYSIQRNKLKEPIIARYIRINPTEWKN
GICMRVEFYGCPMKPFTAPKILTQKTYNGAIRILNEDFNENLLNANSIEYIELANKVETDITSLYLLE
ESFKDGFNSVTVNKFREGSVITEFTIKTHTSDASLDAAEPLRKAVQTGRVGTFDVDPNFFEIVTAST
DKSTATNDDSGGLSNGGKIALIVFFVILICIVLAGGVVYYLRSRRNGFRLQFQHRAFENPTHVDDL
QNDDMKVEFMNDDY*
>TRINITY_DN4927_c0_g1_i10.p1   type:3prime_partial   len:1754   gc:universal
TRINITY_DN4927_c0_g1_i10:5260-2(-)
MSNFKKLKLLLWKNYLLMKKRPRATIIEVTLPVSVVLILFIIRMTSVAPIDEEAKTYKPFNIDQQISIQ
MHMGAWKIAISPNTSFTQQIKEKLMKLDEIDEVKIFENEKQLVSTLVTDGTMPVLSQSYLCGVVFQ
DFNNNSKNIEYALRFPANPRTSMLGALAKWFTNFIFPYTFDGLGPRNPSKADPMYGGPPPYFAEG
FLKIQKIVDFSIIQMTNSSFDPSHFKVSMNRYPYPPHVKDPFIVILQNTFPLFLMLSLIFTALNMVKDI
VIEKERKLKESMKMMGLTGWLHWTAWFIRYFIPLLISISIITILLTVNFNGSNSKMLNHSDGSLIFVF
LVIYMLSVISFCFFISTCFYRASVAAAGIGVLWFLSYFPYFFWMNYYNLLPTIAKILSCLDFQLAMAF
GANLVGRFEGQGAGVQWSNLMEGVTVDDTFTFGHILGMLLLDTVLYGLMAWYIESVFPGEYGIP
QRWYFPFTAKYWSNGNRAERRSFSDEEYAMTGVSDFIERDPENLKVGISIDGLKKEFKTRKGIKVA
VDGVQLKFYQGQITSLLGHNGAGKTTTISMLTGLIPPTSGNARVGGYDIKNNMNGIRGSLGICPQ
HNVLFDALTVEEHLWFFTCLKGINDSLEIEKEVERMIESLGLIDKRYAPSKTLSGGMKRKLSVGIAL
VGNSKIVILDEPTSGMDVAARRSTWDLLQKERRDRTILLTTHFMDEADVLGDRIAILSKGQIKCCG
SSLFLKKRYGVGYHMVMVKEKGCDVEKVTDVLKKYVPTAEVESDVGLELSFALSSDYSHRFEELFS
EIEESRQKLKISSYGASVTTLEEVFMKVKEEDDLTDDTHQKLFRRLSGKSSPGKTNPGYDENNKAS
VNPQRLSQNQKNNSTSNPISWENAIGFTLKELDHMPNYSPQDGDVQLPSLTGSISKYNYANNMG
ITLFFQRWYAMFVKRLIHSKRHKISIVSQLLVPAINLMIALIVVRTMPKAQDSPPLAMNLNMFEKSE
VPLYIHEGTPLSEELSNSFQQYLGSLQQSSNVPQFVDSNMTKYLIEQEIDHFSQFNRHNLVGLEFKE
KYSRSYSTVWFNNEALHSPAVAMNTLSNTLLNLFTNNQEKKIITINEPLPTTASEGLLDLKLNPNG
FQIGFALCFGMSFLASSFIVFLVQERASKAKHVQFVSGVDPLSYWTSAYAWDVINFFLPTIVIVLIFFII
KVDAFQGVRIGYAMLVVLLYGWGIIPVMYIFSFLFNVASTAYTRMTMLNIITGLIMLLVVFIFNIPVV
NLLDEAKILSNIFIIFPNFSLGQALINIFNNYSIIEQYDNTFKLCVDTAHKMYPFLPIEQINKQCKTMI
EEFIPDNLYTRNYFSWDEPGIGRYLLAMAIEGFVYFAIVLMIEYGVFRPIGRCCRTIKRTATTVAISN
DINNEILDDDVKREQELVASKDYNGNEVLVLENLMKSFNTNQGELTAVNNISLRVPHGECFGLLG
QNGAGKTTTFKMLTGDETPTSGAAYVERFDVARELAEVRQRVGYCPQFDALIDLMTGRELLIMYS
RLRGVPEKHIQKLVEDLASNLGVFQYIDKCTKTYSGGNKRKLSTAIALAGDPPLIFLDEPSSGMDP
AARRNLWDSLSDAIAGGKSIVITSHSMEECEALCTRLAVMVNGQFKCLGSPQHLKAKFGDGYTLI
ARIGGINRNTSSLKEFIEKSFPGSILKDEHQGYVQYQLTDKTKTWANLFGIMEKAKETYNIEDYSIS
QATLEQIFLNFTRTQRVDDTR
>TRINITY_DN4927_c0_g1_i9.p1   type:3prime_partial   len:1754   gc:universal
TRINITY_DN4927_c0_g1_i9:5260-2(-)
MSNFKKLKLLLWKNYLLMKKRPRATIIEVTLPVSVVLILFIIRMTSVAPIDEEAKTYKPFNIDQQISIQ
MHMGAWKIAISPNTSFTQQIKEKLMKLDEIDEVKIFENEKQLVSTLVTDGTMPVLSQSYLCGVVFQ
DFNNNSKNIEYALRFPANPRTSMLGALAKWFTNFIFPYTFDGLGPRNPSKADPMYGGPPPYFAEG
FLKIQKIVDFSIIQMTNSSFDPSHFKVSMNRYPYPPHVKDPFIVILQNTFPLFLMLSLIFTALNMVKDI
VIEKERKLKESMKMMGLTGWLHWTAWFIRYFIPLLISISIITILLTVNFNGSNSKMLNHSDGSLIFVF
LVIYMLSVISFCFFISTCFYRASVAAAGIGVLWFLSYFPYFFWMNYYNLLPTIAKILSCLDFQLAMAF
GANLVGRFEGQGAGVQWSNLMEGVTVDDTFTFGHILGMLLLDTVLYGLMAWYIESVFPGEYGIP
QRWYFPFTAKYWSNGNRAERRSFSDEEYAMTGVSDFIERDPENLKVGISIDGLKKEFKTRKGIKVA
VDGVQLKFYQGQITSLLGHNGAGKTTTISMLTGLIPPTSGNARVGGYDIKNNMNGIRGSLGICPQ

HNVLFDALTVEEHLWFFTCLKGINDSLEIEKEVERMIESLGLIDKRYAPSKTLSGGMKRKLSVGIAL
VGNSKIVILDEPTSGMDVAARRSTWDLLQKERRDRTILLTTHFMDEADVLGDRIAILSKGQIKCCG
SSLFLKKRYGVGYHMVMVKEKGCDVEKVTDVLKKYVPTAEVESDVGLELSFALSSDYSHRFEELFS
EIEESRQKLKISSYGASVTTLEEVFMKVKEEDDLTDDTHQKLFRRLSGKSSPGKTNPGYDENNKAS
VNPQRLSQNQKNNSTSNPISWENAIGFTLKELDHMPNYSPQDGDVQLPSLTGSISKYNYANNMG
ITLFFQRWYAMFVKRLIHSKRHKISIVSQLLVPAINLMIALIVVRTMPKAQDSPPLAMNLNMFEKSE
VPLYIHEGTPLSEELSNSFQQYLGSLQQSSNVPQFVDSNMTKYLIEQEIDHFSQFNRHNLVGLEFKE
KYSRSYSTVWFNNEALHSPAVAMNTLSNTLLNLFTNNQEKKIITINEPLPTTASEGLLDLKLNPNG
FQIGFALCFGMSFLASSFIVFLVQERASKAKHVQFVSGVDPLSYWTSAYAWDVINFFLPTIVIVLIFFII
KVDAFQGVRIGYAMLVVLLYGWGIIPVMYIFSFLFNVASTAYTRMTMLNIITGLIMLLVVFIFNIPVV
NLLDEAKILSNIFIIFPNFSLGQALINIFNNYSIIEQYDNTFKLCVDTAHKMYPFLPIEQINKQCKTMI
EEFIPDNLYTRNYFSWDEPGIGRYLLAMAIEGFVYFAIVLMIEYGVFRPIGRCCRTIKRTATTVAISN
DINNEILDDDVKREQELVASKDYNGNEVLVLENLMKSFNTNQGELTAVNNISLRVPHGECFGLLG
QNGAGKTTTFKMLTGDETPTSGAAYVERFDVARELAEVRQRVGYCPQFDALIDLMTGRELLIMYS
RLRGVPEKHIQKLVEDLASNLGVFQYIDKCTKTYSGGNKRKLSTAIALAGDPPLIFLDEPSSGMDP
AARRNLWDSLSDAIAGGKSIVITSHSMEECEALCTRLAVMVNGQFKCLGSPQHLKAKFGDGYTLI
ARIGGINRNTSSLKEFIEKSFPGSILKDEHQGYVQYQLTDKTKTWANLFGIMEKAKETYNIEDYSIS
QATLEQIFLNFTRTQRVDDTR
>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-
2(-)
GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE
>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)
MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*
>TRINITY_DN33328_c0_g1_i1.p1   type:3prime_partial   len:1422   gc:universal
TRINITY_DN33328_c0_g1_i1:4264-2(-)

MLLKYFFLFLCLLLLNDIVYGKRRGGKKPARRPPPARRPPPSRKPVRRPPSRKPSPPSRAPSPPSPPSS
PPNRKPSSNKPANQASNDQGGPGKPASNAQGGGKAQELPDLNAILRAFAGKQTDSGSTQYEYG
GCVLDIGKDKCKIKFIPKKQSCHNKLALGKLFDKFVPKGKIKTLFKKYAPVDVFQVTRFEVDKCQ
GDLDFETEAKEAFNVINDKLKVNSGKLSVSFDYKKFMAAPSFDKLGIDIDGEVQLFGKKVPLTLK
KKRDSGEGIFSIKTASIKASDFAKLFSTKSVANAQSPPQTKMFTDAVIQNPSISGSRDDDGGFELVVK
GQVTGIKGIGAISLFVIIQKSSDSPVSVAIVADIKKIQPTVLLSSLTGKNLNSIPIIKDITANLAVEFANN
DMMMLKDPELNKLLGKYIANGKTIASGTKIKVELPIKEILTKVKTTASLSHVPSTIYMQMFLNGGK
VCFKFPDNIAMDLANVLVALLPKVPDLLFSKVLKTPPKIVIEKFDVNVATKYVDMVLEAPEEIVLG
SDLFKIKNAKFELKHEENKPWDFNIEATKQIGKTMIDINVKSEAKNYIFKATIDSLTTKELATTFGS
KATADGILTKMSFLNFGIRTLTVTAEFGDKFTLNIKGNPVLFNWEGAFFEGFIVGSGLNKKMAFGI
VVKNIRIDDIVFKLFKKRILQTTWMSELTATFLISNTDPDDNIDFTLPELKEHVKLKQGVFFKSELTI
PTDCRAEKICEVLRDKMKPGTKLYLEGEITLNGFKLTAGYKGHGLNFATDLTLTSAKLVLTVGTST
EFYLEGEVQMKNPNVKFIGKLGVGVTGIVELSLIMEGMWRTPFGLSYIAFGNLQLAVAIQPGVPVP
KLEFTAEMWVGKIGNNQEIKTKTAVGINPSNPLDMYFYGEINKLTLAEVAKAFEFKSTLPKVVQET
GFPEGLAAGYTTNPKGKTISHLKVNLKTGFFFRGAINILGYKLECEILVQIPKAIKVSVDMGPIKIAK
GLIKLAKGAKDLDNGPSLYVAISSNEVAVKIQAYAELLGLGAEVNIDVSDKGMKFFVYGNIFNLIE
ANVTVNAPYGNGDLAKSEFSVSSCISAGISDIQNTAFEEVDEGAKESQKIQKVADDEVKDASSWY
NSAMDKLLSYEKKLEEKTAIINRKSGKLEKLKEYLDASCVDHCPDVCQGGPVMRKRKGRFFNKK
PGWDDCKEMVKSIVCLGKCKGKKAYYQGKAAKKVVTMEIIEGSVKIAKKLIVIAKGFAERSKGL
MDLTQKAANKVVSLTKAGKDALGALAKYTKENLINIHLLCFDTTLAKAEGACFGVNVDLTVLG
NKKLQYEGEVCFNADFFKNMAKQVADKVFPGIISIKDKIMQAKNLFSDSDSKKKELEEYEKQSAQ
EEKNLEGQLERQNEDDDDDDEEFNGKYKASFDP
>TRINITY_DN191687_c0_g1_i1.p1   type:internal   len:241   gc:universal
TRINITY_DN191687_c0_g1_i1:1-720(+)
ILLPGPGGGPGRRPAPGARRLPRPLRRAQGRARPGGARVRRAGGGRRQVPDLPVRQPGGAHHA
GARGRRRCRGRVLLADAVAHAGLGRQVQPERPGRRVDHQGGGVRGGGGRRWPPVLRGARDG
GRPRHRDGEAPRWHGHVAGKSRGPRGPLRARQGRPQRGVQRRLGRAGAGRQGLPDAGDPGV
RPGLGVAGRARAVLATGVLRGRGQGRGHHVRLHDQEAVGVHAQGRRPGPGARGEE
>TRINITY_DN5554_c0_g1_i1.p1   type:complete   len:316   gc:universal
TRINITY_DN5554_c0_g1_i1:223-1170(+)
MRIIIALLFCVVGYCYSADWGYEAGNPNVLEPKDWKQHFPKCGGRKQSPINIATRSAILSRLPKIIL
GEGWGTLLESADLSLANNGAKVSIKSSTPITTKQGGTIWNLAQFHLHWGKDSHSGSEHTINGMS
FPAEIHFVHFNSKYPTIGDAVPQPDGLMVLGFFIKVQENAVVPSILQKFFGSLDQIKFEDQKVKLDF
GGRALGDMLPPRGTSKYFNYPGSLTTPTCDESVNWNVMSTENAIVITEKQMTQLRSLSAGKKNE
AFKPQSGNFRPIQPRNGRTIRRNFRTATTKFRSVLRRYFPRIFSYFRVTPRFE*
>TRINITY_DN195348_c0_g1_i1.p1   type:internal   len:311   gc:universal
TRINITY_DN195348_c0_g1_i1:1-930(+)
SGCNSIDLGLLVDFSSSKDYDSKQLTKFVREFIDKITNVFAFSATKSHLAYLPFSSRINENITGQWFD
NKYMKTIGDWDYQELTQYLDRVIVPYTPVTGYETGKANAHEAFQATNDKMFNALYGMRYNMT
KVLIVISDGNEDFKEKQNLVDRAIDQLKAKGVIIYTVSIGNNVNWDRVFRYASRESSIINGANFDD
VFNRFFDFAKMLCEDSKVPIPATRTTASTTTVSINTTKLTTTTTTELVPVTISTTTTMSTTLRPIQACY
EDIDLGFVVDFSKMNANDMKERQTANDIVKVIKKIASSFNIAANK
>TRINITY_DN113_c0_g1_i1.p1   type:complete   len:1417   gc:universal
TRINITY_DN113_c0_g1_i1:4413-163(-)
MANWSLLYAALLFLYSVSAQEEERPITFIKGEPGPKGSRGMPDDGSVGSTGRQGNEGRQGPRGD
TGPKGFKGEPGLIGPAGGASGGETKGPDPLAARVGVKGGTYGVNTVFDYQLGPPGPPGVPGNTG
GYGFKGDVGPVGVKGVPGLPGPPGSYGERGEPGEAGLDGVKGDRGDAGQTGPPGKKGVAGAV
GFPGLQGPFGYKGERGGAGPVGDEGVSGRKGEKGYAGEKGSRGDQGDAGFQGVQGPTGPIGPL
GNVGPRGPDGQRGIAGAIGAEGLKGAPGTRGPQGPKGQLGEPGQRGVKGVVGDKGPTGQQGS
QGPTGNPGDPGQPGKTGDKGSIGDVGLIGLTGPQGMQERGTVGPRGPAGGAGKKGERGQAG
PIGATGEKGNVGDVGLDGARGAPGKSGIEGKVGQPGPQGEPGAVGLQGAQGPRGTDGQAGQA
GPKGNTGEGGFPGAAGGKGSKGLKGRGGDRGMQGEPGSAGKPGARGRDGKRGAAGEDGKNG

NPGQRGPQGSQGLTGAMGLVGAPGAPGDMGVAGLPGQQGRKGTRGLAGPTGQRGLRGEGGL
PGERGEQGAAGPQGTQGTQGSPGPQGRTGLDGKDGSPGDKGERGSMGTRGKQGEPGADGKQG
SRGTPGQQGIRGDSGDQGSPGLLGERGLAGQKGVAGRDGAPGMPGRTGRQGTIGATGAVGLRG
AKGGRGKDGETGEQGPQGQEGPTGPRGPRGASGEDGAPGQNGLPGLTGPMGEEGQPGRPGQP
GKQGPRGSQGEAGPVGPKGPLGARGDQGEQGPVGIEGVVGALGAVGSEGTKGPVGAMGSMGP
TGPTGPQGATGETGPIGPLGAQGRPGIAGNAGGKGPNGDPGNPGRPGSSGDQGPPGKDGSNGE
PGSPGKEGARGLIGRPGAEGIRGEAGTSGSTGRLGRKGELGPKGFPGKRGKDGTNGKRGEMGVS
GADGIRGSKGNSGKDGSAGIAGEDGVEGQIGEAGYQGSRGVRGDTGAPGDSGQPGDNGPNGA
KGSKGSSGRAGAQGVDGRLGARGDQGAEGARGKEGAAGAEGERGEKGKMGAPGIYGPAGDP
GFKGDEGEPGPVGPVGPHGPRGSPGEDGPSGKKGASGITGTNGRKGNRGQSGANGDTGTPGIPG
VPGSPGRPGPPGEIAGMSGAFARFFSAGGMGMKGPGNYYNNYYGQYRYYKAGNEKIRNQIKPH
LSTFKQYYELLKDVDDMMKATGTKSKPARSCKDLFTDYPNKITNDYWIDPNGGSTDDAVKVFCD
KMKNETCIFPKSYRAELENHYTGKDKFRFMYEDIKEDGEIEYAADITQTKILHLMSSKVRQEFSYN
CKNSLAVMKNNKDRYEYALKLKLDNEDIISMNMNTRSLDINILNDECWKKDNTVRTATYELISH
KPIKHQLPLLDVASFDIGGPNEEYGLTMGPVCFS

>TRINITY_DN761_c0_g1_i2.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i2:87-2576(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*

>TRINITY_DN163801_c0_g1_i1.p1 type:complete len:298 gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)

MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*

>TRINITY_DN1739_c0_g1_i1.p1 type:complete len:400 gc:universal TRINITY_DN1739_c0_g1_i1:86-1285(+)

MAITDNIKDILSVKIKPRHDTYSDQYSRIFMVKIMMMSALLVGLNWYSDKIKCIIPDSISADGGFVG
AACWINGFYVYEKIRYHVNEVGYFGMPREIDHDGMFPDGQTCNSKDTLSSDPSMECQPMEKTFF
LQYQYMTFVMAAFALLYYAPYAIFRWINVDLVSLKGSIQDNSAEKIIGNYFNHRVNSPNKMRMRV
MGNIVVKILYIVVNIAAFLLLDSILNGGFTTYGTLWTQWAKLDNDLAYDYMGIRHSPKPANALLP
TFGFCEVYMSAKDIKTTVNNKFKFICEISQHILYQYVFIVVWFAMVFGIVLSIVGLLMQLIEHALTIT
CFLKQGDQARRMYSILTLRECEYLEYIRRKNIPLYNDVIKKLKEQFQDGFHKPRDHYNNDGLPKY
QDTQA*

>TRINITY_DN581_c1_g1_i1.p1 type:5prime_partial len:481 gc:universal
TRINITY_DN581_c1_g1_i1:2139-697(-)

ETTVAVEQTTTTQAPVVTTTEKEVVTTKAVVTTAAPVEETTTSAPVSTAAKTEETTLAVKTTLAATT
KAEATTKSVVETTAAPIATTAAVIPTTKEEVVITTSTTASLKPTEFKVTLPSIGETLDIIEECPLILQCLP
NMMRVTFKKKDLEDVNFVRFNEISLIGNGGECEPNFNGTHFEFKVPLYGCGTRRRYINDAIIYSN
MIIDRIASIFIVRKNSLRIPITCYYPTSGKASASSNEIEQVANLLDQKDAYGDFTTYVKLFTDDTFSTSL

SGEKTSPDVAYQDRIYFEVGLNTKDERLSVFAENCSVTPTNNKHDPRRYFLIERGCKNDETVEFHA
STKHKQRISYEAFSFVGTTEPVTYLHCDLLVCDINATDKRCLNRECAYMNGKAKRRKKRAALPSA
LKPYSMEIHTAVNVLHTSLQKKAQKFAKQRQIMSPFMLYLVASIGSVATITLLIVAVISFKKRTVESA
TTTSDVQP

>TRINITY_DN11726_c0_g1_i1.p1 type:3prime_partial len:877 gc:universal
TRINITY_DN11726_c0_g1_i1:2630-3(-)
MANDDKTGLLTSMEMADKKKASSMKNLMFDDGVRKIDYILAYQDLADDDEHKEEIEAHRALFL
KNLQSKGLEIEKAEHFKATKQSNGKEAYGTFQELEEEEENVVHYIKIHAPFDELCEIAEDMKTKLP
TALNDVNIKPWIEKTSVYRFFQSLDPFIVSDSHIKEEHNYFVAHFTKDRLNEFINHDKPNDFFSHSE
RSRLVYYVLNQTKFGEDELDLGIYSLTTKGIFIDAFPLHDGPVLENMDDEPVNDRQRLQKDWGC
MKRIFKYQPIEGIKNYFGEKTALYFSWLGFYTSLLIPAAIIGILCFIFGVATAWDYGAVKEVCDQVKN
NGSNLFYMCPLCDKLCSYYLLQDQGCMYSKVSHFFDNEATLFFSLVMAIWATLFLEFWKRKQVSL
AHEWHTMDFEEEEERPRPEYLARVTRLKKNPVTLKMEPYMPPGTKFSRIFGAFGVVAFFIVLVLA
AIVGVIVFRAAFYILLIRQDVETIRARSKIIVSACAACINLLAINILKFIYQRIALRLTLWENPRTNTDY
EDSFTIKMFWFQFVNTYASIFYVAFFKSEFFTGSPGQYKRFTAARFRFEGCSVQGCFLELTVQLIIIMV
GQQIIGNIMEIVLPFLKAKYNEYKNRNNVYVKSGEEPQWVSDFECQVQNQFSLFWQYLEIVLQYG
FVTMFVAAFPLAPFFALLNNMVEIRLDAINFIHNFRRPAAQRAEDIGAWYNILATLTMFSTIVNAF
VLAYTSELIPRMVYRYKYSATGSMYGFVDFSLAKFPVANFSSESRPDNPTKTVPVIQPTCRYPGYHE
HAFPFERSKEYWVITSARLAFILVFIVTVMAIRALIMYLVPDIPKDLELKIKREKLLAAESDRKFREK
TGKRKKRESVRSE

>TRINITY_DN77_c1_g1_i1.p1 type:3prime_partial len:1965 gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP

GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN31906_c0_g1_i1.p1   type:5prime_partial   len:595   gc:universal
TRINITY_DN31906_c0_g1_i1:1953-169(-)
AFGGDQFEPGQEEHLAKFFSIFYFTINFGSLISMLLTPILRGDVTCFGNDCYPLAFGVPAILMIISLLL
FLMGSKLYKKVPPEGNIVVEVSAAVGSAFKNRARGCGSGIKKDHWIEWASDNYTPVLKSDIKALF
KVLFMFLPLPVFWTLFDQQGSRWTLQAMEMNGDIGFLGTVKPDQMQALNPVFVMILIPFVETVI
YPIAKKCRLLTKPLQRMGFGMLLTALSFVMAGFLQIKMEGKSSVANLPATGYANYRIINTVPCSID
LYSNELKRKNMTIGYQEATDYFQVPVKFQKLVINSECPPYMNLETSVSVSEQKSYTLVIGTNHSTLV
SMQLTDDVTPLAHGHAKVRFVHAGGSVNDKVTVKLNKTLSIDLLPFEKPRYINIISKSYKIRVAPN
ASAKALALKNNVNFGNGGIYTIVIQPNKDIDKLKLFEYADVSPRPISILWQIPQYITITLGEVMFSIT
GLEFAYSQSPPSMKSCIMAAWLLTVSVGNLLVVILAGFKLTEDMAEEFFFFSVLLAVVTIIFAIMAWF
YKYVNYGASRDEADTTNIRDNENDDERTPLKKYSDDEKIYPDLKSSVEDEAPSTSKKESNL*
>TRINITY_DN5854_c0_g1_i1.p1   type:complete   len:464   gc:universal
TRINITY_DN5854_c0_g1_i1:1435-44(-)
MATNDFGGKLGQESIDAAWVILCAFIVFTMQSGFGLLESGLVSRKSEANVMVKNMIDVTVGGVIY
WFVGYGFSFGPNSGNANKMAGNGNFVLDVDHDDAFTYAHYFFQLSFATAATTIVSGAVAERVK
LPSYMIFAIINTGFIYVIPVHWVWGAGGWLNGKCFDFAGSCVVHMAGGISGLMGAIVLGPRYGR
FDGRAEYRMASPTNVVLGAFFLWWGWIGFNCGSTFAVSNGSWLTASKVAVVTMNGAMGGGVA
AIVLNFILQFKRSYLLDIPELVSGILGGLVSITACANVIRPWEALIVGFIGSLLTIGGGALLTKLKVDD
PVGCFSVHFISGFWSMVATGFFAEDNASDDLTGIFRGGNGKLLGWQLAACVTVTLWNGVLSGLIF
VVLKYTIGLRMDEEEEIRGSDEVEHNVKDLDFVLEGKHVLGKHVSGSVTYRNGHVNEKPQPKVV
NGTNNELVIMA*
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN15109_c0_g2_i1.p1   type:3prime_partial   len:209   gc:universal
TRINITY_DN15109_c0_g2_i1:624-1(-)
MNSQLRNVLLWHEPRISGAIFVLGLFVLFALSIYTVLVVLTCIAIPVVVITVAIRVIFAIKSVIFKQPNE
NPFEYWLNEHWGIQDDKLTSINRRAADIVNNVVLYGKEVVLVKSVGESLMGLLFLYIWYVIGKNI
SGISLLFLGHLCAFTLPKIYDLKKKQINKFIKHAQNSYNECYQRILDNFPILNKYMKEQKNKEKPN
NNNNKEA
>TRINITY_DN7102_c0_g1_i1.p1   type:5prime_partial   len:1263   gc:universal
TRINITY_DN7102_c0_g1_i1:3-3791(+)
DKNELEEKVLPAVSVGTLFQYATGLDWFFMILGTFAAIGNGVAQPISFIVFGELINKFIISDSGEAIDL
EEEMTKFALYYVYIAIATIVLGYIQNTVWLLSSIRQAFEIRTKCFNSVLRQDIGWFDVIDAGEISTRM
TDDITKIQNGIGDKVGSLIQGISMLLGGFIIGFIFSYKLTLVIVAMTPLILITGFLTGKVVALITSDEQLS
YAKAGAIAEEVISSIRTVVAFGGEEKEIARYRTNLVDAEKSGVKKGISTGFAFGMFNAVIFGCCALG
FWYGGYLVAEDEITGGDLLIVFFSVLIGAAQLGQVGPNFEAFAVARGSARFIYDVIERVPAIDSMSD
SGLKPEIIGNVIFEDCEFEYPSRQEVKILKGLNLTVNCGQTVALVGESGCGKSTTIKLVQRFYDVSKG
KVLIDNTDIKEINVRHLRRHIGVVSQEPVLFDTTIADNIRMGNDEATLEMIEKAAVNANAHDFIKS
LPKGYETYVGEGGTQLSGGQKQRIAIARALVRNPKILLLDEATSALDTESEGIVQSALDKASEGRTT
IVIAHRLSTVKKADKIAVVVEGKIAEIGTHEELMEKHGEYFKLVMLQTFEEQEEDEGGDDTSLLSES
DREGLLRKQVLRTLSRMSSHDAEEDKKIEEKITKEFRRRSTFRKSAKDIRSLERQKSKINEEETDEDV
NIPSMWRILKLNLKEWPYMFVGFIFSALTGAVPVVFAVIMSEVLESFILTEQPQKMKDTSAFWSIMF

MVLGNVVGVSYFVAQYMFATAGEALTTRLREMAFRSLLRQEIGYFDLPQHNTGALTSRLASDASA
VQGATSTRLNTLTQVLVMGLSSLIIAFVFSWKLTLVILAFVPFLAFGGAVQTKLNTSFATDEQKKMG
EAGSIATESIMQIRTVASLGKEDYFYQRFLKLLLKPSQESRRSAHLFGLSFGFSMAIMFFNNAAAFR
MGGYLNVNDGLSLADMIKVIISIQFGSMTAGQIASFAPDYAKAKVAAGRILDLFDRVPPIDSYSQE
GIKDSLEGHVEFKDVKFHYPNRPSVPVLQGLDINIKKGQMLALVGSSGCGKSTSVSLLERFYDIYE
GALTLDGKAIKSFNVRHLRSELGIVQQEPTLFDCSIRDNILYGVDTSVRKVSQEEIENVCKSSNIHH
FITTLPQGYDTNVGDKGALISGGQKQRIAIARALIRNPKILLLDEATSALDSESEKVVQDALDVAM
KGRTAIVIAHRLSTIQQADLIAVIQSGKVVEMGTHQELLSKKGAYHILNQAQL*

Band 2
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL

35

TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY

GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA

GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*

>TRINITY_DN1616_c0_g1_i3.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i3:218-11782(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG

NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN4781_c0_g1_i2.p1   type:5prime_partial   len:3388   gc:universal
TRINITY_DN4781_c0_g1_i2:10182-19(-)
QCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWIQFRNDDFDFDIQSGKTSSSGT
GPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASGDCSLRFWYHMYGSTIGNLTL
FLRRDNKDTLLWAKSKPEGNQWRPALVTVNSWYKPFQLIFVGTVGKSYFGDIAIDDLMMTDEKC
PSPGDCDFEDFDKCTYTQDLVEDDFDWIRGHGGTGSWRTGPSLDNTKKDNSGHYYFIEASAPRT
QGDRARLVSELFDPTSSTRGRCLQFYRHMYGTAVGTLNVYVKTGPGNSSDAESLVWTNAGNQG
NSWIQGQVPIYSSKPFRLVFEAVRGNGYAGDIAIDDINFNNNFAPCSFLPSNAAPPTLPPTTITPEDS
NCTFDKGLCRWKQMKSNDQFDWTLVSGSTGSVGTGPLGDHTSGKGSYIYIEASYPRKENDSAILQ
SPPIRPSLGSVCFKFAYHMHGAHVNALYIYKNVKGKRTMVWKRVGTQGNQWRNGQVNIRGVS
GIFNIEMKGIRGVDYQGDISLDDFVVTNGQCPTPSHCDFENNQCGWFNIGRGDDFNWKRSNGG
TPSLGTGPGTDHTTGVALGSYMFIETSYPRKYRDVANLYSPYYPGSKTGYCFNFWYHMYGSHIGSL
NLYQDTVKSTPIWNKTDNQGNMWKHGRVTVNSRAKFRLIFVGTVGKSFLGDIALDDVWVDDFP
CPAPGACDFESKSFCTWSQVPNKFNTSNYDDFDWELGNGPTPSFQTGPAVDHTKGTSVGTYAYV
EVSGLIKRGQKAQLMSEKFPPTNGKCMSFWYHMYGSGVGDLNIYLKYLGVKKSHLVKSISGQQG
NKWIQGEVGLHSQKDFNVIIEAVKGSSYAGDISLDDISILDGNCVGLCSSVQPVARVACGPQSVTS
ASCVVSYGCCYDNSVPNVPACFQHPSSCKAVPIIARQQCGYYSISKYFCARRGCCFDDSGAGGPP
CYHSLSKPTDFPTTRAPPTTQPPSKFDCNFEKNQCQYTNLRNDQFNWARHKGDTASFGTGPKFD
HTLRNQNGHYMFVETSFNKENDTANLGTPTIDFPTGGDDVCVRFWYHMYGQHVGAFKVYHKL
TTRVPTKPIWERIGSMVNKWVYAQLIVPRRPAFQIVFQGVRGKGYQGDIAVDDVGFVNGPCPPSL
QCDYQNGDLCGWAQDADDEFDWSVGNGKTMSTQTGPKADHTYETDFGKYLFIEGSSPRQPGD
KARIESFSHRPTKGMCFEFFYHMKGTGIGTLNIWIRRGKTMDSKPVWTLSGEQGDEWYRAKVTLV
EDTENWTVIMEGIRGADFNSDIAIDDVIFHQGDCAPQGDCDFENDDVSACGYENWPRNKVDWL
IYSGGTPSYNTGPMVDHTLGTKQGHYLYMETSSPAKKGDFGYFMSEKFRVNPNYKWCVDFYYH
MFGDGVGSFMVKMMYQTKYSRGRYLLQTLFKKEGNHDDIWQHGQVNITSSYDFQIVFQGVVGG
GITHRGDIAIDDITVKKGLCPAPKAPPKPNPCAIKCKDGTCVPSNKVCDFYPDCAQTSDNTDDTD
EKGCDGCDFEKGTCNWNDTSKGLFDWNRQNGGTSSYNTGPSVDHTKKNALGYYVYVEASKGQ
SSDLATLSSPVLNQASSTCKMTFWYHMYGTSIGTLNVYLVNGYRLTLHWTLSGNQGNLWKQGTV
YYVNRQLKPYSVRFVAERSFSYRGDIAIDDIKFEGCELPRPAGFCNSRYQHRCAVTRACISYTRLCDY
TDDCGDGTDELNCRWTQYPYRCNFEYDLCYWRNLKDDDFDFTRQKGQTDSANTGPLFDHTTG
TSSGYYIFVETSWPRKTGDKARIGSGYLGPITRTYCILRFYYHMYGDHIGALSVKLRTCIGCPETQI
WRRNTTVGNYWVRHAMYLRSDKPFQVIFEAEKGSDYQGDLALDDISFDGCTPYQGTFPTVAPST
KPPPTTSPCPSGKFYCAKDAKCIKGSMKCDYIKDCSDGQDEQHCGPCDFEKDMCGYQDVSIGTL
EFKRTQPINDGSKNGPSVDHTTNSTKGYFAMAQKGSGNKGSPVSFLLSAQLSQTAPSCKVQLFYH
AKAGANYVRVSHRQPGSNGKTVISQVQSLSIRNMDKWQNDTVGVGQRPFGWQVLIGLLSEYAA
IDDIKFIDCFYPRPTGVCNRMYTQCDNGVCLDPEKMCDFSNDCGDNSDEKPSVCKNFKERCDFE
TDTCNWYQDQSDNFEWKRIKGGTPSGSTGTGTDHTTGTSQGYYMYIEASNPRKPNDTARLLSPV
FKPHGNKKCAMRFHYHMFGIHVDSLSVKMKFSQDDNSTMKTVWTKRGNQGNQWNTAKVYLL
SKVNFQVVMEARRGISFLGDIAIDDVSFSPDCLPDFKATLNPNPITKAPPPGCKAGQFSCGDGQCI

DSDFFCNFKQDCKNNADEIRCPSSCDFEGGKSCNWFNAKFGDIMDWTVHQGKTPTNGTGPPYD
HTKGTKDGWYAYMEAHQRKASNFPNAHFVSPMYYQGAYDCKFSFWFNMYHYKISVQNDARL
NLLYRKNGKDTKIWSMARTTGNKWVQATVQLPRCPRDFRMIFEGHHYWATKTDAAIDDLKFM
CTEPKAPSSCANDEFQCTKTKQCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWI
QFRNDDFDFDIQSGKTSSSGTGPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASG
DCSLRFWYHMYGSHIGSLTVYTATTFGVPETQVWQLSGDQGNTWKRGEVKLDSNKDFQVIFEAK
MGTSYKGDISLDDISLTPGCVYNNAVLPGGPTPPPVDPCLPNFQCNEAGNCVSRAKVCDFVVDCS
DGSDESNATCGYPQGFEYGFGAWRNAHFDTYDFTLQQGATPSIQTGPTTDAKNDKKGYYAFLEV
SNRKRSRKAVLSSPTYAVAYSQCVLSFYYHMYGRETGILKVHLVTTNETTLLFELKGEQGNKWIKT
KAFVGRRYHPFYLNFTATVGSGYRGDIAIDEISFENCAHPQECTGVDPGKFRCKNGFCINQTEICN
AVDDCGDDSDEHVGSVCENYLGCTFENLNDPCNFTQAKSGDDFDWKLNRGWTGSYNTGPTRD
HTKGTSKGSYMYIEASGRVKGQKARLISLPVESRPGGNCQVRFFYHMFGKHINDLNVYILQSGTL
RLIKNANGDYGDMWREASLDLSKEKGVYRLVFEGVVGASYLSDIAIDDIIFNPDCMTNGSRVFPT
RIPCAANQFTCTNTRQCLSSSVRCNGVRDCRDGSDETGCKGPDTGKSSSVNTTTSIYASGVVGGLV
ILLIAVLIIYIVVKRKREKKLQLFSVFYDPTKQAENEKKQGKPSKNVTIKNEGVSNPIYDEQPMSEFS
MGELDTNMFTDEPYVVPAEPKGQTSSMANPLYQDPYMEDDDSPLSNF*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN4595_c0_g1_i4.p1 type:5prime_partial len:1639 gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC

VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)
MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDGLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV

41

GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN1676_c0_g1_i12.p1   type:complete   len:1631   gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*
>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT

GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN1366_c0_g1_i1.p1   type:3prime_partial   len:4702   gc:universal
TRINITY_DN1366_c0_g1_i1:236-14338(+)
MMEQDRQRPSRQEYNNRSLSRERIGSRDGSRDRNLSRDRDLSQTRDLSHTRDGSRDRSNLRTRDG
SQDRSFANRSDLYSSPYSSNSQAMPQTSATVEIENLELQATVSSQEELINQLAEDLRNVRKARDFSA
EVEILQKEQQCMDFKEQLEGKEMTIQHLKTELVQSQTVTEEVYKKYESIRSNRDAKDKSIRRYQQE

LHQVHDLLETAQKDKLACVDKMRQIQNEKSALEFDYQWLFDKIKNYEEHGEVFDMSSVSKSTTT
IKRTTTVYEDGQKIRVEDYQSDDSIMPLQNKFQQAQKGYRKAIGMQDDQLMRDKENLMNEFRS
MQSQMHDLKRIHENFMRESKEKDTLIERLKEAKMALDQELDHLTRENENLRQTNDKLENENSD
LRTELNSARNQVSKIEVQYDNCMKQRNYMKEQMEIITQNSAKGRDDYNSIEATMRDSQRKMDS
MQRDLTNKENLNKQLKNKIKILEEDFEQCRQDYNQCMVSRESLQQQKLDVERELKERHDRMDE
VETSYEDIQRRKADLQQELASLKKNLTRFINEEDSSNQMKSHLQNEVLAANKRISRLEAAYEASQ
QEKLELQQELAPATQRLSMMRAAYETLQQKKEQIQTDLIASQKRCAEYQAMNERLKQDRGEILN
EIQACKRRAAQADVDLDEAAKQYAILKGKLEDANRRAQSASEDLVTRQRTIEELRHKLEVSGRET
IQRESYYERIKQERRSLEDELRGCVTDLERVQNEARDVQRDNEKLRQDLGTAQQRLHETEAYWQ
KTKMENAKLQRDYANMERTVQELRDLSHKLQQDKEDCEKILYSTHKKYANLDKENERLGRENT
DLERELQSSKNKQSKLDAVIQDLKRKEAQLKAQLDDALKNRDELNRVKIVMNDLQKRLDGVTK
DGEQKDNLIAQLRNEKDNYKRDCDKFGRDYEGCRTMLETANREKDRLGKELNAANRRIADSD
VLVKRLQDENMRVRKDANSFEARIPILEDALQKSKANESKWALEANTYKTNVIRIEKELLVFKEE
HHSLVSHVSQNEDKNDGLAKKLDDALRKIFELEATNEMVSRENDELKRDIDNKTRQLEEQLTTV
ERANNDLKNQLNELRGRNKKQQDDYNRMQIDYNEFQSKWDGLSSDGQGKDRLIEQLRSELQN
STHEINQQHTDNENKKAYIERLTEEKQDLLNDVNTVNQRIYELEGLYKSSEDDKEGLQKEITELNR
KLNDVESDYDTLQRESDKEIRALKSKLGKVESQVDMILKDRDYIQDQLDAERLLSQKYKDEFERV
QREFLEHQKICERYADQILERDRIIDDLKNQMYKMETEIDTLKEQLRKAQTDQKVAEQQRDKAVE
KLNQAEMKIKDLENENDYLRKRLAELEREISVLEMKLNDAETENKNLRNKIKDLEDLIKTLRAKL
SNTETELQSIRHIISDRDVMIERLQKELDDANDQAHQLRRQVSELESQIELGDQERDDLRSRLANS
ERTIIELRKNLDKVIHDGQDLEAELAALKQKLIKMEPQMKQAQKQRDDYKTAYDNLKGKYQDL
KDELLANQRQLTDAKRAAEQYKKELRHKDHLLEEARGKILALAGQLQSARDELVKKQQENEQL
LDEKRLIQEELLRLRQKLGDLESANQILAMEKERLNEELISFNSKYTELRIKLEKSEQDRLESQRQA
MAYEQRLAKLEPQLQQILRENSELHLQVDRLADELRNALDENRHLKNDVEELQRIRDMQLKELY
EKDTIIEQLKAKLSNLENTVNHLQQENDKLHNLNDALEQEKHSLAHRLDNANSRIKELDDLYEQ
ERQKRDQLQNDLHDLQKKFVTLENAYKKSQERERDLKKKIDDLLGRIKDLEDQLAAEKKKNSDL
EAAENDRLKDLIHDLEGVIDDLRRKLTEQENENDRLRAENDDLKQQIMNLQRRIDELEGVIAGLEQ
EKNFLEEELNSLRQTVNKLEAEIDNLTKQRDGLQGQLEDLRREIMRLKEVIMKLEGTNRELQRTID
ALKQEIYRKDRIIETLEAKRKQYELEIDNLKNEIIKRDVIIDSGDESKRDLEIQIKNYEGRIAIMDGRI
DKITLEKTEIERNYHNAVNRAKGLESQVLILNREKAELKGDIDQHFGKIRDDNEVVNKTQGELRE
KVRIIETYKKEIIEKTTIIERLTVIRQTVESERDQLKKDNATLKITVNQYKDNDKGMNDEIQKFTFKIT
TLEKDIINMKNERDEFKVKADNATSKLVEVETQLKRSIERETRLRGELDTLHNKYQNLETIYNELL
REKNDVDRKYKDLLQKHRELDSKYNKLLANFNDLKDQLQQANNKIADLKAKLDKEIYENRDL
RDQLDNLKNQYNKLRDDNQRLEQELADYKYKYEDAMKELAEKNDLIDELKAKIANQDRQINA
LKGTVNQLRADYERSMREQARLQDEIVKLQAVVADLEGKLHRLELENEKLRKENNELQAKIPAL
ENEIENLKDKLENLIKENRDLRNDNMNLKQENVQLEKEVDDLKDDIEKLKDEIRNKDNIIADLR
KVRQELEEEIDQLRHDVKQKEKEIDDLFNRIRDYESTIQILNTKLAEIEPAFEACKDRLRHQENQIQ
ELRNKITDLESALKSQENEAELGNKLALTESKLNKITQLLDDIKRKNMELENENGHLKDELNKL
KDQNKKLENDNDRLSNELNECKAVIQRIEPMLDHLQKHKNQLEKELEDALNKLANLRNEHEA
HLREMKEKLHVIEVITRQLDEKDDLIEKLKQEKAALEKENESLNDALNKLHQTLDAVQRRKEEV
EKDFFEAKKRIAELENLLNALKEDKDDLERMLRDAKEKNADLDHALRNSQHNEAKLKGELDEA
RGRIQRQRNELAKLQIIVGDLRAANERLLRDNTEKQNVIDGLHSQIRGLESQNGSLKKENQKLRD
ALDKLQRELHNLEQENQQLKAKVFSLQLLNDSLREEKDRLYDNFQELEKDYNDLKDKYNQAVR
ENDRLKDELAFANKRIDELENMNNQLNNEIENLKNIIAGLKRQINDLQGVIDQLRRDKSDLEQTI
NIHSETTINQRPVFDESDYVPRSEYDELKALLEAANSTKEGAERDRDQYHQEHLELHKRISKFEAE
LEGATGKRDEYKRLLQEAERRIRELEGVNGRLEDREKELQKELLNALNEVSGLQQQIISLKVKLGK
FEADRVNYEDKISKLNNEINDLHQRLSQVLASIEEKDHIIEDMRQELADTQRRHAELDSQNQILR
DEIEKLHGIINDNERKIDDLEVKLQDQRNQNSQLKNQINELNARNNKLKDEINDLQRKVSDLER
DLDQAKRDNQEKQNVIDRLNQLKNQLENDLEALRQENAGMKSDLDRLRLDNRQLLQEKHDLE
MKIMGLESDKGTLEDNVERLLNEIENLRNKIQKLKDENDRLIIENKRISHELYKYNKKSGPSDYDS
LKDQRDKLQREIADLTKELRNYKTNITVLQNEKDDLYNRLKELERDLADRDHVIEELEREKDRLE
RELESARNRADKFELSNGQLENEKNRVQEELMDLHRKLTKLEGDYELACDKRDDLQKELDSAIA

RNKTLEDNYKRSQERENKLHQDLLAAQKKITILEHELQSLKDRVNSLERANKVLDDKKNELKDD
LIAAQKRISELEIMLEGADDRNKDLQNELDAMKRKNDELRETLRLTEHGKEDLINEIQNLTAKLS
KVENKLTQAENEKRYLEQQLEDAKQRTQKDRDEIMNLQKTIYELTRKCDSLTKDNANKQALIDD
LRAKKTTLEGEIESLKRDLQNNQYEIERVENDKKNLYDELENMKNKFNVQEQEYLVLQEEKEKLR
QDMIASHQSVCRLKENYENSLGDKGKLREELATFHRKIAELTTAYDSCRSEMNRYKGDCDNYKD
AYDDIKAKYDASQNEISKSRNDYEVCLQKYQKGEQAFTKSEADRERLQKEMLDVHRKSSEIAVLF
QTTKEEKRVLENQLSMLQDDLERYREGYETFNDKTNALQDEILVSHKNYTKIEHAYNRAVEREEK
LEKDCEEAKEIVANMEKDLDNARGKANELENELRKLQDKLRREQDEYEQNSEHAGKLQMTLRD
YESKLSQLRNVEDENKTLRDEINNLKSSINKVEMDYRSNHNDLTQVQDYESSRNNINKLNNEIN
ELQRDIRQVTSENEKLQNDLQNAAQDKEQEGERLKSTIRMLEREIDSLKTQFGQTTEQLDIVSKDR
NVMHQEIQVILKKCVSIEMTYITKTEDSRFQTSGGDEYEKSINELKNHLDKSEREFDDREKKYKYL
EDQYVREKKDKSQLEKEIDEIQRRYDNMQHEIRVIEEDKKRLSDEYQDMFNKYNDLDRDFKNTQ
TKITTYETEINTYQTTINDMQYKFTNNEDQNKKNSQVYRDLQQKLDNATKENTTLKGELNDEKA
SYRNVKKDFERQVRELQRSSESYGKASHEKDTIIEDLKSKRQALESDIDQLRRDLNHGKDEYKRLQ
REFTQHKSDYQDQQRVITDLQQKVEEHKHSKITIEEEYKITVEKYIKEIRETHIKLSKVESELQTTRE
AQNLDSDERYKRLQNELQQERETTRKDIYGKNQEIEQFKSQISNQDQEIRRLRREIEELDKQLKEA
GSNYSSTILIQKQDAPKYSSTQVTESRISSSSAPRYSTEQEVLIDASDKDTEDEKKRYQSSFYRSTATIK
PGQSDYGSVDVVLQGSQDQGQDDKDYDYNRRATGLDTNAVNRSQ

>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)
KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLVSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ

45

GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI

TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD

GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*

>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)

MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)

MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI

SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*

>TRINITY_DN11248_c0_g1_i1.p1   type:3prime_partial   len:1700   gc:universal
TRINITY_DN11248_c0_g1_i1:111-5207(+)
MEIRSLFVAFIYIVHSINAQCSSPWKSYKDSCYLFTAVSTVSPGHTWEDSRFICQRYGGDLLKLDND
NETKYINSQFDDLKIKYNHYWIGLNDIKKEGDWRWADQAPLNVTTQWRVSRGEPNNWQGNED
CIETTYDGQWNDNECSRMFGYICERSKDAVIPVTPTLPPFPTATDKPTTCEAGWIPWGTSCYGIIRG
LAKNFQDAQADCLRRFGDLVVINDQAENDFISNEISRSVGGLWIGLSDTYKEGTFYWVDKSELNF
TSWRAGEPSNDYGNEDCVEIYGRWGPGQWNDNHCTALRDYICEKPGGVHNCPRDWVSYKNY
CYQINAHPGQKVTWEDARKNCLDFNKAWRKSVNVAQADLVSITNLEEQKMLQKEFSKVNIKN
DNGFYYWIGLTDKNSTGGFYWTDGSTYKYSNWIGSPQFASQCVRSNVIGYQGGSWSKGDCSEAY
NYVCKVGRGQDRCYNPLGIQSFAVPNKAMTSNSVLGPSTPALAGRLYMKAGNSLDGAWCAGN
NTKTPYLQIDFGKMQKLTYMGHQGKSNSDAMVTSYYIKYSQDGIVWDTYGYIPPAQYYKFKIYIG
WRTNYEKVMNLPLPAPFIARYVRVYPLEWNIAPCMRIDFYGCQEEVDNQRCGLGWREDKKTKN
CYKFHNQITTWDSAQELCSIQGANLATIATPDEREFLSEQLGEFKSLVSEFWIGLNDLDYEGVFKW
VDGTPYQLSNWYYGNPKVRNEKSNCVVVRTTDSAWVNTECTVFRKFICKRNYISPYTPKESYNG
YVYSKTDYFWPLDSATDFEGSLPLTLNGNVDRVPFPIDYDVGVSRYALNVSGSSGFFKIDVANDVC
IHHPDADSCPHGITVSFVFKMSKKSSSKRQVIIDTTEKNKPLGYKVYTEFGSIYVNLRGHQKSYSGS
TVYNAHIFNHMTFTWSSLKGLSLYMNGKSRVFDLLGSYAKDYPKVDYGKSLLIGISGDSQDPAEL
MIRSLGIFKQVLDAKSIEAIYLGEFGTCKSHQFAHGSYCYEYNSTEVSWSNALSTCRDNGGDLISIH
SPVEQAFFNLKIAQYNYQRTNWIGLNAKSKNSFFKWADSSRLEYSYWAPLEPNNNNGRREDCVE
TFANGGWNDALCYLRNPFVCKYSRALHIMGSENTDDKEYKVFFSPYQTLTFGCPLGRSIEILTASY
GSVKDGCVKDVKDKVSNACVKEHCVRVQASDFFFNKINPCKDKNRFALKRLKVTYKCNLATPE
FDSTGCSNGKDSENSYRVFDKSNICYKLYRKPKTFKEAQKVCKDDNGDLVRINSRETQVYLTSLLH
TMYQKTDIWIGMMYNSTTQNYEWLDGSHVYYTNWVNRQPDPRNGDYVKVGLEEGAKNFLFW
KNGEANETLPFFCQRVKVGKTTQAPPTTQPRTGTCPKGWFTYNKNCYYVNTNRLSFPDAQAEC
QKYGKSSHLASVLSYEENRAVFYDVVNATVDFAWFGLTNEAIVTGFRWVDDQPVSFVNWYTNEP
HKINRHLCVGMGSGGKWIDLACYLKYPSICKLPLGEVIPTTTPLPTIPPTQASGLCEPDWIHYNGS
CYNFANRTSYADFHNARVTCNKMGAHVATIHYQKENDFISAQLKRMYIPNAYIGLTDFSIEGQW
QWEDESVVSYINFGEGEPKNWHGMEDCVVVKSIGEWNDIPCNLKRSFVCKKNNGTVVKTVNTT
AAPDSGYCPSGWKLYGNKCYYFRYGE
>TRINITY_DN5584_c0_g1_i1.p1   type:complete   len:961   gc:universal
TRINITY_DN5584_c0_g1_i1:2917-35(-)

MASEMSSPFDEEETLLDEKRSKSNDYEGGFCKKNWPVVITGFGVVVLICLGVVIGTAFKSDINSSN
SRLAREEKFPYKNIRLPGNVIPIKYRIYLHPNISDNEFGFSGNVRILVNVLNKTNSVLLHSKDLNILK
VKIFSNSAAFNQKSESLATEIPTQEFLHSKKLEMLHIALNENEYLDAGEYVIYISFKGSLSGGLEGFY
KSSYTTRSGEKRYLATSHFEPTAARAAFPCFDEPAMKANFIIIIVRDPQHVALSNMPIERNVTRRDG
KVTVHFQESVKMSTYLVAFVVCDFAYVSAKTKKNNIEVRVWAPKELIAQAEFAIQVAPNVLNYYE
EFFKVDFPLPKQDLIAIPDFGAGAMENWGLITYRLTSLLYDENESSSANKQWVAVVIAHELAHQW
FGNLVTMEWWNDLWLNEGFAAFVEYIGSDYHDKSWRMMDQFIIDDVQNSLALDSHANSHPISV
PVHDPAQINEIFDSISYDKGASIIRMMKNFIGSDAFHTGLTNYLTKYKFKNAKSDDLWACLTDAAK
DKDIDVKRVMDTWTLQMGYPVLNVKRDGEKVTLQTHFLKDQDKPAKSIYNYKWDVPVTYFT
NGENTTQFDWFYKDNKSIVIKIDENADWFKINRDEIGFYRVNYDKDTWAALKAQLLNDHMKLS
ASDRSNLMDDAFELARAGQLDQIEALNMTEYLHKEKEYVPWITALSGIAFCGKMLQGREGYKYY
EKYIVQQVKPLVDELGWEDKGTHLQKYLRGSVLRSAVDHNYTKAKNQALEIFKDFKENNKAIKP
NIRSAVYLAGIKYGTKDDWDFMYNRYKTSQFPSEQRKIMFALTDTEDKNILKKYLSWTLDNDKIR
SQDSCGVIEHISMNPKGTEMAFKFVKKNWPEIYKRYGTSISLGKTIKRIMGKFKTTEKYREAKEFLD
THKLGSGRLAGKQALASVQNHINWLEKNEKKVVEWLKNNINNKKITK*

>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*

>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE

TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC

RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*

>TRINITY_DN991_c0_g1_i2.p1 type:complete len:3229 gc:universal TRINITY_DN991_c0_g1_i2:278-9964(+)

MKKKMKVGDLLYSKTVMFLMLLFVISVSSEDLLDRNQNNAYFAKYYECPVGWVLRCEKCYLLVE
TAKTWTDARYYCKKHGGELVTVKDDSTNFFLARYVQQTNKKIHNVYIGLHDREKEGDFKWSDG
SEAIEKEFRWLPGEPHKSLTNENCVEMFTRSNQYLWNDAPCSDELSFICQMPACVQGSNRCDNG
KCVSKQAICDGVDDCGDSSDEKNCTKCGGYLNGMTGTFQSPNYPDKYGNNRRCSWVIEVPTSH
KIQLAFKDFGIETGFDYVEIFDGKTLAAKSFGRFNGDENPELIMSTSNQIRVTLVSDMTTSFKGFLA
TFKAIPDKCEFDLVIPKNGYEYIKSPMYPDNYPDNKKCIWNIRSEDPFGTLTMMFVELDTEENNDF
IEVRDGKGVKDLLLGRFSGENDVKFMSPIFSTAKHMFVKFQSNYMTSKKGFRAIIRSGCYAEINAS
QGMITSPGFPYQHYPKLIQCTWKINEPDNKAISFMFHRFDTELNLDVLYIKDKSGKIVGTYSGVLS
NNALQVQWILETSQSSLEVTFTSDVTYTMSGFNVTFSKGCPSISVLGGKVKGKSHYGGKISYECDE
GYHLRNGKTRTCLYSGKWSDPMPYCAKINCGHPGVVVDGGFQTYPKKDNFDVNTRLVYYCDA
GYRLIGNNERVCQNDSTWSGSQPECKLSFCDTLTTPKNGKIVGDDFTVGQSVTIKCNPGFNIVGV
TTLTCGKDGKWNADEPVCEAVTCPIIKPSDNMEVLNLPNNTDRFPYGAMFDIKCKNGFELNGEN
QIKCVAPGIWSPKLPKCYDVNECLQKSSACKGVGHQCINTIGSFKCECKNGYQKNGANTCQDID
ECKISNATVKCSQKCINQLGTYKCDCEEGYYLYSGDNSTVSRIELRTAVVNHTCYGVRCSVAPIPD
NGFVINYGRRHPVRLIYQCDRGFVIKGNEMVMCQKDGTWNREFPDCVHAGCQNVTVAKSATF
KVNGTKLSDGRYKLGTEVIYTCARGFKITSGNLRQECIQNTTHAFWSGELPVCERKSCPTLTAPVN
GKVSSMNNLFESEATFTCDDGFQLLGDAKLTCTESGKWSGATPVCAASSCPYPDVPKYGEFVGRL
ELGRRVIYSCYKTGYTLVGNKERTCLYKKGTGHYWTGDTPLCKDITPPVFTCTKQINVQLPRSENS
MLVKWDVPTATDSTGKRITVTVSPDIHPPAKLKAGQHNIVYTATDKAGNNATCTVVVNVQDKQI
PRIKCPPNVEIESDFPAKVTWDSGLFSDNVGISRVSFNPSNGSTFQSGKYHRVEMTVEDLQGNRDV
CVTEVYVKGCGCESNKSCNSIAPHNGGISTCHINMGITSCSLTCPKGLSFVQDNFKHDNVMCLPQ
GKWSEKDIPGCGERKSVTSCLNAVLEFEYNTIDTSKVDEDNLATYFNDLFKNFGNMKTTYCDAV
KFIPNEYELKSKNIELLFKMEPKGDILKDALKEVLEGCKTELENRFQSSKQDILNLVSHASVNLQA
KSIIKFDAASCCGDSKYYCCPKGHSVRAKGANVENIVCLPCSPGMFLNASSNHCTSCPKGYFTDT
SGNEACQKCPDNLNTLKHQSTKCTEKCPLGTYSSTGLQPTCRKCDYGEYQNEIGQTMCMVCPSS
TTTASRGSQKLEDCKAPCQLGHYSDTGLKPCVPCEKGTYQNETGRSVCKACPSGGIYAGIEGATK
EEECPSDNACDMKLCKNEAKCVPGVYSYQCLCKPGYKGKNCEIDIDECETKPCKNNGTCVDLV
NDYNCTCIPGLTGKSCETNVNDCKNDTCINAGVCEDLINDYKCWCPLGWEGKRCEKFINKCLSS
PCQHKSKCTPLLNAYKCDCTPGYKGHDCETDINECQSSPCYNNATCVDLLNDFECKCQPGFKGE
LCAIDINECVGSPCFNNATCIDGINGYRCECQPGFAGQNCSINVNECDTKPCLRNSTCIDLINKFK
CECEPGFYGDRCEFEINECEDEPCKNNATCIDQVNAFECLCPLGYKGVRCETEINECDVNPCKFG
TCIDLIGDYRCNCTPGYEGRNCDILIDNCVAKPCENNATCTNQVHDYSCKCLPGYEGKNCSIDTN
ECLPDPCNGNALNCTDIVNGYICYCKPGFRGTNCSEEINNCIPQPCMHNSTCKTIIETNDYQCNC
TAGYEGKQCENETNECLGSPCQNNATCIDKLATYECVCPTGFTGFNCETNIDDCKNVTCQNNG
MCFDKINDYYCRCHATHKGRHCEKKIPDEVDIKLPGGTGSVIIHSNISTVQEFSLSIWVRYLGSNSR
GDFLILANSNGKVMTSHFLKLSHQRVMVEFNGNMDIFSLDKMLNDGLWHHVFVSMSGLSSKIV
VALDSKVIIEETKSYLNGQSFFKPSGYLIIGKNVNRTGFFSPSGFAGEISQLAIWNRVLSPNEMNNLA
SNCSVDLKDSIIPWVGLLDNAGSKVELLERWTCGTNVCPAGFMGRFCEILIDKVAPTVASCPKSKK
VVSLLTSTRVNWPEPRFDDNVAVTEITRSHAPDQVFGWGDYVISYIAKDAFNNSATCVFELYVTPY
DCPDLEEPNHSASATGRWLWGLFFDFQCKPNYELAVPKPPFYSCGKMGTWSHGPPTYMDNPKN

LLPSCTGTARPIVIGTNAFTYSTTSKCDETFKAEFMKQFKRKVLEIHQYFKICGEKCDFANIRVKCT
DEDITTSRVKRDASLNEVKVYFDSKFNESLSNSFNDTQTLQAAIKNDKVDLSFTVGGETITSDKNN
VDIAEPKLACNPGWKFVKDKCVLCPAGTYRDSSMIKCELCEAGSYSSLGSATCVKCPHPKITYGT
GAKSMNECYENCSSGYYFNNGSCSKCQIGFYKSFKGLEECTQCPKGTTTTVIGASRLEDCSVECPL
GHELVGTECQPCMNGYYRSNKNQPECLPCPYGTTTYLVGSASNICYKKCELGFESSNDGKVCMP
CNTGYYREEEIQRKCLKCSGDKITLVYGAKSKNQCKEQTGTKFDVELRFTSLEWNNTLIDEDSAYF
RTTAYNIANKIAKIYENDKELLYIKIINFSEGSVIANMTISFEKEKKDPLEVLRKTVATGKLDGLSVDP
DSFKTDRCEFFDCPKDRVCWYNSTGRGCKCKPGFYETSDGKCFAGCEPDYCLNGGACVESDSGR
NCRCSKEYSGERCEKEEKDFSLALIIGLVVVAILILLLLCYCLRRRKRSGNVSLYKYWKSEDKEHGLS
SIPNTPIVQPVKGDNGDIAYAAENKLVEKDDEEQSESSDRK*
>TRINITY_DN1936_c0_g1_i3.p1   type:internal   len:1070   gc:universal
TRINITY_DN1936_c0_g1_i3:3208-2(-)
GEYKPTLGRCLSFWYHMYGSHVGELNVLVLQNKSRSAPIWNLKGNQGNVWRPSRVTIKSAVNH
NIIFEGRTGDGYMGDIAIDDVMMSEGPCTDYGNCDFERDLCGYTNKKNIDQFDWQLGSGGTSSV
TTGPSNDHSTQTALGQYMFVESSYPRLPHETAIIGSETIPVSGSGKCLQFWYHMYGEHIGSLEVNM
RVANDLSETIVWKLEGNQGNKWLQGQAPLLSRGQNMEVRFEGIRGTGYKGDIAIDDITVVDYSG
ACAITPKSAKPWGCNFELDFCKWQQSRADKFDWLRNQGATGSAGTGPKADHTTNTTQGYYAY
VETSFPRQPNDTAAIISPTIKGNGTKQTYCMWFAYHMYGPHVDTLKVYTRSQGSDKPVLWRRRGS
QGLNWNHAEVQVTVLYDTKVIIEAVRGKDYKGDIAIDDIDIWFGDCFSSGICTFEGADLCFWYVP
KNGQLYWQRASGATPSVKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYSPWYYNTGQKC
VQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNNVYFQIIVRGTKG
NGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGSTNSFLTGPSIDHT
TQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNLTIYLRKVSNTKT
LSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVVIEGVRGSSYDGDIGIDDIEFTSGSCSFLPKGA
WPSGRSTPAPTQASTTLGPTIGNKGFDCNFDKEFCKTWMRNSTRTNFQWKRHQGSTSSVGTGPH
HDHTTNTDQGYYVYIESSSPAQPNDTAYLIGKDIPNNNGFCLSYWYHMYGPHVGSFRVYVVNKT
NAEARFVRVGTQGDKWKHGQLYISPKAGNPITIRFEGVRGSSFMGDIALDDISVRYGNQCPAPRE
CTFEHDNNGGSSSTCGWTQEKQKDSFDWSIGSGDTPSVLTGPNFDHTLETKQGHYFYIETSYPRK
FGENATIISQSYQQTLGKCFSFWYHMYGSTIGNLTLFLRRD
>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)
MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ

WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*

>TRINITY_DN1936_c0_g2_i1.p1   type:3prime_partial   len:1894   gc:universal
TRINITY_DN1936_c0_g2_i1:5680-2(-)

MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKKVSNNMTKL
WSLTGTQGNRWISANVTFNGGSQFQMAIEAIRGVEYKGDIAIDDITVDDGSCNADNGQKGNVTS
YGKCTFEKDKCGFKDGNTSTLTWTRHKGKTPSKGTGPLVDHTFGTGLAYYMYVEASNNPMQSA
RLYTTYTNLDSTGSCLSFWYHMFGPRTGELKVYINPPEIGKEIPSFSVGGEQGNLWIRGEVTVNTTT
ALVVFEGTTKYSYLGDLAIDDVSMERGKCEDPDSCSFQKDLCAWYNLPKSSGLDDFDWIVGAGV
TPSRFTGPTSDHNGDIAGKYLFMESSSPVKMGDKTWLSSELFNSTGKGKCFVFFYHMYGRDVGSL
NIYVNTSSGVELVWTQSRSKGKQWQNGQVDVERPGTYKVLVEGVVGKGYLGDIAIDDFKFKPGK
CQIVPSNASPKKPQTTMRPTTKRPTQPPTPILDCDFEFGVCSDWRQDYKNDTDNWKVGKGTTST
AGTGPSFDHTKGTIYGKYIYLEASYGRLNETARLISTSIPATGDTGGKCLTFWYHMYGPHINRLNIY
VMIGGHTGKPIWSRVGTQGNKWNKGQVTLVGRQPFQAVIEAVKGAKYQGDIAVDDVSLSSKKC
PQPGATTCTFENSQCGYIDDTSSDVQFQWTWQSQATSSLNTGPKFDHTLQSVSGFYMYTEASNA
KQGDKARLISPVNPGTSGSCLKFWYHMYGAGMGTLSVRLLVNNKLQSVPLWSETGNKGNEWK
VATTTIKTKDAYQVVFQGVIGTTYASDMAIDDVKLSDGECQSPGFCNFEDGLCTYANSKTDDFDW
LVGSSNTPSSFTGPKVDHTFGNASGSYLFLEVSKPIKAGDVAVLESQQFNAVGGKTRCLNFWYHM
YGSDIGTLQVIYKVFSGSQQERVLWKLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSG
YAGDIAIDDIQFTTLACRVEPSIANPTPTTPKPPTTFPKTAPPTAAPTPFSCNFEKDFCSLTSDSTAVF
NWTRSQGYTASQNTGPSTDHTYGRGFVKTYGPGSIRHAAGMCIHISMGGHTKPKDETALVLYNG
CGQDRTEFKYDNGLIKSTQYNMCFKLKGASTSAGTKVVISDTCTNKWKMLANGAFQDAKTNLC
LAPSGKLAYPQNNSPLIVSKDCKAKGVIFTFSPTMGFYALIEASAPQKPNDTARLISPVLNKPKCLS
FWYHMYGANINQLNVYTKSPNGVYGNPVWSKFGSHGDKWRPAHVYMNPKSSSYAYAIEGVRG
NGYEGDIAIDDVSVSDKCPAPVECTFEETNPVACGWTNLKTDDFDWSIGQGATSSQNTGPSNDH
TYNDQRGKYLYIETSSNLKAGAKALIQSPVYRGNGRQQGQCFQFWYHMYGASIGRLSLHLDQVG
STTKNRAWIQESDQGNRWSIGQITIKSQAAFQLTFEGIRGKSFTGDIALDDFRMFDGPCNNIATCD
FENEKCTWKNSYHKDDFDWIIGQGTTLSLNTGPVTDHSTNSGDGHYIFIDASRKKQGAKARLYSE
IIPRGFFTFIPYCIYFWYHMSGPDIGTLNLIAKHGKGKALEKVIWSLSGNQGSKWLQGTAPVTSSVD
FHLVFEAIVGDGYKGDITLDDIVYKLGLCSISPKAADPKLISTTSAPTPIPTTAVPAMYDCNFEKNSL
CQWKQDLTDFFNWTLVQGQTPTLGSGPSVDHTTGNKTGYYLFIETSNPRKAGDKARILSPSMDS
DKDHGHPHCLKFWFHMYGPHV

>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)

WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*

>TRINITY_DN691_c0_g1_i1.p1   type:complete   len:1726   gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG
QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*
>TRINITY_DN24268_c0_g1_i1.p1   type:3prime_partial   len:2183   gc:universal
TRINITY_DN24268_c0_g1_i1:122-6667(+)
MILLWCILLCLLNFTTVTCNDSNYNTGPNYNCKEDYDVSLRCQFDLGNSCVNNNGSDNSTLYKC
VCSHYGYEEKANNSLSTCQPISCTNINSVYPELIVRHCGLGVTECEGELVNRECTCNSSIHESSLDR
RYCFHASCKTNPQSAVKCGFQNQCYGTYNQYICACNAFGFIRKDNSNSECVLAKCEDNSLDPFI
ACGKGALSCNGTLVTLQCECDTARGFVASASGSSCIPPTCSISPTYLADCGEGNGCVGGYGAGNF
SCICSNPMYKRDPTDNRKCVKRTCDETPETPKMVCGEGALSCTGTVDAPICACNKSDNFVVTPD
ASGCVKATCSSNPAALAKCGEGNSCAGSYDEYICICGAFGYKYHATDGSCQETLCTENLEKACGI
GASSCIGNTTTRKCICNEADYYFQSEDQRSCVKAPCRTNDTIKEICGIENTCLGSEDSFICQCNIGFL
LDRTTNQACYLGTCENGDLDPVTLCGSGAMYCNGTMRNYTCGCDRNDGYVRSPDLTSCIPSDC
RGNSTMHEKCGVLNSCVGSLDDWMCDCHAYGYRGNPSNMQTCDKVMCGDPGAENVTICGLG
VTACDGHILNPVCKCDTTKNYIPSHDGTRCAPATCKNNKAALKACGIENSCSGSYDNYMCICNA
FGYRLDGQNNQCVEITCDDSDLDIRAVCGDGGRACNGTAKRPVCFCNETEHFVPSEDSRSCVKE
SCKASNEVSMKCGPENSCIGSKESFICVCNFEMGYRLNTATNQECYLGTCENGELDHLKHCGKG
SLSCKGNARNLTCECDKANGWVSSPNGMTCLPNDCRGNLTMHNECGKMNQCVGSIDDWRCI
CDGFGYETDPADIRKCRKKMCSDPDVDLLSLCGMGATGCTGPLINHRCLCNATEDFMTTLDGSK
CYNPKVTSCKSNATAIEQCGVGNSCAGPANDFICICDSHGYYPDMNNYQRCLLRKCDDPDADY
VEICGEGGIGCTGTMFNPVCKCNSAAWFYPVADRTSCVFASCRANQTVNTLCGLENECAGSMES
HVCICRDQGYKEHPSNSQVCLEKTCEENDFDLITVCGKGALSCSGTLKNLTCNCDTGNGYSQTSL
GNYCVPSDCQGNATTYDQCGPGNRCVGSLTDWRCLCDAPGYEPHPTDIAKCHQRSCGDATVD
HVMVCGIGATGCTGPILSPKCECNTTEYFAPTVDGTACIKASCKTNKTALEQCGLGNGCSGSHDN
FVCICDAYGYRLDDTNNQACVKSKCDDAGADYNKICGQGGIGCLGTVLNPVCECDFNKHFVPS

PDRTSCLLSDCRGNATALEACGKANTCFGSASSYICVCDYLGYKTNPANMQECLLQHCENGELD
PYNACGKGAVSCNGTIESLHCNCNYSMGYVASPDYSSCIPADCRANSTMYKQCGNGNGCVGSLT
DWMCVCDSYGYTPHASDMKKCHQQMCSDSGIDPVAVCGMGATSCMGAVSNPTCKCNTTSYYV
PSADGASCVPASCKTNKTALEQCGLENSCTGSATDFICICNAPNYRLDDNDNQKCVPKTCNDTN
RDLVEICGYGATDCKGTAMNPVCECNTTEYFVPSPDRRTCVTASCRTNAAVSIACGRQNSCFGSA
SSWICDCVAYGYMLNPNNVQECTLGTCESGYLDPLYVCGKGAVSCKGIWNNYTCECDNDKGYV
SSPDGSSCIQSSDCRANSTTYDQCGDANTCIGGMNDWVCVCDAPGYLPHPNDRQQCVQRMCS
DSDIDFVEVCGIGATGCTGSINSPVCQCNTSKYFTPSADGFSCIPASCKSNKTALQQCGEENTCHGS
ADNFVCVCNAFGYRLDDSNNQACVEISCMDPGVNYKEICGMGSTGCKGTARSPICECNSTQYFI
PSHDSKSCLLASCRANSNFTNSCGDGNSCIGSLTSHICVCDAAGFKLNPNNYRECIEETCEDDAIN
HINVCGKGAIGCKGTLNNITCHCDNDAGYYQSPDSKRCLSYACQQNGAAQDACGDGNKCVGS
YHDWFCECSAAGYEPHPTNSSICIKKKCMNDPINYCGLGALNCSGNTLNPICTCDSSAGYMAAG
NKHSCVPMDCTFNPNIDCGIGNTCKGSYFSYACVCSTPGTIRNMSNPMQCIDVTCPRDAVMACG
EGATSCEVTSTNHVICECGKGYHPGPYKNTCVLDDCRYNDMATKACGLENMCVGSYKSWRCIC
QAPRYMQD
>TRINITY_DN2577_c1_g1_i2.p1   type:5prime_partial   len:1087   gc:universal
TRINITY_DN2577_c1_g1_i2:3532-272(-)
VTRKLYKEEEEEEGEGEEEEGEEGEKDGKEKNGKDGDKSKKKIVDGKKSSRVVKKASKTSNKKIV
QKGRTLKKKNQVKGEAKQKLAKGRALISKRSDGEEEGGEGEAEEEEEGGDFSLSHLSQVDLVRG
LQVSAEFALPGECKKDKLCEWMKTKLGQDTKLTIEGTFSRSGFTLAAGITTSLELAKDLSLTEAKL
ELEFTKDERSVALSCTLKYNNKELSGKEGLEFIGTLKVSFSGELEISMQMKGMVYEPFGVEKLAFG
NIFLSLGVTIAGGLPSFQIGAKIMIGKGVKNKGGEGVFIFEGYFGFNPADPTDNYIYAKRSGDPLTIG
NFIKNFEIEATVPKKIANSGFYGETIISFSAAGKKVDELDLEIEAGFYFKGALKILDFDIYAELKVNPD
PENRALFANITLSPLNWVMGLLRISRSKDDDKNGPFLIVDIDSEKTAVQFEGFGYCLGIGAEIAVVV
NETHFYFHFAGDLFTVLHASLTVESAYGGDSISDMSFSFKGCVGLDLRKIADIVFKTMQDASKAVS
LALGKARKKVENARGAVTAAFDKVRKWRQGIESYKARLRARSAELERKKKELNYSCRDRCGKV
CVGFLDWNPYCWKVWNTWHGCPKWNPCRWKVDDIICIAGCELKKGWNKFVTWAEQVGIQIM
LGLSEVAQFLLKGVEAFEKVAQGVLTFAVGVLNVVESFAKGVLAGVGAIVKAASNVIVIDRFCLSG
NLKPVESACVGIDAKFSIFKVPIEWKGEFCIDLNFFQIIGKKTAVKHTPAIAEIDSKVQEFESQGNEI
DSKVGDMKDEESKQGNEVETETEKPYDINRRKRSHVPTAEEVYFHKLAYDRLPKVNTRSFETETS
MKDGAPWILSKTWKPSKRDIVKEESTLEKRILKTDSPDHCKNIENLYSNYQNIAEGFGTFLKNAD
KQKAGFQAMKRSYIDGMNYLKDEFNYGDKRQNVTDEEREHVKYWEEYVNKGLTSHIEDTESLL
KAQRKTYIPSFRKQVNQLFMEQTKSTLPTYINKMKNTVIKSYHKRSDIPKEHMERQLRKWNNLH
EALGEIASSETASYRDLSQHVASVNYLLTNLRRSDIPCAA*
>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ

GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID

>TRINITY_DN28257_c0_g1_i1.p1   type:3prime_partial   len:1462   gc:universal
TRINITY_DN28257_c0_g1_i1:4384-2(-)

MQNRSLCLLLLISLIVNVYGAFSEWSEWGACPRVCGISQKIRTRTCTRGGFCTGNLQEATHCCNDI
CMESSIQNDISNPSSSYSCHFDRKVTAQCQFDEGNTCIGESGFKGHHCICSAEGFEVTGTKCNDSC
QAVKCEDLTGPNLYKLHQHCGRHALSCTGTLPTRLCNCDTHSYLSSDGRFCYEATCQSTQEYRTR
CGVENKCVGTQDSFVCECDGAGYTTNVTDNSCVLMTCESGDLDPQSTCGFGATACTGNVLNLN
CTCGDGYVQAEDGQLCVAAPCTTNTTMQNNCGEENTCEGGLVDWKCICNTRGYTTDPTDVQT
CKKIMCEDNGFDSKTVCGPGSTSCVGHIVNPRCICDTTQNYVANINGTRCIKASCNADPSSRNKC
GAANSCFGTYGDFICICSAPGYKLDEGTGECVQKECSEAGIATFLCGVGASGCIGNQSNPLCVCK
ADEGYYPDSDGKTCVLAPCKSNPLYASQCGKENSCYGNKESFKCICDAPGFKEDPTNMKKCVLK
TCESGDLDLDFACGRGALSCKGTMKNVDCKCDNANGYVRAPEGNRCLKNDCYANVTSRELCG
TPNGCVGSIDDWMCNCNAYGYKPNTLDRMKCDKVMCGDPGVDHFTICGGGSTNCSGHITNPT
CVCNTTSNFVTSSDGFLQCVSVDCKTNPKAINDCGVENSCSGTYDNYVCICDAYGYRLDGINQA
CVKIKCDDPDVDYEKVCGVGGIGCNGTMESPSCICNASESFITTSDRRSCLKASCRGSEEAKSQCG
EANTCFGNADSFVCSCTGVGYKRDEMNLQSCSLETCEANELDHTIHCGKGSLGCTGNILNLTCIC
DNENGYVQSADGRKCVANDCKGNATTYEQCGDGNSCMGSLSEWFCVCIVPGYAPDENDPMKC
AKKMCSNSIAVDVCGPGATGCSGPIMRPKCECDKTMFYTPSRDGRQCLKESCEQNYASILQCGSS
NKCVGSADDFFCVCDGYGYKSNGTRDQLCIEKTCNDADADFVDICGTGGIGCTGTVLNPFCKC
NETEYYVPNRRSNHCVLASCRVNETILELCGRGNTCVGSLESHICQCDKPGYKYHDTNSQICLQE
TCEDGDLNPLRVCGKGAISCQGTLLNLTCECNNDMGYVQSPDATSCIAADCRSNASVPKQCGEL
NRCQGSLTNWVCLCDAPGYVADKSDFQKCHQKTCADPGVDPEKICGIGATGCTGPVATPICECN
TSAYYVPSADRYSCIPASCKSNKTAIKQCGEMNSCTGTSDNFICVCDGFGYELDAKDNQKCIKKTC
SDADADYIEICGQGGTKCQGSVGNHQCECDTKKYFVPSPNRKSCVFSNCRGNDTALRACGKGN
MCFGSTSSFICVCDAPGYKTNPSNLQECMKQTCEAGELNHMQVCGKGATGCKGTLDDLKCMC
DNNLGYAVSPDQTSCIPADCHANSTMVEECGQPNQCIGSLTDWRCVCNAPGY

>TRINITY_DN4815_c0_g1_i2.p1 type:complete len:638 gc:universal TRINITY_DN4815_c0_g1_i2:79-
1992(+)

MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI
DGIAIVEKCENVKCNVNTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEETCQAFTCNLNAECSNTENGPDCKCESGYKAINGTS
GKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGTRGRDTICEDINECAIKNICGGL
KVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSCSKTCGAGDQKQTRSCSNPSRE
APHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKTGEEPKKDFSSFNGLSITDGETS

RRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKKYSSTKMEMQDIIDCNANIDIE
KNLWDVYDVLAEHSICNYQVKDLEMKADRIQAEITRCNNRGWYSTILDAII*
>TRINITY_DN3795_c0_g1_i1.p1   type:5prime_partial   len:867   gc:universal
TRINITY_DN3795_c0_g1_i1:2719-119(-)
LEFIGKLKASFTGELEISMQMVGMIYEPFGVEKVAFGNLFMSLGVTIAAGLPSFQIGAKIMVGKGV
ANKGSSEADMFIFEGYFGFNPADPTDNYIYAKRSGDPLTLGNFIKNFEIDATLPQKIADSGFYGETIF
SFSAAGKEVEELGLEIQAGIYFKGALKILDFDIYAELNINTDPENLKIYANITLSPISWIGGLLRISRSA
SDDKNGPFLIVDIDAESVALEIQGFIYVLGISNEIAVMINETHFYFHIAGNLFSVLSASLTVEASYGVE
TLEDMSYSFRGCVTLDLRRIGEIVFQTMQDAQKAVSRAMAKAQQKIDDAKLAVANAFKKVKEW
KQGIENYKARLRARSAELERKKAELNYSCKDRCGKVCIGFLDWNPHCWKVWGHWCGCPKWN
SCKWKADDIICIAGCELKRAWGKFVTWAEQVGVQIMLGLSEVAQTLLSGLDFFEAIAQGVLSFAS
GFLSVVETFTNAVLNGIGEIVRAAANVIVVEHFCLSGHLRPVESACVACDAKIRIFNQPIEWKGEF
CIDLSFFQVIGHKTAVQHTPEIAEIDAKVQEFESEGNKVDAQVGDMKTEENKQNKEVGDKTSKN
VNDENFRARRSHVPTEEEAYYYRLAYDRLPEVNTRSFATEQSMKDGAPWLLTQTWTPSKRSLTPD
PSTLHRRILETDNEDHCKNVENLYSNYQNVAVGFGTFLKSADKEKAGFEAMRRSYIQGMNYLKN
EFEYGDKKHNVTDEEREHVKYWEEYVKNGLNSHIEKTESLLKTQRKSYIPDFRNQVNQIFKEQTK
STLPEYIKKMKSHVIGFYQKRSDIPKDHLEKQLKKWNILHQVLTDISSSETASYRDLSLQVASVNN
MLTDLRRSDIPCAA*
>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*
>TRINITY_DN77_c0_g2_i3.p1 type:internal len:1381 gc:universal TRINITY_DN77_c0_g2_i3:4141-2(-)
EPPTSTEPPTSTEPPTSTEGTTTSSGPPPLLFIDSEGSTTPSYPPPLIFTEPEGSSTSTELLSTTVSAPVLTT
SPPSQDLGDLGDVTTEPPTELASTTEQSPILMGDPGLKGEKGVKGFDAVNGTQGVKGDRGPKGD
RGENGTKGEKGDVGPPGPGGDFILGEIGAQKPSDPLSGAVGEIEGLAVPGPKGITYDVRSGPIGSIG
SVGKVGPIGLSGDDGKKGQIGQKGPSGPRGGFGNIGEKGKRGTDGVPGNPGEKGPKGTAGRKGE

LGGDGRPGVQGAFGHKGNDGTIGLDGETGDPGLKGAKGYAGEKGDQGDIGGAGLPGPKGEDG
PIGPPGQRGLRGPIGANGPLGDPGLAGDKGQQGTRGNPGYTGKPGESGPNGEKGLSGSIGPVGE
QGPIGSPGEQGRNGNDGTQGARGPRGLAGPDGPTGPQGPRGESGPQGSAGGPGNAGLKGVRG
KPGLRGLTGPKGESGDIGDPGARGPQGQVGKQGKTGPPGASGEPGLTGNQGPQGPGGDPGPNG
NKGLMGSQGPVGEKGSLGPKGSPGRAGLTGPKGLLGEQGSPGQPGLTGRDGKNGLQGVNGKD
GEPGASGPQGMQGAPGLIGTTGPPGDNGDFGDDGPAGADGDKGSRGDSGVRGPAGAPGDEGQ
TGMRGERGDKGPQGNPGSQGSPGPRGTPGLDGLEGAEGRKGTAGRNGNPGLTGAQGVVGNTG
LPGSQGSRGVPGEQGDSGSDGAPGEMGLPGLPGLKGSIGRQGLTGRRGQQGVPGPKGKYGLQG
EKGQKGEGGNAGSRGSEGLPGRAGRPGSRGEPGPVGSAGIDGNPGNSGEIGSPGRAGTKGMQG
PVGLRGPVGTSGLRGPKGPAGDKGDSGETGAIGIAGELGTPGVTGQSGPRGQIGEIGLRGENGPQ
GMPGSQGLSGPAGPTGPTGPIGLPGKDGNKGPVGEAGDPGKPGQAGNTGATGKDGLPGEPGAG
GNQGKEGPEGVKGTPGPIGAAGPRGLPGRQGFPGENGMAGFPGRDGSTGLAGNRGPRGEEGEQ
GTLGEKGVDGSPGSTGTNGGNGVPGDNGPKGYIGERGEVGPEGPEGELGEKGVKGEEGSEALKG
VRGPNGKSGASGKRGDRGDTGGNGPKGEDGSKGSVGLKGFKGNIGFTGFIGPIGAKGYKGDMG
PDGPEGHTGPQGNTGDPGVDGDPGAVGSKGPAGNPGQIGSEGNQGKPGDPGKPGEAGLSGPPG
SIGQPGDMTGAFAGMYWNYIHSAGMRSQRYYKGKNKEEVDEDSNSIDKLFKTTYETFQNFDFV
WNQVVDDLVVLKTLGTMKNPAVTCADLFKTNPYFQSGDYWIDPNEGSPDDAILVHCNATNYET
CIYPRWPSFEKDNWYEGEEDYLWAYKDRLLSDEEYISYSADI

>TRINITY_DN1795_c0_g1_i1.p1   type:5prime_partial   len:3198   gc:universal
TRINITY_DN1795_c0_g1_i1:9621-28(-)
CEKTCEKTVPFLIETSLNSFKEFDRNFCKTRWQVGVKVKAVSNICWTLTTAIHYMHSYQFDKSTFS
KDIEENVIEPVNDIVTKWKDIRKEMEDLFREQWKRNVKTINILKNYKKTTTKLQSAFSRALGSVKL
ESITEDKIIESAEQYLSERNTTVSLARYEVLNVAFINIISTIENLPNSIKRNQKANFAVDRGQANQVIS
TIDKIISDFPVSIKNICEDKNPENHFDYTAMSSLIKSTKEQYRNLMQKSNSISDIFLYSKRFSERAKSLL
KKANEIKASLFPCKLKSELIDSDAIKVNVEAFSELNSFIKNIQPLAKKSIKDFANNIKSIIGEFKNDITS
PVGELINQLNDYIDQSPAFNIPMVITETPQVGSLVLNSLEEYFKNTKQFFNAIEEVTKLCKGDCKLE
DVFGKSNLNEILEKLDQYLKPISKKASQFIKTIKFTPKGLPLFISSLEELRTSLQTFYASGTGYTKYGII
NLLKSFDKVVTSVQDVRSNLQTNYQYLTSKLNKNIKNFQIAMSNIKKSMNDLYKESKGKYQNIRD
TAIKIGQYEERLKNVVQKSKSIKNVIERRYEIVREGAEVINDVGSQFQYIYSSNLDKKLENYVDMEY
AMKVSTDINTVKENSEKILKQTNDIVKAVGIEIPKNVNVDIFTGDLSKMIDDMIKSTGNRKSYLAK
KLSSATNVVKSKVENVVVDIQKYVKNIVGKVKNYYNETYEKVKQKLEKYSKIYDEIEDTVKEIKN
KPIARLGEIKDATDEFVDSIDKYDLGMILSADPKLIPTKVNELKGLFTNFGSAMAEIDKILKNCSHC
DAINMFGYNYIKSLAVKLNGLGDKMFEKMERYGETIGDTIGEMQVVTKATQSIKTRFNKIFEEKKF
GANTFKELSDALFDSTSDINSMRNGSENVIKILFDKDVDLEVVSGTVNNIVFQLGNVMNKSHQVA
LKGEKVYEKAKEIKSRFTKIKQSASNLREGPLKARIDIARELATSTKSMLKELPTLFDLSKETLEEAG
INSDWLVGFGENINGLTKTLGNVITKTDRVLNAAGIAVEGFEDIRGDIPQIQEQFKTLSNAPWNEK
IPALKDLTASLDGVFQKTIDSTLNTTKALNISLTKNDLKSFADKIIGKERIERYQKLFKNVSTIMDKL
QEGPVPAIGKLTDKVEEFVAGLDDYEFGKMLLKNPSDVKQKFSEFKELAGTAGNILKNIGDITGV
CKACDANSIFGNGFVSSIATKIGTKFESVSKNISKVLDRVETGLGGWETIVGTANTISSNFKGLTEG
KITKEKFDQVSKALLKTSDDMKVFTNGSSKIFEALFNGNKDMDFLQEGFENLVNKVSDVFNKSSV
VLPKVGDVFESIQGVKGIFGKLKNNIEEISEGPIESRINVLKEITKGVRGIGKSLPVIFQQSQEVVTSL
GIDSNWFNDVSKNLMNVSNGISKVMNKTDIVLEGAGIVLTDVMEIKDIANEIGGDLNELSKAPLE
QKFKILESTFGKVDQILDQTDKIAGTIDETLTNVTNKDYNITSSIGKITGFASGALGNISDAVKKVSN
IYGDVMATVKSIKSGPIEKIGKLTDATRDFVKSIKNYDVADILLQTPKFAKERLGDFKEIIFESGDILK
NISGLITKHCKKCNLDRYFGKGFVNNVTSGIKSNLANITGKLENVLDKVEDSAGHLIDLVSSVKGI
KSQVDRLGEVDFSQDGFETISDVLLTSSSHLDDIKNSSSSFFQNLFGDDQDLNKLMGNYEGLLDKV
NGFVVKAGNFTKDLSETVGQFEDLKNQFDLAKSNFKNLTKGPLENRVDAVKKIATGFESIVRGIP
EILKTSKVSPEWLRSFGTKLEGVTSGISNVLNKTSVIADSVGQTIGHVGDVVDTAKLIGSEFERLGG
SESIGTKIDVALNIVTKVSNLTGQVNVVAKDVNNVFKNLTGKTLFKTDIFGEKTNKILGDISNGIGV
VADRYEQFRELSTTIQEAFDNIEDDPINFALNDLPKLFNQSVEFTKLIFDDVGNIAEKLGIEIDGME
GLDTDIVESAKSFFDFAQTTLKTIGSGAAFVNDFKNLLHSKNFKDSLQNLQKLQTSGVKFIENIDE

LGDKLFEDWDDIKGAFSETIDDISKSLGINLKEMGTKFGDGMKLAGDVFAIYSGLKELFNIKEINA
KTIIQAANNVIKVTNAAVNIANTYFDAGISTQGLEQAGQYINYVAAAYQMYEAVKLFKSWINDA
CDLTYEDVITKRNLTYSCAQPELQIEKVIVPIAQCNMINKEVIRGYGEPKSCCNKKECVFMQQVKC
LKENEVCSNSKLDLSKKLQISNYKLVPIYQSYLKSSSSMLVKQKEVKIMEELVNADTHKLKKYEAA
LFQSKKLVERIQSTNNVLEGQYKSISSLLQGGKAKIKVSKINFKSNLVYPDSRYVPLELTVTDEKQKS
SKVRVQFDFKKYSESLKVAAYTVLMSHVDHTPQSRYRRSVQYTSGTTQEVNELTHWTSSCIIYKET
FGTIEKLMSSLKTDMLKASDNVKSFGNENTNTASIAEEKLRNVINQASLESVNEIVRRWKYTSLM
VLSENVGSACSGFEDCFEAQLENMTRLYEPEMKGYDDVISKIELVQSNIMKIVKDEPRKRKTIISNY
ISSTIELLQDIDENTYFCDELPKFVKKMPLQQYAYYGETFQLECTVDGPASMQYIWRKNGTVMPTQ
TSFKLTLDNVDADDNGYYTCEGKSFTISKLSNRVLVQVNEKPRFISQPSDRLIPYPGGVKVTWVCN
GTAAPKNYFRWLFKPYQSDRVISITESSILTLQSVSQKNVGHYWCEISNGVTKISSRKAKLDVVRVL
PLKETASVNLDLKSMKKQTVCSLPTAKESDPLIDSVKVALQAKLTMFGSENAISVFYYPDRSTLNQ
AKLSVSVSSKPVKDIKANAVNLALAVSSERAQLQEKFTSFLSEIKKEDGVQVGYNNCHLNLTTLKL
AIDWKTDEFACPKGMGISEDNLKCIQCTPGTFDNRVGKCAQCPIGTYQPLPGQTKCIPCGEGKLT
PDEGTPDQHQCMSSKYECSDNMNMVILSDTSSGVKEEVWRTVKEFQKRVVSKLPLDIVKVSIGTY
GDNAKLHLSSKTFNSVEEFTKNIGGIRKSNGENRIDLGFDLAEKLSEAVSNEENKAIVFITSNAIEK
DALSQLERKAEELRLKGGEIFFITVGLKSDESLIYHSLASKPIDKHIFNVADSKDLMKWSEVTRRAF
C*
>TRINITY_DN61668_c0_g1_i1.p1   type:5prime_partial   len:453   gc:universal
TRINITY_DN61668_c0_g1_i1:2-1360(+)
FDGSDELGCVTVAPATTKVLHCDDDHAYCEDNLECYPKEGRCDNTYDCRDRSDEKNCGAIKTD
KPICFDFQCKSGKKECISNDKKCDGRRDCKDGEDELNCQKSDCLPFPFGFNCTRVKEQCYLHKIV
CDGSTNCRDETDEDKEICGVTKRVKNLRSKLDDLSTGGIQVRLFWDAPDVSLSKVKGYAVSFIDD
KFVQKALKVPLSPSRVTIPSLKRCRKYVFAVAVDHTDLKADKLLYESTEEIETPGRRSPNAPALISTH
GNKVLWKEDVGDCIDHYDIYNRFLSCMEMDSKTVVKNRLKSANVLFDIQSMLNSNSNDTKLYN
CSIYINYIRKSDGTPFNLQTDYFTFPHTHDHHHKTAASTGGKGKRNTLVWAMPVAVVVIVLCIGL
LLMVYKYRKLQNSFLAFAARGSYNRQVDDLDDEDDDNMAVAFHTGEDSPMINRFSDDEPLVVA*
>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN554_c0_g1_i4.p1   type:3prime_partial   len:319   gc:universal
TRINITY_DN554_c0_g1_i4:956-3(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLE

DGRTLSDYNIQKESTLHLVLRLRGGMQIFKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIE
NVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
>TRINITY_DN4494_c1_g1_i7.p1   type:internal   len:536   gc:universal
TRINITY_DN4494_c1_g1_i7:1607-3(-)
ELFSIKNGGRTGVPKLLILLTDGSQTQDIGAEDPAKIADELRADGINLIIIGIGQGVNQTELSNIAGG
DDNVFSAASFDELIGTDFVSAIKSGSCEEAKKPPLPKLKRVLDVGFLLDSSDKVKDVYGIEKDFLST
MASIFQIKTNGTRAGVISFGKDNEYNIRLNQYFDISKFKQAVDSLQYMGSGRDLKNALQYARTDM
FTVGSGARVGMQNVMIIITGEKEVKDFKSDDVKYHANEIRSKGTAIIVVGIGNIKIEDLEAVAGDK
KNVFIAPTPFNLTSYQFLNAVTVRLNEIDQKPSGPKCEAKVDVGFILDSSGSLRNEYGKEKDFLKTL
ASTFGVSSNGSRAGVITFSYYSEHSIKLNDHSDISSFNQAVDNIPLMGATTRIDKALRLTQKELFNT
RYGGRVGVPKLLILLTDGSQTQDAGAEDPAKIATELRADGINLLIIGIGKGVNQTELTNIAGGADN
VFSAASFDELIGADFVGAIKNGSCAEAQKLEEPKCKAQVDVGFILDSSGSLRNEYGKEKDFLKTLA
STF

>TRINITY_DN74720_c0_g1_i1.p1 type:internal len:124 gc:universal TRINITY_DN74720_c0_g1_i1:3-
371(+)
FKRGGSNLNLALNLANRKMFNKDYGMRTDKKKVMLLYTDGEESFRSPSDTTTDEELKMLREKG
VDIVVLAVGSKIYMDNVKKYAAKDSYIFNVSTFDQLKIRLNDLIQVMCEGNTLGFDVLIY
>TRINITY_DN113_c0_g1_i1.p1   type:complete   len:1417   gc:universal
TRINITY_DN113_c0_g1_i1:4413-163(-)
MANWSLLYAALLFLYSVSAQEEERPITFIKGEPGPKGSRGMPGDDGSVGSTGRQGNEGRQGPRGD
TGPKGFKGEPGLIGPAGGASGGETKGPDPLAARVGVKGGTYGVNTVFDYQLGPPGPPGVPGNTG
GYGFKGDVGPVGVKGVPGLPGPPGSYGERGEPGEAGLDGVKGDRGDAGQTGPPGKKGVAGAV
GFPGLQGPFGYKGERGGAGPVGDEGVSGRKGEKGYAGEKGSRGDQGDAGFQGVQGPTGPIGPL
GNVGPRGPDGQRGIAGAIGAEGLKGAPGTRGPQGPKGQLGEPGQRGVKGVVGDKGPTGQQGS
QGPTGNPGDPGQPGKTGDKGSIGDVGLIGLTGPQGMQGERGTVGPRGPAGGAGKKGERGQAG
PIGATGEKGNVGDVGLDGARGAPGKSGIEGKVGQPGPQGEPGAVGLQGAQGPRGTDGQAGQA
GPKGNTGEGGFPGAAGGKGSKGLKGRGGDRGMQGEPGSAGKPGARGRDGKRGAAGEDGKNG
NPGQRGPQGSQGLTGAMGLVGAPGAPGDMGVAGLPGQQGRKGTRGLAGPTGQRGLRGEGGL
PGERGEQGAAGPQGTQGTQGSPGPQGRTGLDGKDGSPGDKGERGSMGTRGKQGEPGADGKQG
SRGTPGQQGIRGDSGDQGSPGLLGERGLAGQKGVAGRDGAPGMPGRTGRQGTIGATGAVGLRG
AKGGRGKDGETGEQGPQGQEGPTGPRGPRGASGEDGAPGQNGLPGLTGPMGEEGQPGRPGQP
GKQGPRGSQGEAGPVGPKGPLGARGDQGEQGPVGIEGVVGALGAVGSEGTKGPVGAMGSMGP
TGPTGPQGATGETGPIGPLGAQGRPGIAGNAGGKGPNGDPGNPGRPGSSGDQGPPGKDGSNGE
PGSPGKEGARGLIGRPGAEGIRGEAGTSGSTGRLGRKGELGPKGFPGKRGKDGTNGKRGEMGVS
GADGIRGSKGNSGKDGSAGIAGEDGVEGQIGEAGYQGSRGVRGDTGAPGDSGQPGDNGPNGA
KGSKGSSGRAGAQGVDGRLGARGDQGAEGARGKEGAAGAEGERGEKGKMGAPGIYGPAGDP
GFKGDEGEPGPVGPVGPHGPRGSPGEDGPSGKKGASGITGTNGRKGNRGQSGANGDTGTPGIPG
VPGSPGRPGPPGEIAGMSGAFARFFSAGGMGMKGPGNYYNNYYGQYRYYKAGNEKIRNQIKPH
LSTFKQYYELLKDVDDMMKATGTKSKPARSCKDLFTDYPNKITNDYWIDPNGGSTDDAVKVFCD
KMKNETCIFPKSYRAELENHYTGKDKFRFMYEDIKEDGEIEYAADITQTKILHLMSSKVRQEFSYN
CKNSLAVMKNNKDRYEYALKLKLDNEDIISMNMNTRSLDINILNDECWKKDNTVRTATYELISH
KPIKHQLPLLDVASFDIGGPNEEYGLTMGPVCFS*
>TRINITY_DN25375_c0_g1_i7.p1   type:complete   len:811   gc:universal
TRINITY_DN25375_c0_g1_i7:112-2544(+)
MNVNEKMNIYFCIGTLLFQSLLVLKVEGIFNDCQTKGSCGKCISSSPECAWCEDIIYKRSLNSKSYY
KKCDVLDNHKRQGCQNITNPPSSSTIDKDAELKGDTRVSPQEITVKLRPGQATTVDITVKTPKNFP
IDLYYLMDLSLSMKDDLEQIKDLGDILGEEMKNVTTNFRLGFGGFVDKPINPYTTIKPDEIEAYIRD
EDAQYTFTYKNYQPLDEDPSLFSKTLEQVNISFNIDGPESSLEALMQVIVCRNDIKWKDKRKARRI
VIITTDADFHYSGDGLLGGQVIPNDAQCYLSKGNYTAWNQFDYPSLSQIRSVMIENQIVPIFAITGN
FELYKKVAEFFGAGSGAVADRLSKNSDNVVPLIKEAYEKIAKIVNINSDAPKGIDMKYTAICGTGK
NVEAREGTDFCDDVEIGETVVFKVEMTAKDCELVGEDLKFKIKTNFDDVNVAVKLLCECPCEQD

KSKIVIDSEHCNSRGNLTCGQCQCDLDFYRGRFCQCTVEEAKNQTLCRLPGEVGPVCSDQGFCEC
GECICDEPKLNRFGEIEYIYGDQCQCSNTSCGRTTNENLLCGGPSHGRCDCGECTCFSDWQGPTC
EVECVKSSAACIDEEGIECSGKGKCVCNRCVCDPGYIGDLCQECVSNCPDPCQDYRECVKCRVFK
MSDLSDEECKSECLKHNITSHIVTDKVPEDKRCIARDEDDCSFVFTFVKSNITDEVQLIVQQEKICP
AEPDILAIILGVIAGIVGIGLALLLIWKLLATIQDRREFAQFQKDRQDPKWDSGVNPIYQQATSTFQ
NPLYGNKGEETEKILDSQ*
>TRINITY_DN199_c0_g1_i1.p1 type:complete len:229 gc:universal TRINITY_DN199_c0_g1_i1:207-
893(+)
MVQGSMTIVKYLMFFFNFIFWLSGLALIVIGAVIRDKYGDYFSYADSRFTNVAVFLIVVGVIVFIIGFL
GCCGAIKENYCMVTTFAVILGIIFILEIVAGAIGFAYKGQVEEKADKALVRASKNYNNDDEPGAKK
LLDWAQQRFECCEVASATGNGTCADKSPKSCHPDNDCNKTKYSQKCKEGFVEFMKDNLVTVGA
VALAIAFIQILGIVFACCLMKAIKGEYEVV*
>TRINITY_DN1043_c0_g1_i2.p1 type:complete len:700 gc:universal
TRINITY_DN1043_c0_g1_i2:2410-311(-)
MKESYLKRFALLFSVLILFQEGGALLRENLIVNHRLRRNVYSEEKVTAVDLPQSREKRFVGTALIIIS
AASAGLDIYKQVRGCKDITPDLDDKIAEGKALQQSLLNLRDQVNLAWVPAESREEYTRRLASNM
IIIREQVSTFDSLQADLVKLLDQKLLDKLNNVTKHLENQIDRNNETEIGSFEDLEGKYMDTTTFALT
LTAKLLPVGFLLGTKFLLPKITARFSKGVAKAFAADNPSRVQKMLSSFAEKQGKLANWKAEKINSF
KVSLNSKWNTFKLKFPRITAAMNRMSNSKIGKALGKAMGKVKGIAVGVGKGAVVAFFIAFEVW
NFVQFHGACTEKRNKAIEGIATMNANKKNMTDLLTEIHDMKAKADEYYNLMKSNVTNDEFLN
FLEDIADLGENAKEQTKVIVDATNQIKQYKAEIKNADDSRTDALNTMLVTAFSNINFKLDCLRSK
LAIIKGVVDDCGIGLGVYDDIYARALAKQKKITETCIEGSYMDKNEIKGLMVAAMDLDKKQSICV
RNNPTKKQLVCEKWYDDVSDADILAANPDLTKDDVTYFISTCPPAPVNDQTKTTICVKKNNELA
TLQSIQQTYQKYDQTAINSAYEECQLSSISVTTICTAKKEGQTVVYAQQKFPVFPASMVTNVYNSC
KKETNITPADKMMICLLKKNGFALDSPVMANYVKNYDYATLEAFYNQCS*

>TRINITY_DN1910_c0_g1_i1.p1 type:complete len:447 gc:universal
TRINITY_DN1910_c0_g1_i1:2183-843(-)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDATGTYHGDSDMQLERINVYYNEATGGKYVPRAI
LVDLEPGTMDSVRSGPFGQVFKPDNFIFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKVREEYPDRIMNSFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDSKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMAATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDDGEYDEEEEELED*
>TRINITY_DN761_c0_g1_i3.p1 type:complete len:845 gc:universal TRINITY_DN761_c0_g1_i3:129-
2663(+)
MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEAEHHVLQEQMGDITQANAEELSLLGDTDHSPAAPLGGRLGFVAGVINRERIPTFE
RLLWRACRGNVFFKQAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETP
NERREMAIGVKTRIEDLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQ
KCLIAECWAPVADLDSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYG
VASYQEVNPALYTVITFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQG
RYIVFLMGLFSIYSGLLYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPR
ETPYYFGIDPIWQLTSNKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFI
SCIFGYLVILIFYKWIAFSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVP
WMLLIKPFYLRWQHNKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVF
VHQCIHTIEYCLGCISNTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWA
ILSVAILLIMEGLSAFLHTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*

>TRINITY_DN71276_c0_g1_i1.p1   type:5prime_partial   len:1201   gc:universal
TRINITY_DN71276_c0_g1_i1:1-3603(+)

LTFIESLRLSSIKNIFKMMISFETFVPSTTPYAEDYNTNPQVMMLSNKIKETIDTSLNPLASQIDRQKA
FQVQEEFKSSSPHCAEVGLYLYSVERKNSDAVRLCALKFVDHFIETKWNDLTYERKTFYKKESLKL
VEQMTFENETYLKEAAAQIVVEIIKRTWPQSWADLFKNLEELQAKGDAQLELVLIILMRLSEDVN
GLDERLTTQRKRDMMTTFQDNANELFEFFIKTIRDKVTALKTESSSLLIRLSEATLFTMMEFVSWA
HFDCLFNNEKIIFQILFWLLEVKYLRYYAAACLDNIFQRKGTPEKRIEFMVVLSDDVLNIVENVVRS
LKKTPENVLPEEGYKFLKKLAEMLVSFGKIQILSLWGDERGFNEKPVGYDRYLRLMLLLFQHESM
KLTYDVSKFWHALSIHPHGKLDDTFKELMPDLLDCAIMKIAKISDPKIPNNPSSHYSTMDFDDKE
NYAEYFANCRGHMTDVCRKITIISYTVVLDHCLAKIKQATSKPPPDVSGIPKNQIQITQHYLYWDA
LVHFLKNGFAGVFFRANKEISEDTISKCNEIITLLIHYKCEVPLFTIPVINLLESVFPIFKHSRDHLLPT
MQLLFSIIRLPQNDEDPLRDHVFKLKRHVCEAYAALCKEIPHCLVDYFKQLEEFAVYQMMHNASL
TGQEKCRLIEGVLRISKHVTVKEEQDHCINAIFDMIDSMFDKEPVRRACESPISLIQYIGLDQEGTV
AADSELRTRELLFAINLWTAACKALAMSKEEEVKDEITEEEMRTQIETYGWIKRMVTMLPKMLSL
LQSYSLIWQHQDKICDKRILVHKIITEINPTIQVFQPKCADEVNEKRGLGQYYLCTFYESAYTSLGSV
SKSVGPSLFSIGGLAEAMNEKLVQHWNNLPNYRLGRITRTFIKDICLACPKKYFETFIGPFVSQVLR
LYFERISNEWAKLAQLKENPREVTDKLQEQIEIAEERMIYLMSKDLLDLLLSLLTFKRKHLRSTTKP
ADGSLETFGELGHFLLDCEETNFIIVQIIFTSLTWPDTSAAIKVSQIILAVLKKIFTDTSKLNPELPKQL
LLLILQGLNIHGGDEFGRAALTNNVLQFYLHLRMQYRGIVQVMLMIPTCEEQHLREFDLAVFVQE
LPLTEQQQKKIFRRFVAGACGTVISKLHEKDVVIQDLPALMPRQKEKTLNKNGDADDDLGLCSLF
GV*
>TRINITY_DN28022_c0_g2_i1.p1 type:internal len:915 gc:universal TRINITY_DN28022_c0_g2_i1:1-2742(+)

GTCVPSNKVCDFYPDCAQTKDNTDNTDEDGCDGCDFESGWCKWNDTSTGIFDWKRQRGGTSSI
NTGPSTDHTTKNLRGYYIYVEASQGKSKNLASLSSPILNQASSRCHMTFWYHMYGTHIGTLNVYI
VNGYRLTRHWTLNGNQGKEWKQGTVYINRQQKAYSIRFVAERSYSDKGDIAIDDIQLTGCALPK
PALYCNTRFQHRCAATRACVSYSRLCDFTDDCGDGSDELNCRYTQYPYRCNFEYNLCSWKNLKD
DQFDFKREKGQTDSGGTGPAFDHTTGTTSGYYIYAEASRPRKMGDKARIGSGYLAPVTRTSCTLRF
YYHLYGDHIGGLSVKTRQCIGCPETQIWRRNTTVGNYWVRHRLFLRNNEPFQVIFEAEVGNGYQ
GDIGLDDVSFDGCAPYRGRFPTVGPSTIAPATTPVCAIGQLYCNKDAKCIKESMKCDYMEDCSDG
EDEQNCGSCDFENGMCGYQDVSTGRLEFKRTQPLNDGSNNGPSFDHTTNSTKGYFTMLQKGSG
NRDKLSYLISGKLSQTAPTCKVQIFYHANVGRNFIIIYHKQQDDNGKDIVSKLYSGVLKNADKWQ
NLTFALGQRPPGWQLKIGLMEIYTSIDDIQFKDCAFPRPTTGLCPRWKVLCDNGACLHPAKMCD
FVNDCGDNSDEKPYICNKNYKERCDFETDTCNWYQDQSDDFDWTRMKGRTPSGTTGAPVDHT
KGTSQGYYMYIETSGRRKLNDTARLLSTVLKPPSNRWCTMRFYYHMYGKHVDTLSVKIKLSQDD
NSTMTTLWQKKGNQGNQWNTGRVFLRYKTNFQVVIEAKRGISFLGDIAIDDISFSRACRPDFKAT
LSPDPITKTPPKGCKSGEFSCGDGQCIDASFVCNFKSDCKNNADEKRCPSSCDFEGGKSCNWFNA
QFADVMDWTVHQGKT
>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)

MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-152(-)

MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG

TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*

>TRINITY_DN1936_c0_g1_i4.p1   type:3prime_partial   len:1762   gc:universal
TRINITY_DN1936_c0_g1_i4:5283-1(-)

MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKMANDNMTK
VWKLSGTQGNKWSSVNISFDGSSSYQMAIEGVRGNYYRGDIAIDDINIIDGNCDGGDGSKVSASY
GKCTFEKNFCGYQNDTSADMIWRRNKGSTPTGGTGPSSDHTLGTKSGYYMYIEASTKKRYLAARI
SKTYTSLDSTGSCLTFWYHMFGPHTGTFNLYINPPVNSTNTPAFSVVGQQGNLWLKGDVTINTTS
ALVVIEGRLTYKSQFYKGDMAIDDISMTKGKCQNRDICTFQDDFCLWYNVPQAAGLDDFDWIRG
SGGTPTAFTGPTTDRNGNIIGRYIFIESSKPAIKGQKGWLSSELFSASGNGKCFTFYYHMYGGSIGTL
NVFVNTTSGLELVWTQSGSKGRQWKNGQVNVERPGSFKVLIEGIVGNGYRSDIAVDDFEFKSGKC
SIVPAEASPKFKLTTIAPTTIKPTIPKNLIIDCDFEFGICSNWKQDKKTDVVDWTLSRGRTQSRGTGP
RFDHTKSTSAGQYIYLEVSKRKMNDSARLISTFIPATGDTGGKCLTFWYHMYGPHINRLNIYVMIG
GHTGKPIWSRIGTQGNKWNKGQVTLVGRQPFQVVVEALSGISYKGDIAVDDISVSSTKCTQPSSTT
CSFEDSQCGYIDDTSSDVQFQWTRSSLSTSSSGTGPKTDHTMQSETGFYMYTEATRKKTGSKARLM
SPVNKATSGSCLQFWYHMFGADMGTLSIYLKVNNKLQSTPLWSEQGDKGNEWKVATATITTQDS
YQIVFEGKIGRGYRSDMAVDDIKLTDGNCPPPGFCDFETGYCTYFNSKNDKFDWLIGSSRTPSRFT
GPNFDHTYGNANGSYLFLEVSQPIKAGDIAILESQQFNAVGGKTRCLNFWYHMFGSDIGSLQVVY
KVFSGSQQERVLWNLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSGYKGDIAIDDVQF
TSLACTIDPPEANPNGKTTMKPPTTYPRTAPSTPVPTEFSCNFEKDLCKLTQDSKGTFNWTRIQGY
TGSPGTGPSTDHTYGRGFVPKYGPGSLRHAGGKCVHVLNGGFNKPKEGNPLVLYQGCGQTRLEF
VFKYGYLKLTRLNMCATLEGSSTSSGTKVVLSNTCMNKWKMLDNNTIQDVKTGLCLSPFKGSDY
PSNNSPLVVDKDCKPKSRIFTFSPTMGHYAYIETSPPRQPNDTARLISPILKTPRCLNFWYHMYGAH
VNMLNVYVKTSNGPYVSPAWAKYGSHGDTWKAAYIYMNMTGPYVYAFEGVRGIGWQGDIAID
DITLSESCPAPVECSFEETSPIMCGWTNLKNDDFDWSIGQGKTASTKTGPKNDHTYGTSQGHYMY
IETSNAPAKATAYMYSPWYYNTGQKCVQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNN
TWHMGQVTVKRNNVYFQIIVRGTKGNGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQ
EDNDDFDWIIGSGSTNSFLTGPSIDHTTQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCF
SFWYHMRGYSIGNLTIYLRKVSNTKTLSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVRFIYLRL
FHCKICLPCY

>TRINITY_DN2720_c0_g1_i6.p1   type:5prime_partial   len:2710   gc:universal
TRINITY_DN2720_c0_g1_i6:2-8131(+)

NDGDDDDDDDDDDDDDDDDDDENEGGDGNTDKEGGDGDEHCSDAFNDKCTNGYCRNIGG
QRRCVCKSGFKRDRNNFCADLDECTAYSGLCSGGRCINTHGSYKCDCPDGYMTSNDGFNCMDI
NECDNDTNICNQGTCRNYPGTYQCRCNKGYQSVGNVNCADINECVKEDTCPGKGICKNTDGS
YKCECPKGYKSNGENECNDINECKTIPNICSGGYCVNTGGSFQCICPDGYELAPDERSCKDKNEC
SYLPNVCHGGTCVNGPGSYRCQCRFGWTATEAGTGCIETRIDNCYAKFNGLQCSMPLMKQLTRY
KCCCGMENTGMRAFGTECKSCPKKGTDEYDLVCMNGPGVDENGSDIDECKNNAGMTVGLCD
NGRCVNMMKDFKCRCNTGYKNPVDTNKLCEDIDECSELDVCKGGTCTNTPGGYRCICQVGYRY
NRITMACEDENECLNNPCVGGTCKNLEGSFKCQCPPGSVYDASKRLCKDNRKGRCYAFVALGN
SCEQEIASFVSKSECCNSFGKGWGPSCESCNEQGSGLGCDAGYQREDGKCTDIDECKFLTTCQNG
RCVNTRGSFRCICPTGYELDPSGIACIDRRVGTCYRSVENGRCGMALADNFMKANCCCAFSQA
WGSPCEVCPLKNSASYKELCPGGEGFHKPGEDMNECEVSGICKNGRCTNLFGSYKCECNSGFDM
ESSGTMCVDVNECRISGNSICGNGKCMNTYGSFRCDCDQGYKNDMMMEMCMDINECIESNPRP
CGGGVCINTQGSFKCDCPKGLKTMGNSIDCEDIDECLDPNICPNGVCQNFIGGHLCRCNNGYRS
SRDMLQCFDVDECLIQNGGCEYSCTNTDGSYRCGCQPGYELKNDRRMCKDTNECVKGKPCGEG
NQCNNLNGSYICTCNVGFRASPDGRACVDIDECSEDPNACRNGRCINTMGSFLCSCSLGYRLEVS
AMVCLDIDECKGKANGGCHPDAMCLNNIGSFDCKCRPGYDGNGRTCTDINECKLGLATCARD

ARCVNSVGSFSCKCKEGFNGDGEICLDKNECAEDKDLCRPGTCMNTIGGYKCDCTNGYKSTKD
GKKCVDINECETIEGICEHGTCVNNIGNFTCHDLGFQLDKTGKTCVDVNECESTGMCPNGKCK
NMMGMYKCICDKSKGFMPNMNETACTDMRMGYCYSKFINEKQCGGAQLSPKQMTKQFCCCT
APDGTGWQDDSDETCEACPSMKTAEYKSLCPGGTSTHVNETTTMIKKHDGCKVLHNYCAGGN
CSDTGEQGVSCKCPVGTKFNVDYLACEDQNECLTDGICGLGGTCINTERSYQCKCDKGVTYDPV
GNICRDERNYTCYHASLNNGNCEIPLSIRFTIARCCCGNDRSRYGEDCRACPPSNSGTRQALCVG
KPEPPIVSTGQPPIGPTKPTNAPTTVGPDSTGTDGSGPDGTDGRGPDGTDGSRPDGSDGKSPDGSD
GKSPNGSDGKGPKGTDGKDPDGTDGKGPNGTDGLGPDGTDGKSPNGTDGKGSDGIDGKGPDG
TDGSSSNGIDGSGTDGTDGKGPDATDGTNPDGTDSTGPDGTDETDGTKVPKTTIDPRHDIDECKY
IKNSCGKGRCINTIGSYRCECDQGFEQTQSDGRTNCTDVDECESSPCQNGICNNMVGGFFCTCPE
GLKLDKTNLRCVDLDECSTERYCENGDCTNLPDGKGFICQCDRGHVKTVDQKSCEDLDECLMP
NICGNGQCINSKGSYRCECDQGFKLNEQGKCIERDECVEFPDLCRHGNCTNLFGSFMCTCNEGF
KQDATNQSCQDINECLQPGFCENGRCRNLIGGVLCTCDSGFEKTIDGRSCEDLNECEDPDNLCRI
GGTCVNIVGTYRCLCKQGFVTDLNAKQCIDIRRSFCFSTLDENQCTNANGLNITKSTCCCTMSAG
WGDPCELCPEKGTPEFEYYCPNGVGLERNKTDINECEANLGTCMNGKCVNTDGSFRCECNEGY
KLNPSDPRECIDQNECLVSNICGNGNCTNTVGSYECACEHGFQRGTNSPSCEDINECQEQKNICP
FRCYNLHGSFRCTCPRGYKLADDGKYCVDIDECENDFICPFKCKNIVAGFKCLCPEGYHRNPRTG
DCTEINECERNPNLCKPGGICRNIEGGYRCECMHPFMRSKNGRFCEDTRMGVCFSNVVDGLCQG
VAGRMKKVSIRDCCCTGGGAAFGSSCTPCPVLNSEAGRSLCTGYYNRSIDECKFIAGVCRNGKCI
DTAGGFMCMCNEGYQLTMDGKRCKDINECEDEFGAKLEDQCPGECKNTIGSYQCMCQKGFVI
NAQKTACVDENECLTGNHDCDHLCENTEGSYKCLCPEGYTMNGETCEDINECQVANICGLSTC
RNTDGGHECVCSRGLKFDEKRKSCVYITDGGDGGDENNGCINPNECGMCPPGYYPYHTISGGTQ
CVDINECRQKICGQANCMNNLGSYRCSCPYGLNYQNGRCQDGNECLRSPCSYGCTNNNGGFN
CQCPPGYYPVNGGHCVSTPGVACYACDTSDIPAEGVPLGGGLPQTAALYPSLGYQSAVGGQSVPL
INAPSNAQFYPNQPQQPQYNLNVPSYANNGYQQLNLGYQQNFNPYTMTSTFSYRNRRSIQSHIK
PVKVTMSRKSKAKISIVRIVSLLKNMTDHVNYKITHGNTTLFRLHNDNHGAIDLFNTHVLAVGH
YNLVIGGDIKNDSNILEDTLREIYYDSKKFLLKVTIRVL*
>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-1359(+)
MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*
>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)
MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN

VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK

>TRINITY_DN7946_c0_g1_i1.p1 type:complete len:995 gc:universal TRINITY_DN7946_c0_g1_i1:83-3067(+)
MSIGFESSTSQLNVNDGITFKRRNSKLLRCFALIVVLLLILFIVFLAMYVRTDDEKNIIAAENEALKA
RISNVETTALPTSQEPATTSQQPTTPKIDPSLPYANVRLPQTIFPEHYDVNLNVYMNNRTVDGYVN
ITVTVKKPTKYFIIHAYNYTEVNGYLKNSMKQYMKTKKQFLYVPNQYYVIEVDEDVEPGTFYLDFE
FLYTLKKSLKGFYQSTYRNKENEEKLVASTQFQPVSARIAFPCFDEPAMRANFSMKITHTPGYFAL
ANMPNTTYRYLPERDMIYNEFETTPSMPTYLVAFAVCDFGSKTITANTRTPTKMTFYAPKDQVEQL
NYAMKVGKSVIEYFETYYNVSYPLPKADMIAIPDFAAGAMENWGLITYRTTALLFDEKASSTSNK
LRVATVVAHELAHQWFGNIVTMEWWSDLWLNEGFASYVEYIGMNSSEPTWNIIDFQVINDMAS
GLGLDSLVSSHPIYIPVEHPSEIDEIFDSISYSKGGSVLRMLDHFLSTDVFVKGLTRYLKKYSYGNAN
TKDLFDTLTKVSFENGDNLNVTKIMDSWVKQMGFPVVTVTIDDTTKKVGLTQERFYKAIKPDLTK
SKFNSSYNYKWYIPFYYVILDISDINDIKTVEANQTWLNLGNGEINYLPSLNLSNMVIKGNNDQY
GFYRVNYQEQTWDNIANILMNNHKAFSVKDRAGILSDAFALAESGRLNYCTAIKLFDYIDKEEEY
LPWKTAVDGISIISSGLTKTKPAKKYYKKFMLEKVTNLFEKLQFNKISDDMLTEKYLRNSIASLACG
SDHKGCLDNATKMFRQWREDDKPVPPDFRNLVYYYGVYYGGVEEWDFVFDKYLKSQIASEKIKL
LYALAGTRESWLLDRYLNYGLNDSIIKQQDVSYIFSYVANYNPNGRYLAWSFMKDNWNVIEERFV
ESFFTMRRIFSSVTSGFSTTYELEQVKEFVTNRVTNPGSAKQIIKQSEERIKSRISWIDTNEKTIEKCLK
DQLGL*
>TRINITY_DN661_c0_g1_i10.p1   type:complete   len:253   gc:universal
TRINITY_DN661_c0_g1_i10:1712-2470(+)
MQAVTNCMKGLFLIFNFVFWVTGLGLLITGILVKYTFSYMIKLSTNINYNLAPYIMIGCGVFIILIGF
MGCWASIKEHGWALKIYMFVLVLLFLVEIGGAIAGYVLKGKLSKGLKDGMDNAVTNYYTNEDSK
SAMDQVQEKIVKCCGVSNYTDYFNGKTCATVSKNETLRVPVTCCKSEDRSGCQYKDICKAAGDL
GIYENGCYDQLLKEAKEKFLIIGGVALGIAGFQILGVLCAYVLTKKFQSNSKYENF*
>TRINITY_DN118_c1_g1_i5.p1   type:5prime_partial   len:203   gc:universal
TRINITY_DN118_c1_g1_i5:620-12(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPVYSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
SSH*
>TRINITY_DN106_c0_g1_i9.p1   type:3prime_partial   len:1309   gc:universal
TRINITY_DN106_c0_g1_i9:137-4060(+)
MPSNSKLAVLLLILGIGITLSKAQDLDDEFLDRPGQCPVPPIEPNCDRERSPDESVQGCLMDMDCA
TGQKCCSDGCNLFCTSVNIPQPPQIVKGLPGDPGEPGIPGTSGADGDDGIDGVAGPIGNKGATGG
RGKKGRRGRPGPPGPPAPVDGSSLPEVGPIAGGDNKGPGPNAGAIGEEGMGADGFVTPKEGPAG
PAGPVGRLGPRGPYGERGDPGLPGDGDMGPKGPDGPPGSVGENGRDGLNGDRGDPGQVGAI
GAQGVQGDQGPTGANGAAGYKGLKGDRGASGEKGAFGPDGEKGETGDNGLDGEVGPSGPQG
LQGSPGPRGPDGAVGPTGPIGARGPPGPTGLSGLPGAPGDEGAVGAVGEKGSLGPRGERGEQGE
RGPTGDAGAKGETGAMGLVGRDGTAGKKGALGSPGPQGLRGEAGPPGIQGLPGSDGAIGATGA
RGEPGEQGFDGAPGFKGTNGDSGPPGKPGEAGPQGKKGRSGRDGPAGPAGRDGDRGLQGIPGA
PGIPGRPGSKGSRGDRGTLGKQGTKGTAGAPGSPGETGPQGSRGAPGGIGKSGRPGKQGARGAS
GKDGRPGAPGQQGLRGKAGQLGLQGPKGAQGPSGGNGEPGIPGSKGQQGADGQKGSVGQPGS
PGASGATGERGTPGPPGDNGKTGPAGPIGEAGAPGRDGEPGKAGQRGDDGKAGDPGIRGPPGV
KGPNGLRGSPGLPGERGEQGSDGVPGNKGPVGPNGQPGPSGKPGSPGASGTKGPDGAKGQHGI
RGPKGLPGDNGKDGKRGKDGLPGPAGPGGETGPKGESGRPGSNGLPGKRGDPGQQGNRGPAG
MPGESGPQGLQGGDGPKGERGPRGDKGEPGPVGPSGEDGMSGPGGLDGSVGNKGGRGLSGPP
GGQGPPGMEGIRGRRGPPGNRGAVGALGPAGRDGPKGSSGEIGLPGRPGDNGAPGLPGKDGKN

GDPGEDGAPGIQGLMGAQGPLGPRGRPGRVGMPGFPGPQGNVGAKGEPGVPGVAGRKGKSGP
PGPQGMSGATGLPGQAGKDGASGIDGKPGTPGVRGAKGEAGQAGFTGSQGVTGMPGNPAA
GAKGGRGDGGEPGIAGEGGNAGSPGQRGPNGNRGRKGYKGNKGNSGAKGDKGWRGMTGPT
GLPGPIGTQGDVGVDGPKGRGGPVGPPGPRGRSGREGAPGDEGMQGTDGLKGSVGNRGRDGD
DGINGPPGPPGPPGLPGGFGGGAGAINMFPPMGNVEKGPSYYGYQYYKSQDGKDFKTAQEEAK
NTVFAYTNKLDEVLQGLDKPDGSEVYPAKTCADLKLCHPDIKSGNYVLDPNLG
>TRINITY_DN12627_c0_g1_i1.p1   type:5prime_partial   len:1061   gc:universal
TRINITY_DN12627_c0_g1_i1:3456-274(-)
YGENNRLKFNDARQYCQQWKDDQGDLVAIHSNYENSFIMSQLYDVNEPMYIGLTDSFSERTFLW
VDQSSVVYTNWYARQPSFVGNEDCVEMMPYFKTHGRWNDIGCSAERGFICQRTPSKTPLPTPEP
VKDSKPCPAGYRKFMKACYRVVHTPMTYDDAVKDCRTSVGGELGDLVSLHNQFEQSFVFSQFAK
FDFHSWIGLKKIKGEKEFKWSDETPYDYRYWLSLRYDNTVYNDDKCTTQEFSSKVDGKWKVTDC
TQKHPYMCKIERDFDQPHLTFIGNCTDGWTKFYDKCYKLQNYFSNWPAAREKCKGFGGNLVTIT
NSDIQKQMEYLARDAYRSVWIGLNDRAKEYVFEWSSGIPLLPDSYQNWGPNEPNDNSGTENCV
HMTTESSGGKWNDLSCSQRMPYICEHPLECNSALGMEDGSIPDTNINATSYVGTYFPKYARLNAK
SDNNRNTAWCTNITTGAESLTINLGEVMQITRISTQGLLDSSLGFSRGGYVVSYMLEYSNDGTTW
MTYISEDAYDQKPIALPGNIDASKIDGTTINLKAAYLRFIPKLYKNIICMRVELYGCKSVCSRALGM
TNFAISDKQLSVSSSQAGSEKAQLRPNIDGSWCAKDDDYSPFVRIDLPRLTKITRVTAISSSKVQYKI
AYSDDGELFTRFQTLTNEERVFSTVPSTHDLETAISAKHVKFDLLKKDQGKLCLKVELYGCLKDCD
AVLGMETKIIPDRLITASSAKPSNPARNARLSVGVYGDNSWCSSETDNAQYLQLDFVQEAHLTEIA
TQGFNGDSAKYVSKYNVQFSDDGDFWHQYSEELPGNSNGYSIQRNKLKEPIIARYIRINPTEWKN
GICMRVEFYGCPMKPFTAPKILTQKTYNGAIRILNEDFNENLLNANSIEYIELANKVETDITSLYLLE
ESFKDGFNSVTVNKFREGSVITEFTIKTHTSDASLDAAEPLRKAVQTGRVGTFDVDPNFFEIVTAST
DKSTATNDDSGGLSNGGKIALIVFFVILICIVLAGGVVYYLRSRRNGFRLQFQHRAFENPTHVDDL
QNDDMKVEFMNDDY*

>TRINITY_DN195348_c0_g1_i1.p1   type:internal   len:311   gc:universal
TRINITY_DN195348_c0_g1_i1:1-930(+)
SGCNSIDLGLLVDFSSSKDYDSKQLTKFVREFIDKITNVFAFSATKSHLAYLPFSSRINENITGQWFD
NKYMKTIGDWDYQELTQYLDRVIVPYTPVTGYETGKANAHEAFQATNDKMFNALYGMRYNMT
KVLIVISDGNEDFKEKQNLVDRAIDQLKAKGVIIYTVSIGNNVNWDRVFRYASRESSIINGANFDD
VFNRFFDFAKMLCEDSKVPIPATRTTASTTTVSINTTKLTTTTTTELVPVTISTTTTMSTTLRPIQACY
EDIDLGFVVDFSKMNANDMKERQTANDIVKVIKKIASSFNIAANK
>TRINITY_DN1119_c0_g1_i1.p1   type:5prime_partial   len:949   gc:universal
TRINITY_DN1119_c0_g1_i1:2934-88(-)
FFFNPQTVMHEKKFSRMKFILLFSFFAISLGQNCNRMHKKIGCFWNDKNAKVLFNDRDSINNSTY
GALSDKLACKCNAVARSNGFKFFALRHFGICIGYNKITTGSKSIEHCIDTKSNGVCNLGDMNTCT
GTQNTADMMYQIVPEKCPSRHKKVGCYTEDRNATFLFNDRSNIDWPNFEKFLVELACKCNKVAL
EKGFNFFGIRFYGVCVGFKNISTEEKSAFHCKDPNYRPYRPCNMKDSNVCAGDHFLTDMIYKTER
QNVDKLFSEWSGWSTCSKSCGGGTQKRTRECKDKKSCSDAGGEEFKSCSNSFCKGSTGVAKAQE
VVETFLETFHKVEFPDIKPSGKYLKTIFEIQKAVGEEFNSVDPSVKGVPLEKRLTELEHFLKIAVEGG
SIDFARSTLGKGMFVFMKKKIKEGLPINDIDTAAKGFLNKLTGDIGSKKMNEILSSKGDATLMFTID
TTGSMAQEIAAAKAIAKQIISATREYEVDYILSPFNDPRTGPVRYRSTNDRANFVSDINKLLASGGG
DCPELSIKGMLNAFDKGPKYGSPMFVFTDASPKDATPSNMAALKAAASSNNAKITFFTNLKGCG
KELGIESYKEIASHTGGQVFPLKNEAELINFTEYVKSSLQQDTIIAAGGSLNSRISKRAAPRSHIFMV
DQSITRLIISVAFEKQNTGKHIKLLDPNNKNVDSSTMLAMSLIYDIKNPKVGLWGLSFPHIVGEFGY
NVQAVTENAIEFAHSFLHQHNVKGSDVTVSLENPIKGIRNMMVIRLGGADHIDLSTIKVHLVDHS
GNKLVSNVMTDRLDSDEIRNASIVPPTVQFKVLLTGKTKSGQQFQRMSQGSSTPVSAFMRTISAGY
DFTATMGKDWISIQIEIVNKGSAESFNFQAKTKYGTLKNPNQTKTVNKESMITFSYKPPNRHDLK
GKTDKVTVIAKRASGEKINHFISILLIK*
>TRINITY_DN193641_c0_g1_i1.p1   type:internal   len:173   gc:universal
TRINITY_DN193641_c0_g1_i1:2-517(+)

GSKQTGPTGDHTSGKGKYIFIEASSPRKPNDSAILQSPPIRPSYGAVCFKFAYHMHGAHVNALYIYK
NVNGKRTRVWKRTGTQGNQWRNGQANIRGLSGVFNIEVKGLRGVNYQGDISLDDFVVKDGKC
PRPKYCDFENGRCGWREAKNLDKFNWKRSNGGTPSKGTGPATD
>TRINITY_DN1821_c0_g1_i4.p1   type:complete   len:637   gc:universal
TRINITY_DN1821_c0_g1_i4:304-2214(+)
MKLLIKFIVVFIFYDFALATTPEEFLKEYNAKIGQQGWPSSDASFAKATNISDENSEKAQEESKKYT
KIAQAWRANASLINLDGADADTKRQFKLLLTSATPKCESVIADISKVGSDLENIYSLGRIPNDRTKI
KTINSDKASLSLDEHLYLILANSRDPDELLYAWKGWRDAVGPKLKDKYTKYVELNNIGARENGFK
DKGEYKRKVYEVDNLKEIAEKFWDELKPFYQEVHAYVRYRLSNVYKDLVKDGEPIPAHLLGNM
WAQSWDNIFPLVKPFKDKPALDVTSTLKKKYSVKKMFEVAEEFFKSIGWEELPPSFWTKTLFEKPA
DRNVTCHASAWDFSIVKDGSKDVRVKMCTVINQEDFITIHHELGHIYYYLLYWDLPSVYRTGANP
GFHEAVGDTLVLSVQTPDHLHKIGLLEKVEDSKESDINFLLKTAMERIAFLPFGYLMDQWMWGV
YSGDILPNEYNKRWWEMRLKYQGIKPPVSRSENDFDPGAKYHIPADTPYIRYFFAHILQFTFHKYA
CKAAGNTKPLHKCSIYQSKEAGKALGDMLRLGKSKRWPLALKNLTGSEELSADPIKEYFQPLLVF
LKEQRKEHKYTLGWSGTDDNSNSSPNCQVSIALFIMCILFFLFGNKHF*
>TRINITY_DN5500_c0_g1_i2.p1   type:3prime_partial   len:1183   gc:universal
TRINITY_DN5500_c0_g1_i2:3546-1(-)
MEIKNFLILLSLLSLTSQLKAGLVFNETGVDQPVDLFFVIDGSGSVGYELFDGQLQFVTELTDQLGG
VSPFNVHVAIAVITTSPYQAIGLTQYQVNSEFKQAVSEIFYPRGATRIDKALLAVERELLPTSRAGVP
KVLVILTDGIQARWPGVYNTHVIIERLFNAGVSPVVVGIGSDYRDLDRLNKLAIKENHHLNEPIEK
LFLTTDDMEVGSPALVQKAASTVKKILSNVARFGYEVRSDFAFLLDGSTYAEDQLKLMEGLASYFQ
INRELSRFAVASSQGGGRTYIEFNEAQLSRDFKAMLMKLNVDSESIDIGIAAKYAYEEIFRIEEGERYS
TPRTLVIFSGNAEAKDSTLFGKYYSLLKKANVNLVMIAVGGGKGRSNLRNFPVDYYLPDFNDEVS
FTEECNIIAREMHNYIIRFASDTQRSKKCLHDGDLFFSIDVSGSAGAYYQENLNIIEKIIASFEISNED
SRVGFAIDRDGNTQVTPLDKHNSLESLMRDFDSLPYYPRGRSDMVAKLKAAYNQFLTSSRIHFQDI
LFIFTDGYLNRKSESESKELIDKLKAFGVEVFVVSLGYDVNFPFLMTLSSDKGHFFHVNQLPKDSDS
FVNSIINKVCDYTETFQDKYEIPINVALVLDGSHCSEKFHEAQKTFSNVIIDGLDNSPLAKNYLFSYS
SGVQQLDSNSSLAINFGSDGNRLDLALNEVVKLFQSISSNEVNMAIFVTNAGLESEFNATMSQAR
KLRSLGVITMVICIGDNFNYDVIRTLASSRQLIYMIPSPSQLTDTKFLRHIISAAFEMAESMPPPRLEA
GKSWYPAFFGNWVDSNSLEGEVPDAPLKAYHFGPTVLWSKPIQQKNYIIESTIIPAGSESGRFGTCG
HIFKHKVGATKKEKYISKSWGYFLWSNSFLYITTDGTETSPRIEFDYSSRDKLNLKTIVDGSKVKIYI
DGVFIRSIELEGTEADSQSHMFVGVWCHRLSAVTVEDFKVSALSNPCTVNNGGCSQICSADPYEF
KCSCIPGYRLVEDESTCVAESTCPELITTTVITTTLSSSPPTTNQSKFISTTTKPDELIDTTATIISTRESDI
TTTLILSTKSTEKPIEKIEKTTTSAIGDILEQTTVAPIKTSTVFVPTTKEEVILTTKEMAETTLTVPTTASP
VEETTTVAPVSTAAKTEATTQAVITTLAATTK

>TRINITY_DN4770_c0_g1_i1.p1   type:5prime_partial   len:1635   gc:universal
TRINITY_DN4770_c0_g1_i1:5012-108(-)
FMSDYGNSRIIKVDLKANKMNTFTVYRYISRTFFGIPISRERIGSRATGLAIDKIENRLYFCDDKVSSL
ESVRLDLTDHQVLYHNTKYSSGKFVLQTNKGEVVQPFNIEVFGDKMFWTDLYHGAIFSADKWSG
TNVQYVSGGLGRPKDLHVFYNKPKQGIKKIYLFNYLTDSSNKTALCFTSNKENVTEISDPPRCPKG
YIEKQFSSAFSNCSVTRGSDFVCKCENWMTCAQRSHAGVVACRSPSRPFMFFKVRECEQVVEAGF
CPLNITTSCSDDSKNCTVDDDCVSGEKCCYSKICERNRCHRKVSKRENPCLINNGGCSHFCLAVG
DSFRCDCPDTMELNETNPLMCQKIPPPTCDPPCLYVRNTTSIYRIPLNSTDGLLIRRRSVAQVLFHT
KSSIESFALDPIQKEIYWIDSSSGMINKSMLNGTNIKVVFSNRKEAAKFLAVDWTSDMLYWCDVDI
KAIMVGNTDGSAEKKLIQFDYKKKILGMTLDPVNGYIFWVLTSGSSELYGSSATIERSNLDGSGRK
TIVSKNVNYVKDLSIDSKRKRLLWVHYNPNIIESVALDGSDRKTEFALDNIASSMTLHDQLQVAYIS
QMQTIYAVKVGSPISNKSVIHINKQRGSLDQIDIHEFDISIAPRPCFAAKCSHMCLRSMDTTVCACP
TGMVLVNETKCIVAETGSEIIYFQNLDIKLVKYYNKEGYDMVTKLLTAPVNSSLDSAPLDYDSVEN
VVYFASGVTVYKLNIEDQNIEPVMTLDWIESKQIRFVKYDIISQLFAVMEYKSSKIFIVSTDGKIVSQY
NNFPSDMKQIEIEFFDGKLFYAVKDSITKLDILNDKKTNYNSENLEIESISIDVKDRHIYWSNIDGLV
KRSDFDFKNQAVINSDKTKHSISYIQILGNRLFYHSRWYGVIFSVNKNNFLDNKGITSAVKFNSKW

IAVKVSGDKDICNLPKDTGPCKALIPKWYYNKEKQQCEQFNYGGCLGNLNRFESQKECNDHCQ
SKNAGYCPYITNNSTTKCSLDKDCSLQEKCCGDKIKSCVKSVPKPDYPCRQNNGGCTHFCIGNSK
MFKCSCPSNMVLNMTDEKSCVKAVESGCMLPKDSGPCEALIPKWYYNQEKHKCEKFNYGGCLG
NKNRYDSEKECNYRCQDGCMLPKDSGPCEALIPKWYYNQEKHKCEKFNYGGCLGNKNRYDSE
KECNYRCQGKSSCTDNPCKNNASCISRSDGTFDRCMCYGRGFFGRYCEIDKETEAVTIRLQQNDE
VTKVTVTEIKDEIKKSFNIYCKENECKMEDGSASSVETRKKRKRRSSDKELTFESEDVDVLSFNEDN
GEVNVKFVIEKVQDGDYLVMSSSSVRSGFDEFGDSFGESLGLSYLGMTSDRQVAKSQSEDEDGNG
SVTIAVVIVLLLIIACVIIGFAAYKYRQRNAKGPSFGIPGFKKTQMSYRDLDKSSGEQTIPNDYHNPR
EFSNPVFEALETEKAEPMACSIDYSDNNKYKVGLEDSIVPATEKKPIVDFVEVNESGKLVSSNGEEI
PELLPPPYSSRPVTPKTQGTQQAYPPPYNSRNRPLRGTVLSTHGIGNTDATPNSFLPGDEDLFPSTL
SLQNSVSLEDSYGSELSDSLSSSMNRMLKSEANITAPKTIQIQDVKGNSEC*
>TRINITY_DN1071_c0_g1_i1.p1   type:internal   len:660   gc:universal
TRINITY_DN1071_c0_g1_i1:1977-1(-)
DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTTPATTTESTTTTLPTTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTTQATTTTTKATTTTP
ATTTTKATTTTEATTTPTTKPCECKVLQPVGVSDGRIPDNQMTANSVLVNVSGPTFTGASQARLN
NKPSKDGVGAWEPAQQEEIYLEVHFNKIEDVREIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDEN
LYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVSVGDPKVAMRVEFYVCPPCGVTPPPTTTLPTTTTE
KPTTTAATTTEVVTKIITEPPKTTTAEPQTKCPPGQIEGNCSSEFDCHNRDICKPQITNGCCCPDGL
YKSYEICVKQEECGCIYNETKKNEGEVWYPNDYEVCKCLNNKQVCSERCPNTFKCAKHEKKIFK
KKADKCCDCVKNCQYCNHHGKYYGPNDTWTVSINDMECKTGRCVLDEEEECAEVEIDTVKCP
SECPKGKKRVGSADKCCECVCEECTVKSQDDCETNEEYVKAEGDCCGACLIKMTTEPKISGTTEI
KTFPSTTEESTTPKTFRPVTTATTRGTFPPLPPTTTTEKPTTTTEKPTTTTTTTEKPTTRGTFP
>TRINITY_DN14015_c0_g1_i3.p1   type:5prime_partial   len:2566   gc:universal
TRINITY_DN14015_c0_g1_i3:2-7699(+)
PNEGVTIVFSNGDYELKKDYYAMIEAKSNGTLYKGKTVVHVTLTDKNDNPPRHQNLQVDIAISES
TKPGTIVTILYADDADDKQNGEIFFMLESASSDFSISSFNNTGVIRLSKELDNEQETSYKLMILLKDF
GSPSSKFSNMATVNIDVIDENDNTPLSEKTFDTIQVSRLKANGVIYQVKFTDADSGLNGQIEYDIEP
FKSFDDYFTINKTTGEVSLIKSLETTTEDNFWLFIIATDKGNPRRKGSFTLQVNVNEPSSLNPIFNPD
TYDIEIYENRLPNSLVARINVLNVDPNKDSLTFKIVSGNDGDRFLITNKGDLVLKQNVDFEQQNLY
NLVLSVRKNQNSVESVNQATVKIKVLDVNDNNPLFEKTDYTFIVTENTPINTFIGGVSAVDQDFGE
NSKVSYTIFDTTKTFIIDSSTGRITVVGQLNSFVENEYNFVVYAFDNGNPRRASSANVKVIVEDINE
APQFSPPSYNLNVSELLHPGDHIITPKVIDNDIGINSQVRLTLDASGNIDDTFLLENGKLKLNKQLD
FETRSTYDLTLVATDSGRLPLSTNAKVKINVMNVNEHRPIFNINPYMTEINEDQFSTPIFQVKASDK
DALSKVRYVIEDGLDYSLFSINQITGEITNSRLNANFKKEYSIQIKAFDLDNPQFYSHTVLVVKVIDI
NDNAPIFNKAQYSFTISDQTPVGTIIGKVFANDADTGFFGQVTYFLDNNFNGPFSLSGNDILINGD
LDFTKVSSYEFVIKARDSPGSSQGFRTTSTNISVNIVETNGTMPIFSREYYEVTIFSNISTQYTVVKVSA
TDNDGNEFGEIKYSLISDSSNLFQVDELIGIVSLKDGVQLQTRSFKYTNTLQVRATDGAGLFSTAYL
VIHVIPVSGNNPPVFLQIQYLSRVSYLTSKGESIVSVIATDPEGAAVSYEIKSGNELKKFGITNSGIIYL
EDQVENPEVNVYRLGIEAIDENGLRSDPDAQVIIQILYFNSTFQCKLIPTFSSNLYISQVEENKAPTII
TSVQANGSSQNDSIAYSIAYTKDVTQNDFEINSTNGVITSQRTFNYEMKNSYQFEVIAKDTNSLKE
GRTIIMVNIIDVNESPVFESSNIVRSLSQSSPVGTFVGLAETSDADKNDLITFSFVPANIGNIFQVDA
NGIIRTKSSLNAADSPYNFTLIASDKVGLTANKNIKVTVIKTNVPEFSQNAYLFSISESLNSVRIGQLS
TKQILEPVGYRIPNNNYNNLFIISDGGIISSSKGIDYESDDRKYNLCVEVFLQSNPSLFDTCDVTININ
DINDNRPVNKKDGQYTVEVSENVMVGKMIITLDVEDIDSGEKGFLNYLITSGNNGNEFRINNKG
EIYTLKPLDYEVKRSYSLTINVQDNGVPVKTIEAPLTVVINLVNENDNNPIFNPSSYTISISEQQALTT
ILKVTASDKDALIKSTYSILENEDTFSIDANGNINLVKAVDFEISSKYQFTVVANDGSRSGYAIVTVDI
TNINEKPSFGQNYAIEVSESTPVDTVILTVSATDVDIGVEGDLEYSIESGNDENTFSIQSNGQIKLLEE
LDYETKTEYTLSIKATDKGQPQLSATTIVNIKVRNINDNKPVFSKQKYELTVKENSQLSLTVSVTDA
DNLGNMKFSIPSSKAAGMFKIEINTLNTNEAVVSNIKPLDRETGAGHQFLIKVEDDVGNQGLSEF
VIVVEDENDNNPIFTSEEYNVTLFSKLNVNDAVVTVTATDADATYGVVSYAIISGNNDNMFRVNT
KGEILINKQNYDSRANYVLTIEASDNFETPKKSLTNTNVKIQIQSSGLTFEFAQDQYKYTKSEINIGD

TFGPITGTSSTSLDQIVYEIKDSSGTFEVTSNRNIKVLKKVTTDQNFCVAATTKNGGTLLDLTQIHIL
LAKTNENRPIFQFTNPKVVKISQNTLVNSVVAVTTASDSDTGSTITYSITEGGEFFNITNEGAITLKN
TLQTSTVNQFNVTIIANDGTFNSAPANVVINVKKENNFNPKLSFSSLNLSITEGNKVSQVLTDTDT
DADGDQLNFKIVGKTANNYFIINNTVLESKSPLDYEQVRSYEFCIEIKDSIDTNSRSVILPVSISVTNI
NDSNPVFTSKSNEVEVPYTWPPDITIIEASAEDSEGDRIEFSIVNSSFSSLFSIGKTSGVIKLNQRLKEA
KVYNLTVTATGVQSGKSSNDNFILTFTAVEAMSQTMPITFSDVTDNTMKVTLNAKEEFGEADYEK
MNTIYVYAQEYLPNLDEFVTRTLMEPVSYYDANTFESFRGRRFMIAKVDMERPTQRRKRRDTSLD
EKNGILTILIGNNQCANKYDPTIPCNGPLKAGQSYRYQLEGDLLNKRKLSSFTEPKTTTSAAQSVA
QFSASNYTFNIYYIIGLVMLGLLLAVSIWVIAVLLLYKRRGTKLMQLRESMLPPAINNAQTIANGKF
GSNARRYTNPVYGDYDDDRNFTSDFNLPRGQNNQELAQLKQQIIPIPNQNNGRANYNNRSEMV
NRVPRHFDNPGYREEERKPTYTATVMSSPTVPNPPPPPPPPPMENTRLPSSGTARSTNQPRLRRTSS
GRVIVQHLSGHQ*
>TRINITY_DN942_c0_g1_i5.p1   type:complete   len:5116   gc:universal
TRINITY_DN942_c0_g1_i5:15664-317(-)
MKMKLALLVLFTGTTLAAPFWVLDDNLPRAEIKEVGCSGKRFQNGKSHVYEYEGVTYNTIEGST
DKKTGIKLTATATITPMSECKFMMQLKSVELMSKSMNQDTFTTNAESAKLKDELEKLMVGFTMK
GNQIVTIHASENEPTHVLNIKRSILSSLQLDESTEKETDINGICDVEIVTKSGKIVKSKTLSECTERAQ
NEIGFQSTSIKSATTLKPLDSTSKCEYVMEGDVIKSVVCEEKHIFKPFSAGYKTPSGAMTTVKQSLSF
KEYTVAAISAVPSDFTVETNLLFDHSTEEPTATSTINDQVEKVMLRLVDPAQKSDLSAKENSAQEFK
NLVTLFRRMDEKRMEATWTKYFDCIKSGVCTDANTRDLYRQYLLDGISHCGTSTCIAMVRNVIV
NGQITGERMNMFLRSIPFVTKTTMKMIGHVLEICEKNPSRQAYLTLGTLLVRHCKQNPEDCSENL
RNPVTMAEEHLVKKLGQECEGQDDHERVEELLRVLKAIGNAQRPARVQEKLMKCAEKSKHSNI
TTSIFDAFRGFSCDALKQGELLRVFEDINNEDETRIHAFITIMKCPTVEILEKVTMMLEKELSNQVA
SYMWSYLTNLMESSDPRHQVARDILTKMTAQKPLREVNLPVHQFSKAFEKSLHSEFLKSGLTTEG
HIIFNKDKYIPKMGMLNMKANMMGNSLDMLETKIGLDGIEPILETLVGPNGMLPKDLNIDLGSY
GKFNSEFLRKMLEKKNNKRKLFNDNLTKMHLKANKQFEEPCAHLSVKIMGQEVSVLSYDDILW
MIDQIDNMNAVQLLTNIAKGGHKTFSKSLMFLEMSHNVPTGMGLPLKLKLTGSAVGTVEFNGKF
DIRNLFWGTPAVNIKGHMKPSTVVELSGQMGVEGHYVSTGMFVKSSMFTSQIVKGAIEYKHGQIL
KINMDVPEEPLAAVKFSSSPFLFMNEESELVEGTSRFVNPEHCTKSALLGYGLCASMRLPIAFREYE
APYYPLSGPAHFAVRAIRGDEKLTTWQFLVELNKQSGTTFGNIEFSTPGAAYERKLNGKVSMKQE
GKMNMFTLSTEGYDRKASVELNFNKETYSTAIITKNNIFTTKDMTTKLAIFNEEIDSGRQYGIQAL
ATMDWYTFDHITKFVRKPNVYMFQTSTTYYPKKVVMGTIVYDTKENKLSTRIQANQFQQAYEFS
GKFSDDGQEKGVTVTGKCVTSGKSITLYGGIQNTKQTKQILFTADVLGYSAKQYIRYENNNDVHT
VSQFLSVNGKIISLNGELSSFTEMKRLKFVADIIGRKADTTFLLTNNKGEKSLSVDMNAMQKHAN
FKTGCYQAKDSNECKFNFKIGTKEGEILMKQIMRDGNVITTLETLFDKYVAGFRNVYSNKNANA
KSLCSSIFYGTEEKEHEPVNVCLKYNAASDEKKILAITFDIVDRNQQGEINMELTKQTEFVKMQTE
VVYNKNSLAKAMQSMKYSKDLNNEIKMEVNVGKYNAGFRWFTLKTTNGANVGIEGYAMDKKI
QFVNKYVKDVVSGTTESKVTSELYINDKLVPVTTETIFLNGKGIAGPKFQVNIGKHSVSYATLVTYG
KGVYGIDLEFLVAKESNMLFKLFNGAAASVTPKKMDFQYKFGFGINGKQYTYGGDMSYNNLGN
DEKMEHSVKLGLQYSINRRSSMTFVLSNDKTKAALNMEFEYIPTKSVSHSIEYTKNDRILQVSVEFL
PKMFYTFKSQLVKNEGYSLASSVTLNWKNYNRVLKMINSMVNNDKKFELSTVFGKDLTFTFTFG
KENQKSMTLSASGFKRSLKVIGTFVKPNVQLQVYKNGEKIMDVTTSFDGITNKFQFALTNGKDTY
LKMMKSYNEFVLASGKETYLKMKKKYNEFVVTSGKETYLKMMKTYNEFKNQYKFQINGKIWTK
VQEWYLKMTKMTKDNKITKFLAPFLDLTVKLDRETNDMKLVLSNGKQTFVKIVKSYNEAKNQH
DFQIFGMSKEWVDLMAKYNKRNKVLKVSFSFFGKELAMFTLNMKEKDTVSLTTGSDYWKKNIV
LTGSLDRSQKSIAGNFQYGKTKVQLKLRADWNNMILENAFTFNDNVAKIGLLREQNSMVFRVKL
SPTLMAQVVMEVKNDNIIKMTIQRSEGDKLIEETSMQFKLSKDLYNLAFKWNPETFKAVIRAVQN
MIQNGYYKDIKPFITNVFVKGQRMSRKALTTTVMTFTEKVKEAKTKLIDLITNFEASVDKINFVAIR
EQIGQLSLKTIQKLKELVKVTLKELMTKLENAKENIPELLKQYKQIRNKIEKISKDTAEVLPKFYKET
LEAMDKQYNKLNGYWKDVSKVVMSNFELVSKNLTDSTKPVVEKAIYLISNFKLRGKAVKEIVSIA
RELVEKYIQILIEQGKIIMANGKIQLENMKLKSMEHYKNLKLKGMEQYNNLKLKGMELYQKGKM
PYLDETVEGIIKISVEKYMDLKKKMTDFDFEKYIQSVRDQIMEKKINGKTIVEHLNTAKEEMKNLP

PALKENYVKLIELITKLTKALNTNLKEWKIFAKPLTNYMKLVALSTKKHFGPILTKSMDKILPLITGI
ELPDFKMMALEQWKQLENFMLPLIKPVGPLYENIKTQIRNIKVSGYPIGSFVDFNIEIAKTFIQTSLK
TTKQKLDENVKMVTEYANLIKKMTPEEIMNQITLKSTELTKEYKEKVLKVYEERQERLKVLVEKLK
ELYNEFKQQYERITAVPVQDHIDDMMFKSSKFVKGNLEEISKVVKQITEIEISKPTWDAWKQADV
MGHLDKYGINQKMIDFIKAVKEVDMKRIAQKTTRLIQDMISTIYSKAFVRFVQVYGKLEKVHDYL
RSIPKKEYEEWVKELKEFSLENKERVIEFMGKMYKQTQKKSLNLYTQSKFLYAIMHKIVLKNMEKI
NINLVKPSQELYSDIKYRSEQVYGDLEQPTIDVKNHYQKIINDFVEEQYTIVKGAVLRHYKSLEEYK
EIMYTKAQEKMEEVKKLIELKYNELLAKYGDMTYEEMYDNAYKYGKSQYKVVRKTVKRGYKKL
REQMEKMEERLNALYQLYSTKYSDLVNRIKTEIIPQTQEYQKYRLIVINLIKKYQKVLMEKMAEL
KTRGMTIYNDLKTRGMAIYNDLKTKGMTIYTDNKDKTIKALFREVKQNAIKNINTVYVLVKNFG
DEKLKQVRTIIVTYYNKAKGVMVDVIIPEVKMELVSIINQTLRSSKVMTEEIMKAYTPHMVLAKNF
ANKGAILIIERGTVAMKASEKAIREFMDKAPAMMKDIVKKIKDQEYYNKIVNHEVVKKYIAKTQE
MIENLKTKVEQLKQDPTVVKYQKMFSDKVTELKERAKIVIDKLNQRIEELKNHPMTLKYQKIVTE
KMTELKKKAQLLLEDVKAKIEELRNNPSVLKYQNMMNEKIAELKAKVKMLVKELKKRIEDLRK
HPKTIEYQNMIKQKIVDLKKQISMYKQKIENLYQHPFVTKSMVTMKRIKRSALFTADKINVNLQP
KIKEASEMAQKRIEKVQEQAMSAVQFFKNEPEEAFWTGVSNLEKSGKDLYEQIKRLFNKELIKKQ
FDVLTTDAKMQWKIFLNDYFDDWSKEASRKMYEQVVTLVKNMNMKIIDMKMNMQKLPEVYK
PIIEDYKNQIMENYKNIVEYSLQNMIQGKVYLSNQWVELNNQWKACPYRLIMENPVWSEIGDEI
MQHEAMTAVKYVSNLGNLKFQAMKTILMKEYEIKKQLLNQKITELQVSLKKTVEDLRSKGLKNY
QLAKEKAEQMVKNIKEIAIKMDKFLEEKTIGEIVEITLEKYQMLITKVEFLRTQVVGLSQWYKEKA
TVIYNEKRKRAEKIFEEQKEKVLAVYQKYKAQVMPIYQKYEDKVKQYYNKYSSIIIEQYKMLLKKS
AQKYIQLRTKYEELDLKNKLNKLQKDAIDMYQNKKESALKLWEESGVPTKLVELKQMTIRKTIEA
LKQLPGQTKEQLTAVFDKYLNELKVQYKKYYSAGYTKLIKEYNDLKAKFEAKFELNRNLLIKLAK
PYTTPVVVAYKWVENEVAETALFVYRYHKLGERYNNGRELIKSEIERLTPILKNNFKKYNAEIRKY
VKDQADKYSAQALEMSKDLKQKAIVLSKDLSKKVVASLKTYSLMTGDKILRSIHSSMKCIDNVDF
GKVQKQISKKAQDFYREFTKYVIIDPSKGEILINIPHGDMVPSFTHQFEQIKLRARRSVQVLKENGK
VLMKKINNRMAELKVKIEKVRNKVMKKVMDNTVEVRRDLLSSYNINKRIFDRVYVKAQIIYKKS
LRKATNQYKVLKTKSQDYIRKATAQAKAYYEEYMTKAKDYIRKNTELAKVYYQKYMTIMKERYL
TVNKIIMDLYNTPPAELYKQLKESKASLKVIELIMHLYNTPTAELYKQLKASPTYLRIDRIIMDIYNT
PLSQRLEQLKTSSAYLKVNKMVMDIYNTQYMDIYNQRLEQIKNSPRYIKVKGMIIRLYNTPAKELL
SKLQYRGQKLYKIWFNKVKVMINKAIEKNAPLIKARLNAIKKELRPYTESLKTMYKKIKLGYSVKD
SFYPMYKQMKFATKFYRGEAMRQARKIKAQICKEDPKLCKAIKSSAKVHSFIINKYATRVNKVLNI
ALDKYQEGVAKTHRAYRHALNMIARPKSTYAAVAMVFKDHYVTFDGKSYEFDIPSSKCQYVLAH
DFQNADFTILKTQDAIKINNKDMKVVIFKNGKTMTVFPDKKISNGLPVQAGESKCIRQHNEIICN
FVEDKLRVVVDLENDITTVSISAWHHGKLQGLLGTNNRESFDDMKMSNGDLAKDQLQFTNSYE
MTGSPKCQLNKVAFKKLQCGKVTQKCKKLFENPKSELAGFFNIINAEPFIKACERDLVSCEKSKEA
KHCSSVNAYLSMIKSRGYPVELHSECMKEGERMTGDKWQQKQSNKEFDIVVLVSQRKTVNKKPI
MKVLQKLQSSFKSNSIDTRYALIGFGGKGVNEEAHVHALGKGASVFSNMNDLKRAITNTMVFNG
DEESNDAYHAIVEASLQRFRPGAHKIFVMFNSEPHTSHKYGATLKEAIFTLEKESHASLFVFDEINF
KSLNKKGLTIGQTNSKIYTTKNLKGLRLSGMELPKSEFKDMVESTNGGMFTNELMNKQNELATV
LFDAITDTVTQNRQCLDCEKHTTWYGSTRQLCHPVAC*
>TRINITY_DN1189_c0_g1_i1.p1   type:5prime_partial   len:449   gc:universal
TRINITY_DN1189_c0_g1_i1:1554-208(-)
VSAKSQVIAKMKFFLFSIAAILLVNSALADNAVQIPKTCEDVLAMETCDRLRAVAKKFHEKVGTV
NQAVTDAFKHHKTKAVEVLTYVKEYLVDKAVNFKCEDVLPADQCHNLLEFAKRLNVKASEASIA
LREAIADGSEQAKQLYQRAVSFLVNDVPNLKCEDFFKKDDTCDKIRNFATKVNAKAKDVTAAVK
KAIVENLENAKDGLKKAKQFLKAKISCDQVLNEKMCNTIQSIGDKFSVSMKKIDAALREAYANG
VRKWSELYEAAIKYIMDKWSIFGDDEPQRERREIQPENVKKAIKNLLDSLKVKSKKVRAAIMKLIE
SGKVKFGNLRKTVKQLLASLKGDKKSEDAVTAVYKRSVVDTLKETLQKLKEQIKDLAGKAKEQA
KAKIAELKELIKGALGSLDQDQSDELDQDFEMISDVLEAAADESFDEIANNALENHLGQYY*

>TRINITY_DN3182_c0_g1_i3.p1   type:complete   len:784   gc:universal
TRINITY_DN3182_c0_g1_i3:2869-518(-)
MDEFDLDRFSASDSCAKNRKKKSGNRSNSGILSLIATGTFVLLAFVGVLYVFKSDSKGSSFDELVTT
GGAVRRSVPDGVSNCSGVQLKQCNTKPCQSLRKYVLDSMANEKEMVDPCNNFYKFACSGWMQ
KNRIPKTSSTFSTFSKLNQKVESILHKIMKSKKKEVGMMKNVKNFYRSCENLAQIDKYGKKPMIN
LTNYLNSWDLAGDDSWNKNQWNFTATLLKIQTEFTSSGGPLVSVHVSDDPRLSTKHILEIDQAGP
SLPREIYLSKDPKKLKTLKAYTEYLEDVAYELCKDEPEKKCSKDQIKKRAKETIDFERQLAKISVAD
DVKQESWFKRMRLHELEKAVPDFPWDPYLNTIFKNITKIRKDQYIIVPALSYLKKMMGLVRNTSA
ETLSNYIVWSVIQDEVPYLSKPFLQIRMRYKEKVLGSKGLRKRWKTCVSYTNEYLGEILGKLYKDQ
NFKDSAKVTTEHMIKLIREAFQKNVNTLSWMDEATKEKVREKAGAMKDQVGYPSYIGNKTRFEE
KYKNLKIHADQLFQNRINMIKFAHMRMLNKICKEVDKEEWPMDPQTINAMYSFNQNGMIIPAG
ILQPPFFHGENLSMAMTYGAIGSILGHELTHGFDNTGRKFNKHGELKKQWWSNKSLAAFKEKSQ
CMIDQYNSYKVRGKFQINGKLTLGENIADNGGFKTALRGYNDWLCQNKADNLIEGLPFDNEQL
FFIAFAQAYCSNSRENEQYLATLNDRHSEEEFRVIGTLSNSKEFSRAFGCPIGSRMNPEKKCSVWV
NEETAK*
>TRINITY_DN984_c0_g1_i1.p1   type:complete   len:1485   gc:universal
TRINITY_DN984_c0_g1_i1:4558-104(-)
MVKSSWQQLLLLLILFCGFQSFEIDGEDKPGSCPPPLETLECNEVEPGELSCLTDSECSGTDKCCSD
GCNLICAAALPEIKGEMGAKGEPGPPGRNGTTGPQGPKGGAGIKGKKGKQGKQGNKGRRGRP
GPPGPPANDTEPGPDPLTEDDHGKPGPGGILEDDLAEGGVAPGVLTTQDAPEGEKGARGRAGP
RGPYGERGNAGPIGDAGEVGDKGEQGPKGQPGPPGDDGQDGDRGAPGPIGEPGERGERGEIGK
QGRPGIGGYKGDKGHPGLAGPKGVGGEEGLKGDTGESGPVGEGGPAGPRGMPGKTGNQGPPG
PTGPTGMSGPQGLPGSAGLTGAPGSPGDQGPQGPKGDMGPVGQRGERGEQGERGLTGDNGPK
GERGLTGTAGRPGRDGAQGQTGTEGRPGLIGKRGPIGQPGSQGSEGPIGLPGKRGESGDIGLQGP
DGDKGQIGDSGAPGQTGGAGLPGRRGIPGREGPTGPQGETGRRGPPGLLGTPGSPGEMGSKGLR
GERGAPGVIGGKGATGAPGSAGETGAPGDRGLQGLQGKTGRPGKTGSSGIPGKDGRPGSAGPQ
GLRGVRGAVGLQGIKGSAGSNGLVGENGALGKKGDTGDPGLKGSPGAVGAPGKDGNVGERGV
PGAAGERGAQGPIGPIGQAGPPGKDGEPGKTGERGSDGKLGPQGLRGAPGLRGPNGNPGVAGQ
VGERGEIGADGAAGSKGPNGMLGTIGNPGAPGLAGSFGQKGPDGQKGAVGERGPKGFRGEDG
RDGERGGDGIAGPSGPQGVSGVKGEMGRTGANGIDGKRGLPGLMGPPGSTGPPGDEGAQGQD
GAKGIKGAMGPRGDKGPAGSIGEPGIDGGAGPIGSLGGSGPKGGRGSIGPSGEQGAQGLPGPTGR
RGVQGNRGSIGPVGLEGREGVKGSSGEPGMPGRTGENGVPGMPGKDGRNGDPGEDGIPGPMG
KPGMEGARGPRGQLGPGGLPGMPGLQGIQGVKGEPGLDGGDGLKGRKGSTGMQGVMGSSGLP
GKPGDDGAAGEDGIPGTPGDRGAKGDIGDVGFLGPIGPPGSPGFSGDIGEKGMIGAPGEQGNDG
EPGNPGEPGYRGLIGNPGAKGNKGGKGEVGDRGHKGYRGMRGARGPTGNVGDQGDDGLDGL
KGAKGPPGLPGPRGRTGREGPSGPIGDPGINGTKGFVGIRGNPGEDGSPGPAGPPGPTGNPGFPG
GLFGGALNYYPDQQQAEKGPLYGYHYGYNYRYYKSRREEDTDKEEIKAKNKKANRNVFRYAEE
LKMRMEAEIKPDGSEEFPAKTCKDIQMCFPDAKSGSYWLDTNGGSKTDAYVATCNFTDDVTETCI
APTVSSFDRKRWVTTGGKSQFTWFMKDLLEIDEGLTYTASVTQLKSLRLASTKMRQNVTYHCKNS
YAHHDQLENTAKTFVKLMSDDEDELHALGGRKERLDVLSDKCILKDDVWRKAVFEFSTKRTSKL
PIRDIAVFDVYDENQEFGIDIGPICFM*
>TRINITY_DN1613_c1_g1_i2.p1   type:internal   len:1068   gc:universal
TRINITY_DN1613_c1_g1_i2:3201-1(-)
TKSCGGGIQESTRSCSNPSPAHGGKPCSGELSKTRACNEHECPVDGGYTPWSAYGKCSKVCGTGV
QFSTRTCTDPKPKFGGEPCTGLTKKSRNCNTHPCPVNGNWGAFGSFTTCTRTCGGGIQKRYRKC
DSPAAAHGGKKCPGLSFQFKACNTVHCPVDGGYTQWSSFGSCTATCGGGSQTSTRTCTNPSPKY
GGEGCVGPSEKTRTCGTKPCPVNGGYTEWGEYSKCSEECGGGIKTKSRSCTNPAPAHGGKGCQG
PSSESDVCNEQPCPVDGNWSAFGPLSVCSRTCGGGTSLSKRTCTSPSPKYGGKSCSGSRYRIVACN
TRICPIHGGFTAWSNYGVCSEKCGGGVQTATRSCTNPRPLFGGKACVGSSRKSRICNSQPCPVNG
GFSDWSAYGKCSKSCGSGIQVSSRTCTNPAPAHGGKSCAGPLQQSRVCNTLPCPVNGNWGSFGR
FEECSVSCGGGVQKRFRPCNNPSPAHGGKACRGLSFEIQACNTKHCPIDGKYGSWSSYSKCSVTC
GGGTQVKTRKCNSPAPAYGGKNCVGVASHIQACSTHHCPVNGGLTSWSSFDECSEECGGGIQER

SRSCTNPAPAHGGKSCVGALVDSRKCNTHKCPVDGGFTKWSSYGSCSKSCGGGSQTSTRSCTLPK
PAYGGDACVGPTIKTRGCNSQACPVNGNWGGFGVYGTCSKSCGGGTQKRYRRCNNPAAAHGG
KQCSGLSYQIKACNTHHCPVNGNWGSWGSFATCSKPCGKGVQKRVRKCNNPSAAYNGKACPG
LDYQLQACNTHHCPVNGNWGAFGPYEACSKSCGGGTQKRHRRCNSPSPAYRGKTCSGSSYQQR
SCNTQHCPVHGKWGTWGSYGACSARCGGGIQKRYRSCNKPSAAYGGKACPGASYNIKSCNTQ
HCPVNGNWGSWGSYTTCTKSCGGGTQKKSRSCNNPAAKYGGKACSGSNYYLKTCNTHHCPVN
GNWGSWGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHHCPVNGNWGS
WGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHH
>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)
MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*
>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)
MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*

>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN581_c1_g1_i1.p1   type:5prime_partial   len:481   gc:universal
TRINITY_DN581_c1_g1_i1:2139-697(-)
ETTVAVEQTTTTQAPVVTTTEKEVVTTKAVVTTAAPVEETTTSAPVSTAAKTEETTLAVKTTLAATT
KAEATTKSVVETTAAPIATTAAVIPTTKEEVVITTSTTASLKPTEFKVTLPSIGETLDIIEECPLILQCLP
NMMRVTFKKKDLEDVNFVRFNEISLIGNGGECEPNFNGTHFEFKVPLYGCGTRRRYINDAIIYSN
MIIDRIASIFIVRKNSLRIPITCYYPTSGKASASSNEIEQVANLLDQKDAYGDFTTYVKLFTDDTFSTSL
SGEKTSPDVAYQDRIYFEVGLNTKDERLSVFAENCSVTPTNNKHDPRRYFLIERGCKNDETVEFHA

STKHHKQRISYEAFSFVGTTEPVTYLHCDLLVCDINATDKRCLNRECAYMNGKAKRRKKRAALPSA
LKPYSMEIHTAVNVLHTSLQKKAQKFAKQRQIMSPFMLYLVASIGSVATITLLIVAVISFKKRTVESA
TTTSDVQP*

>TRINITY_DN106_c0_g1_i11.p1 type:internal len:621 gc:universal TRINITY_DN106_c0_g1_i11:2-1861(+)

RGPYGERGEPGLPGPEGDMGPKGPDGPPGSVGENGRDGLNGDRGDPGPVGAVGARGVQGDQG
PNGASGAAGYKGLKGDRGASGEKGAFGPDGEKGETGDNGLDGEVGPSGPQGLQGSPGPRGPD
GAVGPTGPIGARGPPGPTGLSGLPGAPGDEGAVGAVGEKGSLGPRGERGEQGERGPTGDAGAKG
ETGAMGLVGRDGTAGKKGALGSPGPQGLRGEAGPPGIQGLPGSDGAIGATGARGEPGEQGFDG
APGFKGTNGDSGPPGKPGEAGPQGKKGRSGRDGPAGPAGRDGDRGLQGIPGAPGIPGRPGSKGS
RGDRGTLGKQGTKGTAGAPGSPGETGPQGSRGAPGGIGKSGRPGKQGARGASGKDGRPGAPGQ
QGARGKDGQVGVGGPKGTRGAAGRNGEAGIPGAKGQQGEDGLKGSAGQPGSPGPSGPTGQSG
TPGATGAIGKTGPSGPIGAAGAPGRDGDPGKAGLRGDDGKAGDSGIRGIPGVKGPTGLRGQPGL
SGERGEQGADGAPGNKGPRGPNGQPGGSGQPGTPGAAGRKGPDGTKGPTGARGPKGLAGENG
KDGKPGKDGLPGANGPTGETGPKGESGRPGSDGLPGKRGEQGKQGNRGPAGMPG

>TRINITY_DN36_c0_g1_i16.p1 type:complete len:224 gc:universal TRINITY_DN36_c0_g1_i16:829-158(-)

MMIKTTIVAVVLAACVLQSFAGRCYVGYSAKGLPLAIGVRDVECGKGYDYCTTIKYRLGGIEVTQ
GNCARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTT
GLITKFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNI
DNCNKWCDILSIHQSMENCVAKCCKGDNCNA*

>TRINITY_DN495_c0_g1_i2.p1 type:complete len:655 gc:universal TRINITY_DN495_c0_g1_i2:152-2116(+)

MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPSNSVFGDPCVGTVKYLNIEYFCVKR
TPPTINTPTLTPVTLVIPVQSSYQGDFGKSLTLKWNLGLTEKDRIIAVYLYDDIKPCKTKIIFSSTGFNT
PMLQESYAQLIFGNRISATISKSSYQLTIKGLKASDARSFTLEMFVSGPGRSSCKPILSVIKISKINNINS
DKVDGGYTGWSVYGPCSKACGGGVQERNRSCTNPAPANGGKACDGVPSETRACNTNQCPEAS
MSYASTKYPASNCIDGDINTRCHSKKGVNPWLKVDFHKKVLFKSVELIKYFKYVCCDAVIKISAIQ
SDGTKKLCATDDQAEKGVQDLEIELSDNCVGHSIELQLDTHGKKSALRLFEIKFNAE*

>TRINITY_DN3698_c0_g2_i3.p1 type:complete len:710 gc:universal TRINITY_DN3698_c0_g2_i3:78-2207(+)

MMSKILLQLQFLYFVAFSILDGSKIDLMIYKTIYNYSACVSLTNATHQIGCTSEIKGNQGVIHLVNSD
ADIDWIINHGPHQPYIPLLNTTMFNEIIMKRLMDSKKISGLLVMHERATENPSGGFSPDDRCPKDK
FGMYASDEHYGSCKKVKWNNLGNGMSFVFYGIPIFLLQSDEEIAFLIKCYEDYNKPVNNSARDYP
LCAAEMKDFMFAAKDTPTCRRKTEMPNPIQSTYCDPLGDWNIYGSLYPMVGELDKNQIIMLTAK
MDSTGFFHDFTPSVDNGVTGVVTLLSVAYALGKYKRENANASQVLKRPIVFTLFNGEDWDYIGSS
RMVWDMEHGRFPYEQANKDATSSSRSFDDLDLNYTSKLSLDNIGYFIEVSQVGKANHIFAHTDPL
SQKSSSVKNTVDHLLETFTDAAKESSLLFDKVDQSLKHPLPPASFQRFLRAKKDIPGIVLTDHKTQF
TNRYYNSRFDNAENLDLHLNLQNISYIKLHSPAITKLVNLSETVANAVFMLSSDGIKPIERITVPPN
VTAHLLYCLVYAANCPFFKEVLGKKTTALPKVPFSRYISVQQLDNPITQIFHRLLSYYTGDWLPEDE
CVKKRTRKKLPFVYNYAIVRGSEENYTCYRASVYQTPAVSPAFELMDYASTEYSTWAESMWNSDI
GIQVYLKANPTIEGVILAAGFTMFMVSFIAVYFITKKSSILFTPNALVNG*

>TRINITY_DN10485_c0_g1_i1.p1 type:5prime_partial len:604 gc:universal TRINITY_DN10485_c0_g1_i1:2-1813(+)

NYSRLKSYFVAMKRTTKRIALAAAAVFLLVVIVVVVVAVVVTRDDDEDEILTAKHEPVEAREYSK
ASVAADRLECSNIGRDMLKRNGSAIDAAVASLFCIGLLNMHSCGIGGGGFINFYKRSEKKAYIYDF
RETAPLSASENMYVNKSQERLSTVGGMSIAVPGNVKGLHYVWQKHGKLPWGDLLDPTIKIATDG

FKISKAVGDKIERESTNKLYLNEGFKEFLQKDDKTWYKTGEMLKATLLADTLKRIKANPHDFYNG
TMADEIVLDINEAGGSFSKKDLEDYKVTEREPVTTNVKGYTIYSMPPPGSGAVIEMTMNILEGFN
MSEANIKDNAELIKTTHKIIEALKFAFARRPLLGDPSFVADVSKVLTAMLNKTFAEELRHKIKDTPY
PNQTFYGGFYSQHQDPYGTSHLSILSEDGDAVGATDTINYGFGSGVRSTRNGIIYNNEMDDFSTPG
LQNLWGYLPAKSNFIKPGKRPLSSMSPTIVTNSDGDVVMVVGASGGSRIITATALTLIRTLYLNEEL
GRAVSEPRVHTHLLPYEVYINDPYTVSEELQDGLKDLGHKLVMSKYWAAIQAIYRKDISSPILAKC
DPRKGGLPAGY*

>TRINITY_DN8155_c0_g1_i1.p1 type:internal len:249 gc:universal TRINITY_DN8155_c0_g1_i1:744-1(-)

DPDSEECQEEEEEEGGEEEATEGEEGNSTSKTSEGGNKKKKKKTQKKKVGKVLGKGQRKLRNKR
KNLKKKNKSKPKKKGVNKKVALSKRSDDETTDDEEEEEEEEDSGDFSLSHLGSVDLVRGLYISAEF
AIPEDCKKDKLCEWLKNKVGAEAKLTIEGTFDTNGFKIAAGITMNLALSDDLFLTEAALELEFTKS
ERSVALACKLQYNNVELSGKEGLEFIGKLKASFTGELEISMQMVGMIYEPFG

>TRINITY_DN3655_c0_g1_i1.p1   type:internal   len:536   gc:universal
TRINITY_DN3655_c0_g1_i1:1605-1(-)

FWFHMYGPHVDTLNVYKKVSGSLQLVWTRVGDNGDQWKYAQVDMTSKYSYQAVIEGVRGSSY
KGDISIDDIVLADNACPPPLNCDFEHGKCGYVEDPLADFDWTRNKGETTSVGTGPPFDHTYQTN
QGYYMYAEASGRRKNGDKALLVGPVLPGSAPMCLEFWFHMRGWHIGQLNVYIKTSNGGKVLI
WRRSGNHGMQWKIGRVTVRPRSGRQIVFEAIRGLSFSGDIAIDDIKTVSGYCPPPGDCSFEKGMCS
WNNVKRTKLEQFDWILGSGDPYRFNDHTSGKLEGKYVYIESSAQGQGDRAWLISEDFYPTNGRC
VQFWAYMSGTNVGDLNVYIRDQNGTNSMIWTLSGQQGRPAKWFNGHAPIYSSGDYQIVFEAVR
GGGSFGFIGLDDILFTSFRCNNLPLNSVPPVTTKAPPTTLATTQPPTPAPNYYTCNFTYDYCNWHN
DSTAHFNWTRHQGSTASIQTGPSGDHTTGRSGWYIFLETSYPRKANDTARLISDDVPATSIMCLQF
WYHMYGDHIGNLTAYTKVGSNM

>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)

MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGQQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA
QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP
PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA
DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*

>TRINITY_DN6221_c0_g1_i8.p1   type:5prime_partial   len:855   gc:universal
TRINITY_DN6221_c0_g1_i8:1-2565(+)

ITSSSYTVPSTMVSETTPVSSSYPVMTESVSATSVSTLVKPASSSIGPITTSVKPLSSVSSLTNPATVSTST
PSVSSSSAIKSVVSSAVVATPASSMTVYSSSSSVLKSSIAPETSTEQTVLVESSSSRPGESQVKSTISSSVE
SPAIQSSRIISSVERSSSVITSSSYTAPSTMVSETTPVTSSYPVMTESVSASSVSTVVKSVSSNVGPITTSV
KPLSSVSSLTNPATVSTSTPSVSSSSAIKSVVSSAVVATPASSMTVYSSSSSVLKSSIAPETSTEQTVLVES
SSSRPGESQLLTTAARTRPSERTVLVSTSYPSSSLSSIEEFTIVKSSGKPVTFTFPPVPSKTSVNSISSSQS
AQIQSSVIISTSFTVPATSAAVSSPAKLSSSEGPEFSSTASVSIVKSSVSSQIQSMKTSVPRPSLVSSATNP
PTVSTSTPSVSSSSPTKSSISTAFASTLASSMTKFSTFSNLPSSSITPETSTEQTIIVEPSSSTSEKPQMKTS
TLRSIQSSVVESRKESSASSISRMTVASSSSPLITASSGMSSTILSSVSSMRPSASVVYSTVAPSLPSTTVY
VSTVSTEVLTSIGSSRFTVQISSEVTVTTTLINPTPTPSSVVPTTSVNSCPACFHKGSYYAVNETWQDA
TKCMNYTCVEVDNPCYPSNKSVQIEVSTPVCQTCPKGYKSVQNKNKCCPDCVPTENVPNMCN
MKQYGNEYLSENDNKHGVCTSKQKYQVTGCGGFCESSVKAKLGAGIYSPTCQCCQPAQVKEHN
VTMTCSDGFTYYTSFHQILNCQCRQQTCSSSYKTDDIDIVTEGNGHLREKRSILETFKADMNERKR
HALLNDLAMIHVNKKRK*
>TRINITY_DN27058_c0_g1_i1.p1 type:internal len:188 gc:universal TRINITY_DN27058_c0_g1_i1:2-
562(+)
FLENFLDVDYPMPKLDMFAIPDYASGATEHWGIITYREARLLYTPGESSLSNQRSTAGIIAHECAHL
WFGNLVTCKWWNDLWVQEGMASYLEYYAQDYAHPEWNIIDSFIVNDWKTGISLDSLASSHPISQ
PVDHPKQIKEIFDSITYNKGSSLFRMLDYYLGIDLFKAGLKRYLEKNKYKGATVKD
>TRINITY_DN149493_c0_g1_i1.p1   type:internal   len:148   gc:universal
TRINITY_DN149493_c0_g1_i1:2-442(+)
EVKKAGVNVTGKIAICKYGRGSRNAKTRFSEARDVIGLVLYSDPREHTYPGLEYPKGWMLNKDG
VQRGTVNRLPGDALSIGFPSKDGYFRYGEDKYAGNPTIPVQPISYDTAEKILRWMKDDSVPLPEGF
GGDLNVTYRLQSGAGRE
>TRINITY_DN4900_c0_g1_i1.p1   type:complete   len:246   gc:universal
TRINITY_DN4900_c0_g1_i1:153-890(+)
MAELTCGMKCLKMLLFAFNFIFWVCGIVVLGVGIWSRIESKDWDSLLGDDGTIVNAANIMIAAGI
FVMIIGFLGCCGAMRENKVLLMLYAILLILIFVLEIAAGIFAYTKKDTVIEKFEENITKGVKNSYGKT
DKASEAMTKAVDWFQENAECCGVDGPNDWKASDWGKSKNTTKIPGSCCEKVDADTCDIKDSY
KKGCSEAGPQYIKDHMWQIGGVGVGIAFVQLFGIVSAICLCRAVNAETTA*
>TRINITY_DN8597_c0_g1_i1.p1 type:internal len:124 gc:universal TRINITY_DN8597_c0_g1_i1:369-
1(-)
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQACGGSDADFSEERVRACSNVNQCGVNTGTQTV
YKVCNGNRCNFQGRDYQINEEVVIRVQSCSVVCDYSPWQDTQSCTKTCDGGVLIQSRTER

>TRINITY_DN187759_c0_g1_i1.p1   type:internal   len:544   gc:universal
TRINITY_DN187759_c0_g1_i1:1629-1(-)
FNKSPCTSCLCEPSGINCYTQPQCYLFAYPAVYQNKPILNPAEIVTSCMYPGFGGNSGHGCCFFPY
KFMDQLQYTCLQRPDKSYWCSTTPNFDQDRKWAECGSCPKPPCPTKTPQVTTKAPCTGPSCNET
IKTTITPQTTTPFTTTPASSTTLSPPLTTDETPICEEWGAWMKCSASCGGGYRDRYRHCHKEGEQPY
LDQQTEACNTQPCPTSFPTPASSTVIKITPEGTTTTTTSSPSTKASSTSTTASTTKTTTTLSTTTLATITA
ITTIPANTTPEIPVNCSKWSDWGKCSTTCGFGQKLRVKFCSLSQHTKEYRETKECYIEDCPPVCDP
WSNYTACSKSCGGGAQKHTRKCIFNDNVHNEIKEFTETRYCNTQPCPPEYTEWSQWSQCSLSCN
SGVQSRWREAMWEDLGNYINIPQYQTRECNTFKCPKESNCTAWSEFTECSKTCGGGLQERVRRCI
ESKDDAFVDKETQVCNERSCVPSYCGEWSAWTNCTKPCDEGIKLRWRTCGGRYEEENSTCNEFP
CYRPPGKMIKISKLLQ
>TRINITY_DN18_c0_g1_i1.p1 type:complete len:256 gc:universal TRINITY_DN18_c0_g1_i1:53-820(+)
MGIDIGLDEVKTKPFWIAALAEFQATMLFLICVTTVVLGWGKNDVSANNVEIGLGIGLAIASLAY
AFGHISGGHINPAVSLGCVVGGRISIIRGVVYIVAQCIGAIIGSAITYACTEDSNRDKLGVTSLGPNV
SVGQGFGLELIFTFLLVFFILSATDPKKNTEPYGTTLGIGIMIVVAHVSIIPFTGSSINPARSLGPAVMM
NSWADHWIYWVAPFVGAIIAAVEYRFIFGVPENPRHDEERIPLAVESTTKYT*
>TRINITY_DN168145_c0_g1_i1.p1   type:internal   len:186   gc:universal
TRINITY_DN168145_c0_g1_i1:556-2(-)

RCGWREAKNLDKFNWKRSNGGTPSKGTGPATDHTTGVALGSYMFIETSRPRREGDNALLFGPKY
PGSKTGYCFNFWYHMFGSGIGSLNIYQDSIKSKPIWNRTDDQGNQWRHGRITVKSMRRFRLIFEGI
VGKNYRGDIAIDDVWIDDFPCPAPGACDFESKSFCTWSQVPNKFNTSNYDDFDWE
>TRINITY_DN1535_c0_g1_i1.p1 type:complete len:779 gc:universal TRINITY_DN1535_c0_g1_i1:86-
2422(+)

MMKYFMLIVFTICLKNIHAQDKNLCTSAETCGKCLLKGGDCFWCIEEDFKFNRTRCNTEANLAA
QGCTDYGMGRGKKTNDADLDFTSVRQVKPQKVTLEIRPEEEQSFRIQVKSAKDYPVDLYYLMDL
SKSMENDLDKLQTLGTNIAAEIGNITKNYRLAFGSFVDKTVIPFVENDDANYKPCAECEPTFSFKH
VFDFSNDAKSFEKAVSEQKISGNLDTPEGGFDALMQVAVCEKEIGWNPKDKCRKIVVFVTDASPH
IAGDGRIGGIIRPNDGQCYLTEDGDIKMYTEATKMDYPSIGFLRSKLKDNAVIPLFAVTKNVTEVYK
SIAAELKDLQAVTGILEGDSSNIVEVIRDKVREISRTVTLTDDSSPDITVTYRVQNDPTKPNVCPSPV
APNRCEDVEIEQTVDFDVYVKASAKNCETKEKQDQTFTVNIPAFGKVEVNVKMICDCDCAKTSE
PDSPKCDGQGTFECASCKCNEGRYGDRCICDGNENKDMSLCKPNNVTDKICSGFGNCVCGVCQ
CNIRENPEERIDGNYCQCNNFNCPRHQNIVCGGPERGSCECGTCVCREGYLGENCGKTDCRIGV
KKCLDAKGQNCSLNGICECDRCLCDKGYEGKQCQTCVSCPGKCSEYKTCVLCKAFGETGEQCD
GCELIQHVLVNRTNEECVVPVDENCFVIYRFEIDPVSMNETLYIQRDKRCIIIVKTKPPILAIVLGTIG
GIVLLGLLLLLLWKLLITAYDNREFQKFEKDRMKSKWENDENPIYRPSKQQFQNPAYAGAN*
>TRINITY_DN10094_c0_g1_i1.p1   type:complete   len:264   gc:universal
TRINITY_DN10094_c0_g1_i1:1210-419(-)

MRHILKVFAVAFVLHCIDRTLSLPVSPVPPLLNKLLKDQNVTLGFILKGLQGPPGRDGAPGSSGLP
GPPGPPGWKGDPGTPGMNGAPGFMGNPGSPGAPGNDGLPGPPGLPGAPGWPGGSGMQGPPG
MPGLPGLPGSSGPSPIRYNGTVKCEEDTAWLRCNEYKHISIMSAFWGRRNFGLCTEHTGNLITNK
YCPTTPLFLTKVKDACEGTTMCEIRCTKFFFHDQSCLDVYKYLEVYYKCIEVINGHEVVNEDNLL
MANFLG*

>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)

MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*
>TRINITY_DN2490_c0_g1_i1.p1   type:complete   len:1044   gc:universal
TRINITY_DN2490_c0_g1_i1:354-3485(+)

MDVNKKVNQAYIDDDDDITINFNPKSGDPNPQAQRFKISKLPSQSDSNNSMEDIEEADDVDGLE
KDNVQNTVSKHVQLTIPAEHYHNDHNDTRRASHTHTQTIGYMTHDAVPMSVFYRNQASMENA
ANGDMRPTLDQLHKGQGLDEARKRHWDALNEEDEQQDAERGTSNTKTKLGWIKGVLFPTLLN
IWGVILFLRMPWIVGQAGIGLSSVIVLLATVVTTVTALSMSAVCTNGEVKGGGAYFLISRSLGPQFG
GSIGIIFSVANAVAVALYLVGFGETVQALMARSDTYMVDATNDIRIIGLIALILIFVIAMIGLEWVIHT
QTFLLLLLVAAILCVAVGCVYPAPQESREKALAWGLPGYKSKSFADNFVPDYRDGEEFFGVFAIFFP
AATGIMAGSNLSGDLKDPQKAIPLGTLLAIGMTSTSYVALSWILGSFVMRDASGIIPVINVTVNGTT
MNSHTCEIGSCEYGSVNDLQIIEKISLWGPLVLIGIFAATLSSALASLVSAPKVFQAVCKDKIFPHIEL
FGKEYGKNGEPRNGYLLTLVISACFIAIGELNVIAPIISNFFLMAYALINYSVFAASIAKSPGWRPSFK
YYNKWCALVGFFLCIVIMFMINWWAALITIIVVAALYKYVDVRKPDINWGSSGQAHTYLKALRFT
RRLEDTDEHVKNFRLQVLCLTGQPSLRPNLVHFCSHITKHLGLLVCGEVNVTDKILSPSGNEGKW
LKKQKIKAFHQIIHSATLRNGAQSMLQSVGLGKLKPNTLIMGYLNRWQSIEVAKVDEYVHIIHDA
FHLRYGVGILRLQDGFDITDGVVDDQIENGVVENHEPDWYTEDWDENQKDTRGSDGDGSDQA
KEERQETFKPPDIVSAFPKKRKGYIDVWWLYDDGGLTILAPHLLALSSHWRGCKLRIFTPASDKKI
KANQIRMANLLKKFRIDFSSVVEFRGINKHPKEDSINQFKQLRRGEHLPQDGLLDKKTLRQIRLGE
LLHEHSSEAKLIVLTLPIPKEGMVTSLMYLSWLEVLSADLPPVLMLRGNQTSVLTFYS*
>TRINITY_DN6920_c0_g1_i3.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i3:2124-892(-)

CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN

GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT
PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*
>TRINITY_DN776_c0_g1_i1.p1   type:5prime_partial   len:201   gc:universal
TRINITY_DN776_c0_g1_i1:692-90(-)
RAGKTPHTASMVKNVCSKTYVTPRRPFEKARLDQELKLIGEYGLRNKREVWRVKYTLAKIRKRA
RDLLTLPEKDNRRLFEGNALLRRLVRIGVLDEGRMKLDYVLGLKVDDFLERRLQTQVFKLGLAKS
IHHARVLIRQRHIRVRKQLVNVPSFIVRLDSQKHIDFSTNSPYGGGRPGRVKRKNMKKGTGGGDG
DEEDED*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*

>TRINITY_DN61742_c0_g1_i1.p1   type:complete   len:349   gc:universal
TRINITY_DN61742_c0_g1_i1:1073-27(-)
MDNKTGFTFFVFTILLIGTILINHSRIEELKSHIETSKESVHKSRSKRDIKPDDMITLLQNADFKQYFQ
KEVNKTLKLYISSLPLKVFCGSECNINKANGSQQETFQLKIKRISLKVRPTPVLPIIQNNTMTCTAN
GNPKTLSGRWINLFTQQDIPFTKRISNDEVSITAGVEKQGQYQCLFTDGKDQVSAVTFVQKVSFNV
RYLSKKKASILLNELAKYGRVSDFKLCFSYTGSFRNYQNDINNDEVLVIIRNEQNEDLGFYQSGNY
FQLNSFLFKFNDTDNITIVASGVKQLSCFTSSTTCNANFEFKSESVSLRRYNTARNWKYSAESLQSK
GRVSRIEILKRQC*
>TRINITY_DN564_c0_g1_i1.p1 type:complete len:563 gc:universal TRINITY_DN564_c0_g1_i1:2018-
330(-)
MKLLLFCAATLLVAGCVLADGVATQKKCEDFLPVDTCNQLRVIAQKFNEKAGAVNKAITDAFNK
HKTKAGEVLSYVKEYLVANAKNFSCASVLSTQQCQQLKDFAKLMHAKAGEASIAVREAIVNGA
KNSKVQFQKAMEFLKNDVSCEKILGLEQCEKLLESAKTLKENIKTVHQALVAALQKHLSKTKDIL
KSVRETLVEKAKNFNCTDVLTLEQCNRIKNIGQRLKLKSSEVQKAVKEAIANGAEKAKQIFSNAM
DFLLIDARNMTCEDLIKAETCQKIKDFAKKVHARASDVALAVREAIVQGAQSTQDTLKKAIEFLK
AEISCKDVFSIDTCDKIRKLADSFHVSLKTVNEAMREAIANGVTKVSDLYKAAVKYITEKWGGIFG
DEPQIEKRSVDEKLTNIGELLKQKITKMAMDLLDMLKVTNEKIREKVKELIENGKIKITNIKEKVN
DLLALVNSNDEDTMNDVNMIYKRSTEDSLVDLLKSIKGKSQEFIEKLLKLSKDKLEQIKEWIKQLK
QTDDSIPSDEMEDDLDLVHDVLKDGVNMAFADIVEDTIKNIE*
>TRINITY_DN4781_c0_g1_i3.p3   type:complete   len:183   gc:universal
TRINITY_DN4781_c0_g1_i3:2965-2417(-)
MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*
>TRINITY_DN18348_c0_g1_i1.p1   type:complete   len:2565   gc:universal
TRINITY_DN18348_c0_g1_i1:90-7784(+)
MSSSLIVVKVNLEKLEIVKTFQFEPTATFQDVMNLVRTKVPEAKPKANENYGIFHYDNNDPAKSQ
WLENERTLEFYGFGNGTEIIYRDKHRYLKVKMLDGSVKTVMVDDSQTVGVVLQTICEKVGITNTE
EYSLFIEEDKNEKKEEYSMGTLSRRDKSVKQSTLQRVEDRDKKKMETLKRKLHTDDETNWLGHD
KTLREAGVQDSHMVVLRRKYMYEQSVNIKNPVEINLLFVQSRDGILDGTYPCPMDEASKFAAYQ
VQIQYGDYDEARYKSGYIDMKEFLPKEFAKKKEAEKKIKEEHKQIIGMDALNAKYKYIQLCQNLP
TYGVTFFLVKEKMKGKNKLVPRLLGVNKESVLRVDEKTKQVLKVWPLTQVRRWAASPNSFTLDF
GDYTEGYYSVQTTEGEQISQLIAGYIDIILKKRRAHEVFDGMDDEESTMLETTVLPSRATVLQHQS
NKAQLPQSGSVAIPAVIRAGGQGPSSYEVGNMGDAGFTSSKGLTHSGHQAPMGHTARMDNFSP
GQKALFKNLDDGKQRLKVVVEDLSEEPTDIPDLGTDPQSLKWRDNQVEISKNNVANRLAAMSA
ATAAIISLTSGDPEAFNYTAVGAGVSTITSNLEDLVKGIRMLAALTDDDDKSKSLLDAARGLAAAF
SDLLNALKPGDGKPRQDLLAAAGNIGTLSADIIAALGDPDTDPELQELLLQLAKAVANATAALVL

NAKNVASVTEDPAAQDKIIDAAKDTAMTTSQLVACTKVLAPHINSPLCQEQMIEAAKLVANSVD
AVTGSCVDATDDDDLKDKIKKASQDVSDALNNLLQHIGDGSRVRPGGQYDSACDDILNATDKLF
NSMGNAGEMVKQAKVLAQATSQLVNGIKGDAEGEDDDDSQKRLLAAAKVLADATAKLVEAA
KGAAKNPNDSTEQEKLKKAAEDLCGATNAAASNALKKKLILRLEKAAKEAVASATQLVSASKA
AEPSNRNPASQQQMDESCKAVNDNSHDLIHSIRGSHNNPDSPAAQLGLITSSKNFVPPASKLVAD
SKAAVPTVGDNAVAYQLSNAGKNTQNALNELRVAAEKAAEVCGSLEIDNALAAVKDLEKELED
TKQSAADGTLKPFPNDNADDRALEVGATSKTVGATMAQLLTAAAQGNDSYTGIAARDTASALK
VLANAVRGVAATSDDPKDQQAILDAAKDVMQESGNLIEEAKNALEHPNDPDNQQKLAQVARG
VSNALNNVVNCLPGQRVVEDAIEDIANSSQVLASPHIRFPVTDEPFSQVQEKLNQSSLNLNAAAN
DVVHAAKGPTGHLAKASANFSHSYQDFQNSGLTFAGQVKDKGAQDQLINDLRKTSTVSSKLLL
ASKSLAADPGAPNAKNLLAAAAKGVTDAINQLLNQALTAAPGQKECDSAVRNVEAMAHVLD
NPVEPVNEASFFECLDTATEKSQELARSMQDITSSLKKDDVDTLAEAVGGASDAVCQLTESTAQA
AYLVAIADPSSTAGRAGLVDQSQFAKARDAIREACDGLLNPNASQQQVLSAATVIAKHTAGLCN
ACKAASTKTDNPVAKRHFVQSAKDVANNTANLVKFIKVYAGDMSDPNREKCAVATEPLLEAVD
NLVTYASSPEFASVPAKISAQAKAAQYPLIMSGKSMVTSSANYFLSTKQLAVNNKDQPTWQLFAQ
HSKALADAMKKIVTAMKENAPGQQECDEAADIINNAINKIDQASLAAISNNLQPTSEGSLKSIEE
KMALTCAQLKEAVPNTVEYAKSAPEKIGHSVIKLANLADPLADCAIGFASKLPGGSEKQKDLLDT
AKTVCESAQQLVLATKDAGGNPKAVNHHPAVHDAAEDLLEAIKDLTQQLEETASETGAVTALVD
SINRARSQVTMYVGDYRDKGVARVGEPVTMTFVACQDNMVKELKSIARGAQDMVGKANTKPK
ELGGLSQDMVKSYNVLTDDTKNALRLSNQPDIAERLKGSVGKLGDSCSNVVQAAGNVQSNPND
SYAKKDLSDKAKDVSEKVSYVLATLQAGSVGTQECINAISTLAGMIGDIDTTVMFAQAGTLNPEK
EGETFGDHREAILKTAKNLVEDTKNLVVAAQGSQEQLATSAQNVLSSMTKLIDNVKLGAAALGS
DDNEAQVMLLMAAKDVASALTELINSTKNSSGKSANDPAMDTLKGSAKTMVTSVSSLLKTVRSV
EDEASRGVRAIESTVDAVKQAVINLQVGEPERTATPEDLIRATKGVTLATAKAVAAGNSGKQEDIV
QAANVGRRYCTELLVVVKAAAFNADSESIKVATIVKGRDTAQAYCEVLDHVASVIIHPTPQKKQH
LTVLSKKVAYSVGELVKSAEDLKGADWVNPEDPNVIAENELLGAAASIEAAARKLAELKPRVRPK
QADESLNFEEQILEAAKSITAAAGALVKAATAAQRELVATGRAGVDTNDDGQWSQGLISAARMV
VGAIGSLCETANAAVQGNATEERIVASAKGVAASTAQLLLASRVKADANSVAQRNLQIAGNNVK
KASYQLVESASEQGNREMVIEVEVSQRKMKGIRQEREAENEVLRIERELEEYRMKLLQQRKQKYQ
KK*
>TRINITY_DN194261_c0_g1_i1.p1   type:internal   len:124   gc:universal
TRINITY_DN194261_c0_g1_i1:1-369(+)
ADANLIPINVLKFSKQVQAYLDAFDTAYSDMLQNQSISMGFAKFRMNALVQKAEQFQTKVMEL
MKKDVSPILLRMINDKIMNFERSFVLSGLSKDNPVIRHAVYATTYYKLKNTKFPGISEAI
>TRINITY_DN12542_c0_g1_i1.p1   type:internal   len:226   gc:universal
TRINITY_DN12542_c0_g1_i1:676-2(-)
FILDSSGSLRSDYGKEKDFLKTLAASFGVSSDGARAGVVTFSYNAEHSIKLNDHFDISNFNRAVDNI
PLMGSTTRIDKALRLSQKELFGLKNGGRAGVLKLLILLTDGSQTQDAGAEDPVKLADELRADGISI
LVVGIGAGVNLTELADIAGDDSRVFSAASFDELIGTDFVSAIKDGSCEEAKKKPEPKCEAKVDVGFI
LDSSGSLRNEYGKEKSFLKTLASTF
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-
2869(+)
MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVQGNEKAIEDYENLASDLLDWLNNIKTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM

GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN1058_c3_g1_i1.p1   type:internal   len:485   gc:universal
TRINITY_DN1058_c3_g1_i1:1452-1(-)
IGSLTDWRCVCNAPGYYADANNSRRCRKEMCSENDIDAEKICGTGAISCVGPVVSPICFCDVKKN
VVSSTDGSRCIPASCKTNKTAITQCGNGNSCTGSSDNYICVCNSYGYKLDDNNNQACVEKTCSDS
DADFIEICGQGGLSCTGTMKKPVCECDHTKNFVPSDDRRSCVLASCRANPVVDAACGNMNTCY
GSESSWICLCNAPGSMLNPNNVRECLTGTCENGDIDVQTVCGRGALSCKGSVASLTCECNNHKG
YVQSPDRRSCLPSGCRQNTTMQEQCGEVNECIGSLTDWSCICSAPGYRPHDSDQMKCHRRMCY
DANVNPVEVCGVGAIGCNGSVVTPQCTCNTSAYYVPSLDGSMCIPAPCHSNKDALKKCGVGNS
CFGTTNNYVCVCDSFGYRLDDTDPHKCVEIQCDDDGVDIEKICGQGSTICDGTARKPFCQCDHA
SHFVPSLDSSSCLLASCRANGTVTDMCKDGNTCFGSM
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN11377_c0_g1_i1.p1   type:complete   len:804   gc:universal
TRINITY_DN11377_c0_g1_i1:3179-768(-)
MKQNWYNYFLLVTFAVCIIQYTNGQEERDSNPCVQATTCEACMQANPDCYWCRDVNYTEGEN
FSRDRCNLLIEFNDGCANLTSISSAFEPGQNSNFSDTVQVQPQTVTLDLRPGQPAVFNISVKPAPDF
PVDIYFLFDASFSMKDDLEKLEQLGAAIAQSINNITKNYRLGFGTFVDKKAVPFVEGPLFPTFPCSR
QVKVDNCAPVFPFRHTFSFSKNTTLFQQAVADQPLSGDLDRPEGSFDGLMQVVVCDQKIGWQPR
GKARRIVLLATDALPKIAGDGRLIGDLLQNDETCHLSPLNSDRSVLEYSESLTMDYPSISQLREAM
KKYEITPIIAVTEDVQDVYKDIANSWESLLAAFGVLNNDSSNIVDLVRENYKKISSTVRLLETKNEY
LDFEYKQLSPECQETLTSPNECEKVAIGQQVDFQVSVTLKKCPPEEENAANRGDIDIPGFGQVKIN
LNYLCTCPCSNNAIPNSVLCNTTGSLDCGICKCNQGFFGSKCECDETTVSRNDTLKCQSDQNDPS
FICSNQGICLCGVCDCFRVAAPRIISGKYCECKNFGCPKSRGQECGGDERGTCVCGQCKCKKEYA
GVDCGNFNCTEIEGPRCTKDGVQCSNRGFCDCTLGGCNCNQGYQGKYCEKCVTKNCKCNDLR
NCVLCKAYDRDDLNCTGCEYLDLQRVNDTQKTCTVQFNETCSAYYHYEIDPTQNQTQTQNVTV
YLEDDFFCVVPIVAGEPNSLWIILGIIAGIVLIGLLLLLIWKLLLILQGRREYNKFETSRTGSQWEQDQ
NPIYAPPDQKFDNPVFGGEF*
>TRINITY_DN16079_c0_g2_i1.p1   type:5prime_partial   len:396   gc:universal
TRINITY_DN16079_c0_g2_i1:1686-499(-)
GENETTIVSAITKQYENMLELRNISKEFEEIIKTLNIKERYRYFGPQKSFFDFENSKLFADELMTNINR
CEKENCSSFFSNHSVCMKHENYGSICQCNNYTYYDNETRKCEDIDECVVNNPCNLTTQYCVNVI
NYPAICGCKDGWGGEGCKIKRTCEDQRLICGVNSDCIIKENDLTSCVCHAGYYHGRFHECTKAS
NVLTAKGMKLKKNFTNELLNPESAAYKDLALEVEVTTKTELKKRIVDLADVLVNKFRRGSIEVDL
DIYLSGTSKPNEVLTELNDAIASGDMKGLDIDTQALASIEVTRTCALGNDECPTNSKCISGDGFDY
TCQCEDGYEKDGNECVKESNYKTTLAIVIPIVVVVLIILVGLFLYKCQTANRKSNEQNYGLEIRHKR
*
>TRINITY_DN9655_c0_g1_i1.p1   type:complete   len:497   gc:universal
TRINITY_DN9655_c0_g1_i1:132-1622(+)
MYILVLFCGTLIYFNHFQFVRCQDLEGVFGKSLTLKWILNLNETIIAANLYHGTQISEDKKLFGSTG
SSNPTREQKPYSKTTFGNRISASISKLSYNVTINDLKYSDSGSFLLETYVQSASESYSKNEEVRSISDV
KGGPDICGNDIQKSYTYKEGETPKINITLCGVPKPAATFKFNTNGKNEPSFQMINNYTYVYNYQFP
KLNQNMCNKTLSFEAVGHDVDKTISRSSIIVLDEFIPTAPSNVRFSRIGNCTKVKWDPIDTGNCKV
DYVVEFFSNSILMSNKTIPVGNTLDICSPSVVNASGVIVFAIYMGRYNGEKSVLSPLLTTPPPTTTTT

ATPETTPKGGGSFAADDDEGSSTPMIIGIVCGIFFLLLLVVLVAFLVKRKKKNDDDGTKLSNATED
MELKRPVSYQDEGDYASVGGIYAELGKGGRIGPKPVPIESNYSEVKIDESGYPAVGPTSDLSKERPN
YSTTVNRDRSRRHSLSADIEDNSEVIV*

>TRINITY_DN48767_c0_g1_i1.p1   type:complete   len:533   gc:universal
TRINITY_DN48767_c0_g1_i1:2135-537(-)
MEQQELIGSASRENENPQNVEENRCNCSKRFWIGAIALLLLLIGITGVTVTCFVLEQKVLQYSHHY
GVVFDAGSGHTDITVYQWPSDQKDHGTAHTEQITFEKCSDTGISSYQTEPEQAGVMIRKCVEQVA
FKHLPHKDVKKTAVYVGATAGMRLLCERDKDSCDKILEAIRRVLNGFKFRQLKNRVRVLTGSEEG
TFGWITANLVNNALNLKVPAENNPKLIGALDMGGGSTQISFIPEHYNFPNKEDMSNLKLYGVNY
TVYTHSYLCYGFREAQRKLMAHLVEASNYSSKAIHPCWQKGYNETIPASWIWLSPCSKRPQASIFP
LKNSTMYKFVGNGTSDACENRIKGLFNKTNCEAPNCTFNGVYQPPLRGHFMAHSGFGHIGTFL
NITKGDMVEDFKTKGEKLCQEDWNKVVREHEDVKKKYLRNYCFEALYSYMFLTYGLNFPPNSN
DVHVTKTINGTEVGWSLGFMVNATNTIPIEAPSYRLTQQELITLLVVCFLIALVGLSMLIVCCVKRK
IERNLKYKYTLVN*

>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*

>TRINITY_DN144214_c0_g1_i1.p1   type:internal   len:154   gc:universal
TRINITY_DN144214_c0_g1_i1:461-3(-)
DSPLRAYESEPGVQAPVGFWDPLGLSTSGNEFDYKRRREVELKHGRVCMFATIGYIVPEYTRLPGL
LSPSYGVRFDDVPNGLGAFSKVPALGVCQIIIFAGLVEIQIYNDQVNGEPGNYGAGFLGIQSIGIMS
PGWKDPEARKKKLNAELANG

>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*

>TRINITY_DN144508_c0_g1_i1.p1   type:internal   len:265   gc:universal
TRINITY_DN144508_c0_g1_i1:1-792(+)
PRRPNDTARLVSSDVPATSQMCFEFWYHMYGDHIGNLTVFKRIGKAMTMLWAKSGTQEPRWRH
ATVDITSASVFKVVVEGTASSGYMGDIALDDLFLTPGACPPSAECTFEDPQLCGWTNIAGDDFDW
TRGNAGTASWGTGPRTDHTYGTKQGFYMYIEASTPRSKGHKAWLKSEEYKPTLGRCLSFWYHMF
GLHIGELNVLISQNNSMSAPIWQMKGNQGRPWRPSRVTVKSSLNHNIVFEGRTGDGYRGDIAID
DVMISEGP

>TRINITY_DN3655_c0_g1_i2.p1   type:internal   len:494   gc:universal
TRINITY_DN3655_c0_g1_i2:1481-3(-)
FWFHMYGPHVDTLNVYKKVSGSLQLVWTRVGDNGDQWKYAQVDMTSKYSYQAVIEGVRGSSY
KGDISIDDIVLADNACPPPLNCDFEHGKCGYVEDPLADFDWTRNKGETTSVGTGPPFDHTYQTN
QGYYMYAEASGRRKNGDKALLVGPVLPGSAPMCLEFWFHMRGWHIGQLNVYIKTSNGGKVLI
WRRSGNHGMQWKIARVTIRPRSSRQIVFEGVRGQTFSGDIAIDDIKTIDGYCPPPGDCSFENGMCS

WNNVKQSSLDQFDWVLGNYPARQGDHTSGTIAGKFVFARSSSKGKGERAWLISEDFYPTNGRCV
QFWALMSGISVGELNVYIRNQNGTNTLIWTLAGQQGRPPKWFNGHAPIYSTEDYQIVFETVRGG
GSYGSIALDDILFTNFKCKNLPSGSTPPVTTKPPPTTLATTQPPTPAPNDYTCNFTYDYCNWLNDS
TAHFNWTRHQGSTSSRKTGPTGDHTTGRSGWYIYLETSYPRRPND
>TRINITY_DN113_c2_g1_i1.p1   type:5prime_partial   len:1207   gc:universal
TRINITY_DN113_c2_g1_i1:4425-805(-)
GPFGYKGEAGGPGVSGDAGESGKNGTKGYRGETGARGDIGDTGFPGPQGMVGPPGFVGKRGLP
GPDGKTGGIGPLGKQGNTGLPGSPGNSGLKGQTGNTGAIGPKGRVGLVGPVGLMGVKGASGEA
GLDGKPGMPGAEGPDGLSGPRGEPGPVGDSGETGPGGDIGPDGLVGLKGDVGKPGIRGLPGLKG
MAGDTGLVGAKGAAGPDGDQGATGKAGPRGEPGLVGIRGYPGAAGEPGPNGQTGLKGNQGRI
GETGADGLKGSKGTRGMTGPNGETGMIGLVGKPGVAGVDGRNGAPGMNGRNGARGVSGTAG
ADGQPGVMGVPGIPGDPGDMGDTGLTGANGNNGTRGDPGRRGPNGAIGERGSQGSRGDMGQ
RGNSGPTGFQGPPGPRGVAGLDGMDGKQGIKGSRGKSGNPGLAGEMGLPGNAGVVGQLGKRG
ASGQKGNSGSNGDNGEVGYPGKVGNVGDDGRPGTPGLNGRKGVTGETGKPGMRGPKGPSGD
DGSEGAQGTDGLPGPPGLTGSRGVAGLDGKPGDNGSPGAPGKMGAEGKPGAPGLVGQPGLRGP
VGAQGTRGVKGPTGDRGVSGDVGLEGFAGEMGQNGLRGAVGIIGQIGEIGTPGKPGPRGMMGA
QGLTGPSGPTGSTGIAGSPGRDGNKGPNGDQGDFGKVGKAGQSGSPGKDGLPGIPGKPGLQGEK
GFGGPLGQQGPEGEQGSRGTTGMQGMKGKLGPKGLSGLNGSPGKDGLRGPRGSRGTAGGIGPL
GVDGKPGTPGTNGTDGLPGDTGPKGTAGLRGEVGDFGAPGDVGENGATGPDGIIGAAGPRGRN
GDVGAPGSRGGAGDMGAEGPRGASGDDGRDGLKGLKGTMGRMGIPGPSGDLGEKGDNGPDG
RPGYTGPQGRYGDVGTDGDTGVQGMKGETGVSGPDGNKGPDGTSGDHGTPGTAGAPGPPGPP
GPPGDYSSFMSGGYMDFLRAGGFSKGPRYYSGKYKKSLNQESNTIEKVFQAKYQLFKEFDSVWN
QVVNDKITRKTSGSSKNPAVTCADLFKNNHHIGSGDYWVDPNEGSPDDALLVYCNAENNETCIY
PKSPSFDKYSTYMGEVDYTWVYSSRILTDEEYITYAADMVQLNMIRLMSDRVRQNITYHCKNSLS
DLQLKTDDDKTMHLDNLRRITVTMQNNCVVKDGTWRKSVFELNSKYLEQFPLQDIAYKIINSSD
EDFAIDIGPVCFS*
>TRINITY_DN66856_c0_g1_i1.p1   type:internal   len:443   gc:universal
TRINITY_DN66856_c0_g1_i1:1327-2(-)
WSIGQGKTASTKTGPKNDHTYNDQKGKYLFMPTSNKKLRNGAKAQIQSPIYQVQPNGNSVKCF
QFWYHMYGSSIGSLNLYMKSQWLKRKLWTKVSYQGNLWWIGQVTVTSQTPYQLMFEGVRGSSY
TGDIALDDFRMLEGACNNLATCDFENDKCTWQNVLRSDDFDWLIGQGTTWTKWTGPLTDHST
DTGDGHYMFIDSSRKTKGAVARLYSERVQRSIFSFFPFCLSFWYHMQGPNIGTLNILTKTGRGKAN
EQLVWSLSGNQANSWKYATVSLKSRKGFIMVIEAIAGGGHKGDIAIDDIVFGRRFCAISPPEAKPT
VATTPGPSPPPTTPMPTVYDCNFEKKDICQWQQDVSDQFNWTLRQGATPTRGSGPTADHTTRNK
TGSYIFIETSNPRKAGDKARIISPPMDSDKYHGHPHCLQFWYHMFGSHIDTLNVYKKV
>TRINITY_DN6304_c0_g1_i1.p1   type:complete   len:348   gc:universal
TRINITY_DN6304_c0_g1_i1:1626-583(-)
MGCCRKRAPEEEDQNKSNRPSDSKFKQQKLPAWQPILTASTVLPLFFFIGIVFLPIGITLLVTSNNIK
EKVIEYSTAENCMKCKAEISSPKAKPPSCECELTFELEEQWTGNVYFYYGLSNFYQNHRRYVRSRD
DNQLHGELVDSVNSDCKPFDKDGNGTIYAPCGAIANSMFNDTFTLVKEDSDQEVPLTSEGITWDS
DKNTKFKNPSNINDLNRYAKPKYWSKNITQLGGTDEKNRGFVNNDFIVWMRVAAFPNFRKLYR
KLDLMKNPSFRDRLPSGKYKLTIGYNFPVSSFGGEKQFILTTGSWMGGKNPFLGIAYIIVGCLCLIFG
FVFLVIHMKIRTRPLAS*
>TRINITY_DN2356_c0_g1_i1.p1   type:complete   len:270   gc:universal
TRINITY_DN2356_c0_g1_i1:194-1003(+)
MGQGELLQKAEDLADQILRHSKHILPHLARFCLVSTFFEDGIRMWFQWSEQRDYFDHTWNCGW
FFATMFVVTNLVGQLAGCFMILARQKVEIAVGLLFGIIVLQTVAYQVFTDLKFFLRSLALAGGLILL
LAESRQESRSIFAGLPSLDNQNKPKTYMQLTGRVLLLLMYLTLLKFDMSLFHIVFNLLGTVLIMLVT
VGYKTKLSALVMVMFLMMINVYENAFWMIPQWKAMRDFLKYDFFQTMSVIGGLLLIVAFGPGG
ASLDEKKKW*
>TRINITY_DN7674_c0_g1_i1.p1   type:complete   len:661   gc:universal
TRINITY_DN7674_c0_g1_i1:117-2099(+)

MDYYASEKKGLVVWDWLIIACYFVICLGLGIYSKFRRKQDESAESYFLAGRSMLWWAVGGSLYAS
NMGSEHFIGLAGSGAATGIGVVAYEWHASWILLVLGFFFVPVYIRSKIFTMPEYLRKRFQSKWMRI
YLTVVSLISYVTTKIAVDIYAGGLFLKTAVGLNIYVSSIILLSFTALYTLLGGLTAVIYTDVMQCVLMV
FGALALTIIGFDKIGGINALWDKYPSAFPLTTLATNGTIVSAALTTANTLNAANSVTSNSTAASYDA
HCYQVDPYWEHMFRPFDDGEFPWIGIMFSAPITGIWYWCTDQVIVQRTLGAKNLANARLGTIVA
GFLKLLPLYIMVMPGMIARVLFPNVIACGSPDTCKAACGNEYGCSNEAYPHLVLHILPQGLVGLM
LAVMIAALMSSLSSAFNSSSTIFTMDIYRVVRSKASNKELLIVGRLVVCVLVVIGVAWIPVVSRGHG
GQLFTYLQTIQSYLAPPTCAVFIVGMLWPRLTEAGALSSMLFGLLMAIIRLAFDVTVPKPHCGQVD
NRNFFAKLHFMYYALIMLLICVVMMVVISLFTQPVPMDMLGALTWPTLNKPRYKEGNQTDEFVL
STSNGDSNVKIKDASTFDPDQQDLIHDEDELAEIEEFENQSTIMKWGVRIASGCLLFTLFFLWIWY
R*

>TRINITY_DN738_c0_g1_i1.p1   type:3prime_partial   len:338   gc:universal
TRINITY_DN738_c0_g1_i1:1011-1(-)
MVSNMLKLILLIGLISLTSGKTCRNIRKKIGCFMERGDTTVLFNDRNIINWQRYGEFSEKLACKCN
EAAKAKGYKYFALRFFAICVGLNTLTQNRIENEKCKDGNTVPFKPCNLDDDHDCAGGPNSEMV
YEIGRDGGYGEWGSFGLCSVTCGEGTSKRQRKCDNPTPLANGNKCDVLGSSNELKKCERKPCIV
VTDGGFGEWSSFSTCSKSCGGGVQYSVRKCDNPKPSNGGKNCVGDTRRTRQCSTNSCPPEKVDG
KFSKWSGWSRCSVTCGGGTRARARKCNNPSPSGGGRYCVGEKVEIQACSTKYCSVDGGFSPWSR
WSGCSKSCGVGTKTKS

>TRINITY_DN2796_c0_g1_i1.p1   type:5prime_partial   len:521   gc:universal
TRINITY_DN2796_c0_g1_i1:1-1563(+)
LKQFRLKPVILARRPPTPVRLDSDGCQANFAMSVSLAKLRAAAKGGSAEAAVEEAIKAVEAKKFL
IECLKAREILDSRGNPTVEVDLTTQSGIFARAAVPSGASTGVHEACEKRDGDKSRYLGKGVTKAVH
MVNTVLAESLKGFDVSQQEALDKKMNELDGTPNKSKLGANAILGVSLAAAKAAAQGKGIPLYR
HIADLAGNAEEMVLPIPCFNVVNGGSHAGNKLAFQEYFIIPVGAASFKEAMRIGAECYHTLKGII
KKKFGGDATLIGDEGGFAPPCDARGGVELVMEAIEKAGYKDQCRIGMDVAASEFKVEGKDCYDL
GTWYPEAEKSDSLKMTGAQLAEFYAQLCKDFPIITIEDPFDQDDWEAWKLFTAKVGAGTQVVGD
DLTVTNVTRVQKAIDEKACNALLLKVNQIGSVTESIAAVKLCKGSDWGVMCSHRSGETEDVTIA
DLAVGLCTGQIKTGAPCRSERNAKYNQLLRIEEELGDKAVYAGASWRKPIWMGQTRAVKRGAE
QMNGGH*

>TRINITY_DN5_c0_g1_i15.p1   type:3prime_partial   len:578   gc:universal
TRINITY_DN5_c0_g1_i15:1731-1(-)
MKALSGIVALTLFVSTVYSFQCDDVLYTRNCGGYTNAINSINGIYEVSNNRIADILNKLSQDFSTIFK
TFLPNLKDLKINGNVIRLDNNTKVIVNGNMTKEEALKAIGQLNHMMKVLKSFNLVGTTELQELN
KIITDLLDQALNQNLNAYLIIDKIDIDAIKGQIKNVLGSVSIITRTLIMNAIEAFDGKLQKVLGLIKPI
LEAINRRDIYDKIEAVVQLAVEAAKAKAGGQYAFEVDNQVEKAEINLIAFIDRLDQQAPIVKRGV
NDLWRKIQDALNGLNENAKKAATDLVNKYKPKIIESLDKLKKMVIDGAKKMIIELQGDIVKIITR
QNDKTLSKRSISDMWLKIKEAAKNLKSNIKDSVTDVLERYKPKVIDALNNVKKVVIEGAKKIVVE
VNNGIVKIITDGQTATSDDNLYVFEEFHHTAYVVIDDAAPSVYGFKDVWGKVIAKFTELGDKISAS
TRALIEKYPKIINTLDNVKQFIIEEGKKIIIELQGDLIKIVVENMKGSVEKRAISDVWDKIKEAARN
LKSNIKDSVTDVLEKYKPKVIDALNNVKKVVIEGAKKIVVEVNNGIV

>TRINITY_DN75609_c0_g1_i1.p1   type:internal   len:232   gc:universal
TRINITY_DN75609_c0_g1_i1:694-2(-)
ERTSDIVNEIFSRFNEYGFEPSLYKYDVLLSFPDPEKDNYVSLINSTGDKIFQNMRIEQVLEPSENDSS
ALPPYLAYGKSGEVKGDLVYVNYGRDEDFKYLVDNGIKLNGTIALIRYGKLGRGQKVTSAASFGC
VGVLLYGDPKDYSPGPTYPNGRWLPTDGVQRGSIIGYDKDVAEGDPMTKGYPALDWVYRTDVK
KVKGLPLIPALPIAAADAEKLLSMTSGMEVPKDW

>TRINITY_DN179_c0_g1_i1.p1   type:3prime_partial   len:223   gc:universal
TRINITY_DN179_c0_g1_i1:84-749(+)
MLSNSKLAVFLLVLGIGIITLTKAQGQCPPPLDRDCNDERNPDDETDGCLIDNDCSSGRRCCSDGC
NLKCTEVQQPPDPEPGDPGEPGRRGETGRSGRPGFPGPEGPLGNPGPPGGRGKKGRRGRPGPPG

PPAPTGPGGEVGPLGTGGDGTKGPGPNAGALGEEGMGADGFVTPKEGPAGPAGPDGRQGPRGP
YGERGEPGLPGPEGDMGPKGPDGPPGSVG
>TRINITY_DN65215_c0_g1_i1.p1   type:5prime_partial   len:383   gc:universal
TRINITY_DN65215_c0_g1_i1:1336-188(-)
HYRKKTTMAAYDDDENFGTSDSYGNVGSFPKEFGYAEEQEELNNYSEEQKPKILLMGRRRSGKSS
ILKVVFHKMSPNETLFLESTNKIVKDDISNSSFVQFRIWDFPGQIDFFGHDFDSEQIFSGCGSLVFVI
DAQDDYLDALTKLHQTVTRAYKVNPNIKFEVFIHKVDGLTDDHKIETQRDIHQRATGELEDAGL
ENVQLSFYLTSIYDHSVFEAFSKVVQKLIIQLPTLENLLDILIQHSGIEKAFLFDVVSKIYIATDSAPVD
MQSYELCCDMIDVVIDISCIYGLKENGDANAFDTHSASIIRLNNSTVLYLREVNRYLALVCILREDN
FAKHGLIDYNFHCFRQAIQEVFEIRQQARDALLPKNGTILSKGESVVV*
>TRINITY_DN165469_c0_g1_i1.p1   type:complete   len:2668   gc:universal
TRINITY_DN165469_c0_g1_i1:41-8044(+)
MVEEDLNRSKELDIPKTLAYCFHNVTTVSLNRKQDIFRLLTQCIESQGCQDGHLKAVCKIISLTVM
RYRDSKSRQLVLKFVQKFLDIHELQAVKCLLTEIHILAKQLIKCGASLFSASCGLALLSWCSSISKKK
VQEASILKILYEVEAMCYSVICTCDSFRVKRLLKRAYLYLQDGKDAEQLENCLGVIISNSNCQLESIC
LVGFIFQYLTTKKEIQRVDEVKKRSLIDIIIKNYIQTKVKADYHYLKHAVPFLKYITHDDFKEILPAIE
KGLLRNPETVLQGVGYLLEGLSIDSSNYIEELSKCIAVHLISKNASLQADAVFAVSVIAKQCSDFSAI
NHLLKQLIKVLNESEGKLVFPEQKNAVLQAIKSVDCTSVTGSDHKENLATTLHDGLFPFILLEGHE
GVLTQALNVMKTWCKYFKNNLPKTFVDNIKKGLSLKVSTTVIQAHYLLVVSEALKGNTVSQASG
LLETLLQVIEKVKGQSHLINNVFLCISSSMVLLKMFLSDDVQVNAAKEDSFWNVILDPVKKNLVSE
KFLLSHQKEYFYHLSQCMNTMFLNYSSRFSQKLLEPWYRAFNVLMVYGDWKTKKSVKILLSKMF
DSGNYDTDEFQSRLFADLDSLLDQEMSKSSKIEDTEDILVVNHVVDAYLFLCIWNKKDINEDEVLA
VLRKCLIYVHHDTIYQHDSSLFSKIGSVLKKDVAKEFVEKYKDDLLKYFINLESLSKADNHSLKTLL
SLYPEALLDTLVDEIIKYFTKPDLINVTSQEYEIMKTPDGVAYDQSVFESAKAANQKSGNLKRESKA
YSYKDQKAEMELRKELEKKKGKSDKIELNKKQKEQLEVILTQEKAIRDKLKSLEQGVMKHASILSL
LLDMDSDLLCYHYLDLMNLLLCLCQSHIAAPHVIPIYTKLSEKLFEGDLKHLGQLVANVILRLKKP
VCELPMGWSVENLPEQAKRALNTLHTFVNERNVYLMMTYTRKKTFSVLVFSYCLPLLKSILKDQ
GALVKGSEEFRMKALQLIHIHAKLRSPMDMGSEKNDPELLPRKEMLQILSDVIVSCEGHNKEAKV
QQQATLAFDEVCKCASGRLGCAVATEEEINILLSNILSQCSILRRVSLKGLLEFVDILPTENVVIMTQ
LTRSVLIGRFDIVDENATLAKRLWDEADICIEPSMIQHLVENVTHPLDDVRLAASLALEFSLNERKE
VDIIPQLLDIYFEKLKIPPPIIDNLGRVVSQQFVDSWEARQGVGLALEKIAETVGEDKLGDLFSFFVP
KALGDRNESVRKQMLNASLQYVNLYGQKNMDMLLGVFQDFLDSAPDSKELDTIRQSVIILTGSIA
KHFDKTDPQIKSIFSKLMAALSTPSQSVQQAVANCLPPLCGAMKSEAPELFKNLLEQLLESESYGE
RRGAAFGLGGLVKGLGILSLKQQNVIPTLNDAIQNKKIWKHREGALFAFETLCTMLGRLFEPYVV
HLLPHLLLCFGDGNQYVREAADDTAKAVMKNLSNHGVKLVLPSLLKALEEDAWRTKTGSAELL
GAMSFCAPKQLSSCLPSIVPRLTEILADSHLKVQKAGQQALRQIGGVVRNPEIQEICPIILDALSDP
NKHTVACLQALLSTSFVHFIDAPSLALIMPTLEKALGQRPTETKKMAAQILGNMYALTDPKDLQP
YLQAVVPGLKKSLLDPSPEVRAVSARALGAIVKGMGEVDDLMPWLLETLTSEASSVDRSGAAQG
LSEVLFALGKDKLDKLMPDVIATSMKTELSPNIRDGYLMLYVYLPATFEDQFLDYIGLIIPAVLKGL
ADESEFVRDTSLKAGQRMINMYADSAIELLLPQLEAGLFDDHWRIRLSSVQLLGDLLFKLSGVTG
KQTTVSEEDDNFGTAYSSQVILETLGFDRRNRLFAGLYMGRSDVALGVRQAALHVWKVIVQNTA
KTLREILPVLFELLLGCLASQSYDKRQVAARALGDLVRKLGERILPEIIPILEAGLDHEDGDKRQGV
CIGLSEIMDSTSREMISMFEDSLINTIRKALVDELPNVREAAASSFENLHNTIGHRALEGVLPTVFQ
KLDDPQLSNYALDGLKQVMTVKSKSVLPFLVPKLTTPPVNTKALAILSSVAGEALIKHIEKILPAMI
QAIQVSQGTGLDGDSEFESTRTLILSVYDEVGVRTIVDELTTSSKSQMPGIRKVAASLLMVFCKETR
GDHVPYIQSLFRTIIQLMNDVDQDVVASAWGALDALVKRLDPSEQLQHLSSLRQAVRFIKDDIRN
EQLPGFCILKKGITPVLSIFREGILNGPQEIKEQAANGLGEIIKLTSPEALRPSVVHITGPLIRILGDRF
NSSVKVAILDTLGLLLQKVGALLKPFLPQLQTTFIKSLNDSALGVRQKAAWTLGLLTVLHTRVDSL
FTELKNGIKNNEDSAICETILGALRSITLKAGSKMSEGIRNTLYETLVELISSNEDGIRLKAAAALGA
MCQILPQDQIEQLLNDNLLDINQMLDWSICHGRAVALSYALYHAPSQVFDAVDEDDIVEAVVKY
STYDRVPICTYGVHSLGHLLMFSKDNADVAPQIVVSSIKKTLLNSSVDIRLASLSTIKHVSRNTPEV

MTFERIRYLIPEFISLLRDRNTSVRSSAEITLAFTLQMDKNDILFDECVNTISEASHFLEEFKKNTFSK
LNDSLATDKDDYFFAT*
>TRINITY_DN106952_c0_g1_i1.p1   type:3prime_partial   len:135   gc:universal
TRINITY_DN106952_c0_g1_i1:18-419(+)
MSDAAAPKGGKHAPKVAKKGEKRAGKKGGKIGGGSEKKRKRKRKETYAIYIYNVLRQVHPDVG
VSSKAMSIMNSFVNDIFERIASEASRLSLQNKKSTISSREIQTAVRLLLPGELAKHAVSEGTKAVTKY
TSS
>TRINITY_DN4481_c0_g1_i3.p1 type:internal len:369 gc:universal TRINITY_DN4481_c0_g1_i3:1-
1104(+)
FGIDKVLTMLKFLLFLGFISITSGNTCRNLRKKIGCFIEDGGATSLFNDRNIINWRHYGEFSERLACK
CNEAAKSEGFKYFALRFYGICVGINELSQNRISLESCKDGYKLPFKPCNVYDDHDCVGGPSADMV
YEIGRHGGYGQWGSFGVCSTTCGKGTHTRQRLCNNPIPLGNGNKCDVLGSSIEEKECESKPCIVN
GRFSEWSSWNRCSVSCGGGSHARARKCINRSEGGKDCVGEKVQIEACNTKHCIVDGKYSQWSS
WTKCSKTCGEGIQERTRQCNNPRPSGGGKSCEGASEESRCCSNDFCKGPTGVAKAQETVERILGN
FHKKAYPDKKPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTL
>TRINITY_DN17095_c0_g1_i1.p1   type:internal   len:607   gc:universal
TRINITY_DN17095_c0_g1_i1:1820-3(-)
CVEHAHCKRNEFHCIGTMNCILKSSLCNSVKDCQDGSDEGPKCTFSSCNDTCSYKCQKQPSGVG
ACICEPGKILADDGHSCIDENECDQVPSPCSQHCNNTEGSFMCSCTYGYILQDDKRGCKLNVSKE
EELLFVDVKEIKRYYMRSKLLQPVFTNLSRGVAFDFDSASGKLFYTDVTQNVIYSSYLDDFAKVVH
GEKRILDRGLAIPDGIAVDWICKVIYFAESAANRIDVIEFNGKNRASLISANLTTPRGLALDPRVGY
LFITDWGGKPKILRSQMDGSNLKVLITEKVGWPNGITIDYYDKTVYWVDARYDYIDAIDYNGNN
RRNIVKGKDLIPHPFSLSILDDDIYVTDWVLNGVLKISKLPGTKKVEQLVYNLSRPMDIHVISEKRQ
PYTDNPCDTRKKGNRCDQLCVIKSATESSCLCQARYILGSDGRTCEPANEFLLFARSWEVRGISLN
ASYLNDVMTPVLGLNSAVGTDFDALSEYVYFSDVKTDKIGRTFIGNDKGGKIEWIVEGNLDNPDG
LAVDWVGRNLYWTDSRISRQSEIGVSKLDGKFRKSLIQEPLGKPRGIVVYPEKGYLFYTDWMRPAK
LGRIDMDGSHLMILVN
>TRINITY_DN912_c0_g1_i2.p1 type:complete len:355 gc:universal TRINITY_DN912_c0_g1_i2:1586-
522(-)
MGCTISQIDKEAVERSKMIDKNLKADNERSAREVKLLLLGAGESGKSTIVKQMKIIHESGYTSDEC
LQYKPVVYSNVIQSMLAIVRAMGTLKIEFVDPTKNDDALRLFSLAGSVEDGCFTPELMSIMKKLW
QDENVQHCFQRAREYQLNDSAGYYLTSLDRIGADDYVPTQQDVLRTRVKTTGIVETHFVFKDLH
FKMFDVGGQRSERKKWIHCFEGVTAIIFCVALSAYDLVLAEDEEINRMHESMKLFDSICNNKWFM
DTSIILFLNKKDLFAEKIKKSPLTVCFPEYMGANTYDEGGSYIQLQFENLNSRKGEKEIYTHFTCAT
DTNNIQFVFDAVTDVIIKNNLKDCGLF*
>TRINITY_DN59572_c0_g1_i1.p1 type:internal len:725 gc:universal TRINITY_DN59572_c0_g1_i1:3-
2174(+)
FSSVLEYNIEDFELVNQYMFVTKNSSSHPGTKDLLVSYYRGDFQNTSFPMKNNGTSYIIADAHENE
TMVAVNHNGTANLYISNPEGTKYSLSLGNILYYNKDEGQKSYFEHSFVDLHRIKGISGIYIATSLTTG
AVGTRHLQSYITFNKGGYWSLLKAPEDTKNCSIWRGCSLHISQEFGYHNPLLNFSPITSKESAPGFL
IGTGNVGDSLKTKPNVYLSRDAGLSWRKVLQGHYYYNMLDHGGIIVAVEKFGLTETFTYSYDEGK
TWHSEVFSKERVRVYGLLTEPGEKSLIVTIYASYNKAHAWEVFEIDMTKVLGRKCSIDRDYNLWAV
ADQRNDTERCVLGKKQIFERRKAKSRCYNGYNYDRPINVSACLCTREDYQCDYGFKEKMILWFR
WDCVHDSDFEDYSKKPPSWCKPGLTYNISSGYVKAPGDACYGGEESKYVSTRKMCPIPKVDDYL
LYATRKSFFGYDFESKKSIEFKLDGYSNIVALEVAYDDGVLFFADKDRDSIVKIDTNNGNISTLLGFD
ESSTHIESMSYDWLSGNLYYCDSGNSTIGIINLAGKHKKEIMKFADADKPRAMMVHPTKGYLFWT
DWGAKPRIGRATMNGKNIKTIIDTEIYWPNGLTIDYDADLLYFADANKDRIEACGMDGENRRVIL
STGVYHPYAITIYNDRLYWDDWNQHSIFSIDLQGSGRETVVSYLAYAMDIKAFSKKRQKKGTNGG
T
>TRINITY_DN11522_c0_g1_i1.p1   type:5prime_partial   len:849   gc:universal
TRINITY_DN11522_c0_g1_i1:2860-314(-)

LGRECIMSGLPNVDIDSNKSDIGRIGLGNIRDPSISLTRGSKIDYNGYMGFSATSGYFGNDKHIHFA
GGSPRSNALKGRVIMYKDSAGYEISQYLDDPSDQIGTYFGSAMASADINGDGLADLVVGAPYYTG
TVSNEGIAYVYLNKNGIVELVQTLRQPEGKDVKENGMFGISIGSVGDLNNDGFADIAIGAPWGGE
DGKGIVFVYYGQRDPAQLKLMQTIKPSDLSGIDVDGFGYSFAEFYPYSGGPDQYGFIENDPDYNIY
PDLAVGAFKSNHAIVFKSRPVYTIVGRLSLGGVKRLDLVNKENLCPNGMKCLDKVQACLMFKEE
ESEGEVDYTLEVDSGRDSPKRAYLLDSDGKQVTKINKQTTVSKDEECDDYTIYVKNTTDVLSDLVI
KLSWKFVVPTTCDGVCPVANELCQFVDTKSIIFVKGCSDDGDDTCSSDLHLEIEKKFEFTPKLVGTE
EIISAGATDGIILTFNIKNLGENAFDNSLKLEYPGKGDMKLVNIDDAKVISDYYGTPIWDSDVTREK
DVTTLSVMLSSPIVKGKPEQVQVKMSLNPIPKGTKFLKFKVYLETDSEETDTSNDFQEITIPVELVSN
LLVSGQSIPEILTWRKDVKDVQDKGAEITYNFLFQNQGPSNVDTSEAIILIPEKFKGSYFLNIYNYDV
KGSKSGSDPGSCRIEGELNPLKLDYYGRRIGNNTRKRRDTRGVPALECGADTTCREIICNFNIENR
NSATVTVKATLVDANFDSVIGAGREIHVTAEFSSDAVTPPSGLEFPVKSMVTTTVNSPYLTKTEGGE
SIPWWIILLCILAAIIIIGVIIFIMYKKGFFKRKKMADEDEALRNGDPEMDDD*
>TRINITY_DN75529_c0_g1_i1.p1   type:complete   len:517   gc:universal
TRINITY_DN75529_c0_g1_i1:94-1644(+)
MSSYHDVIISSIGDFGLAQTLIILAAAVPKLTAAWSILLMSFGGIETDWWRITKNLNSTGNSSDVIRL
FKDCKLKPGDTIEFDTSIKTVVNEWGLVCGKDWIPTTITTTQMFGVLIGAAVGGQLGEILGRRKTLI
IMLTLKILAVTIEGTAANWYVMIAAIFFVGISFGGFFVINNVYMLEFVGTKYRTPVGVIPFWGLGM
TLMGVLYKFSPNWRHICYVAVAIEIPCYILLCISPESIRWLFTQREFEEGKKKLVKLSKLNGRPLPDFS
NFGEVVNKEEQSRGASKKYTYLSLFKYKSTRIMSVILGYIWFCQSYTYYGLTLGVGHLVGDPAVNM
MIMGSTDVLCMAIVALISRCCGRKYTTIILMIITAFATLGITVAYFIKTEKFDLIMSILALSAQFTISGG
WMSVIVYTTELYPTVVRSVGYGFASICARVGSIVAPQINTMRKISIHLPYTVSGIMMLICCVLVLTFK
ETASSPLEDHVEKNAKEKDVELTDPTKVELTDNCYVVNEQAT*
>TRINITY_DN711_c0_g1_i2.p1 type:internal len:183 gc:universal TRINITY_DN711_c0_g1_i2:548-3(-)
KGESGRPGSDGLPGKRGEQGKQGNRGQAGVPGDSGPEGLQGGDGPKGSRGIRGNKGETGPDGP
AGEDGTPGMAGNLGSGGRKGARGISGGPGAQGPPGLVGMRGRRGAPGNRGPAGAVGPAGRD
GPKGNAGEVGAPGRPGANGAPGLPGKDGKNGDNGADGAAGVQGLMGAQGATGPRGSMG
>TRINITY_DN1783_c0_g1_i1.p2   type:5prime_partial   len:473   gc:universal
TRINITY_DN1783_c0_g1_i1:1460-42(-)
NDFGPSAWQLVTAGTYQFLGSLARVAFFYEMGKPKALVIGGQFSGTFTARDLKSKFHVTVVDCKE
YFEYTPGVLRAYVKPCHLDALTFTLQPVLERSMGVKFIWGEVKQLDGEKKCAAIKPMFADTTDIIS
FDYCVICSGCNFGPFKPMGESLWFPTVHEEERKISDWKHIDERFIEGRRRHVLEEFHKLKDLNTKK
AQILIVGAGFIGVEWATEIEYFFPDIKLTIIDALPRCLGPLPDSAAEYCSEYMHAAGIKEFYDCKYDA
KSPDFWKKVELPDGADVEYVCIGVKASNYFMPKETLSDKGPGGGGWIHFNKYMQVTKKDGTV
WGDGSVFAVGDCNYGCIGAPPNWEMPPVPKISYPGEEQALHAVVNIKKMYKGKTALQPTWWP
WGAGMFATSLGPHDACFVLAANENKGSGYMINWWIPAALQKEIIESTKINECKNGCIGILIWHF
VHHTPFNFWGRGPWMPSTH*
>TRINITY_DN98417_c0_g1_i1.p1 type:internal len:180 gc:universal TRINITY_DN98417_c0_g1_i1:2-
538(+)
LLTGQVVTLGCEKAGPYWGPWGNWTSCSVTCGDGIMTRGRQCVGGNPGEGRCVPKNGNQQE
QSCNLGPCPVPPRPCDKDIDLGFIVDFSNTVDAGLHEKQLADKIKSNIMEIALLFDISSSGTHFSYIP
YSSNPGDYDPLQWFNNSVVKALESQDKSSQKFYLETVIKSDPEEEGFKRG
>TRINITY_DN38399_c0_g1_i1.p1   type:internal   len:876   gc:universal
TRINITY_DN38399_c0_g1_i1:2625-1(-)
GDGSNFYESPGLLDWMNVTNVHIRFSGLYRKFDYIDTRWHHYVVSEVSLIARCDCNGHGDGISC
PLNVVTGTRKCTCHDNTCGSHCERCCPAFNQYPWKRGTRSSWFSDNTTACERCNCLGHSDVCQ
YDQHAADNNLSLNINGEYKGGGVCMDCKHNTDGINCEKCKPYYYRPANVDPRSKDACPSCGC
SIAGTRAASSNIKFLECIKDDKTAKFYPGMKVGDCFCKQNVIGSKCDLCKDEFYRLEASNSLGCRR
CRCFLSGTVQRLNICHKDFFGQCPCKSNVKQRDCSICKDGYYDLRNDDESGCKWCDCDVGASIS
PYICDKITGVCTCRAHIHSRRCKKVDEGYYYPDMHYIFGERNIYLRANSRLTTKIDIPRDAMYQLF
VQFELRTRLSPMLQLELKLDGTTKFLLRSNNNLPYALIKVCDTGCFSYFRHDSTQNFFLNAGLYEV
RVVSTIANSKFLLYKFIAIPVEFITAAILVGELKESFLHSCDVTKNDMRLGTANETICLAGAFSMTVK

FEDGALPCNCNLIGSTSTSCNKYGGQCACKPGIGGRDCSYCKPEFYDYSRNGCKECGCKGRNKV
CDPVTGDCVCPPNSQGRVCDPCECNGNSKRCNRQGICFRCGFNTEGDHCERCKVGFYGNALKS
QCIECACHPLGSFNQSCDAVTGQCYCRPGVVGRTCSKCASNHYGLSVKGCKACNCNEFGSKSLQ
CSAIGQCTCLVAAGREKCDKCDPGFYGLPKMACKECSCNTTGSVLNTNCKNDEFGQCTCKNGV
EGRACNRCMKQHADFGNNGCRQCPLCTRKLQCHADEVARKLINVKTHLNLTEILIALQTNLIYT
QDTFQQIQVDAALFEHRLKQGKKDYTYLYDQKLMPWNK
>TRINITY_DN577_c0_g1_i1.p1   type:5prime_partial   len:269   gc:universal
TRINITY_DN577_c0_g1_i1:1086-280(-)
PCQNCADMAVGKNKRLSKGKKGSKKKIVDPFTKKDWYDVKSPSNFQIRNIGKTVVSRTVGTKIA
SDGLKGRVFEIAQADLNKDEVAFRKFKLICEDVQGRCVLTNFHGMTMTTDKLRSLVKKWQTCIE
AHVDVKTTDGYLLRLFAIGFTKKRQNSVKKTAYAKTTQVRAIRKKMVEIITREVSTKDLKDVVNK
LLPDSMGSDIEKASQGIYPLHDCYIRKVKCLKKPKFDVHKLMEMHESSGTTTTDATGGVVVERPD
NFEPPVLDSV*
>TRINITY_DN11595_c0_g1_i2.p1   type:complete   len:615   gc:universal
TRINITY_DN11595_c0_g1_i2:1952-108(-)
MLLLLIFCFVGHVYSFYVPAMAPHEFRKGDTVELKAVKMTSVKTQIPYDYYTLAFCDPAEKHYVP
ENLGEILRGDRIVNTPYNIKMDTEAKCQTVCPKKKISAKDSDVFIKRIREGYHVHMIIDNLPAATK
FQTEDGTPQFSHGFLLGAINNKRVFLYNHLQMIIYYNRDEKKDLYRVVGFEVYPTSVKNAESLDN
NQCKYPEKGQAEVLELNENAENEVQYSYSVQFKASTIRWASRWDNYLKMDNTQVHWFSIINSIV
IVLFLTGIMAIIIIRTLRRDIANYNKEDDMEDNIEETGWKLVHGDVFRPPRYPMLLSALIGSGVQLF
CMVLITIGFAALGMLSPASRGSLMTAIIFLYVFMGLFAGYYAGRLYKTLKGCHWKRAALMTGLLYP
GFVFSISFFLNFFLWGKESSAAIPFTTMIALFCLLFGISIPLVHLGYFFGYRKAPYTHPVRTNQIPRQV
PDQVWYMNPFVSVIMAGILPFGAIFIELFFILSALFENQFYYLFGFLFLVFIIIGICCSEIGIVIIYLQLCG
EDYHWWWRSFFMSGSCALYVFFYAVFYFVSKLEIVNVISGMVYFGYTIIMVFSFWVITGTVGFFATY
AFIRTIYSAVKID*
>TRINITY_DN3434_c0_g1_i1.p1 type:internal len:317 gc:universal TRINITY_DN3434_c0_g1_i1:1-
948(+)
PAAGAPGRLKRHFASSEPQAIMGKVSQVIGAVVDVQFESALPPILNALEVQGFEHRLVLEVAQHL
GENMVRTIAMDGTDGLTRGQKVQDTGAPIKVPVGEQTLGRIINIIGEPIDELGPIETKKTYAIHRPT
PTFTEMNTTAQQLLTGIKVVDLLAPYAKGGKIGLFGGAGVGKTVVIMELIHNIALKHGGYSVFAG
VGERTREGNDLYHEMMASGVIKKDKAPGSKAALVYGQMNEPPGARARVALTGLTVAEYFRDEE
GQDVLLFVDNIFRFTQAGSEVSALLGRIPSAVGYQPTLATDLASLQERITTTQKGS
>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)
MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*
>TRINITY_DN5115_c0_g1_i2.p1   type:3prime_partial   len:180   gc:universal
TRINITY_DN5115_c0_g1_i2:539-3(-)
MLQKTNDKLHLIIVILLSWSQVINGDGNVTFRFQRYYNPQQKNADGNSCDTFSGCDQIFKICLSL
VSLKQDACELLNFETEQYFKTLHIFREGGYLNRNKSAKNPIKAKFKGIYPGLVYTKIAIENYDATSS
IDVILKKSRTAFVNEKNKYFKYSENNKYTDFDYSIKYTCDMHYYRED
>TRINITY_DN557_c0_g1_i5.p1 type:complete len:571 gc:universal TRINITY_DN557_c0_g1_i5:26-
1738(+)
MDKLRVIVALLLILQSTFAQDTSVAQTQACEKVLPSKVCEKLRETAGKLKEKVSVVTDAINAAAE
KHINNTAEIINFVNAYMAEKFNCTKVLAVDICNKLQTMGNNAKLKVIEVKEAIVEAIEDGANTSK
EIVQKSIEMMKRMVKCETFLGVQNCERLRYAATVFGESTEAVKDAIFTAVQTQYNNVNELLAEVQ
DVLRNAAKNFKCETALAPVACGKIRAIAKLLRLSTKTVQEAIERAVLNGLKTRDAIVNATLNFLQ
TKINCDTILSPTTCYNFMRVIGMLNEQKDLIQEALLSAAVQQLNNTKDVIAFVKNQIETAAKNFK
CTDVLPSRYCDLIKYVARRFQLRSVDLTLTIIEIMLNGTFDVKQIYDKTLGAMVEEAKDLKCEQLIH

EQACAILKAFASNFNLQMSQVTTAIEEAIVNGLNTTNDILKFSKEFLLELTSCDTFLSATICGTIERLS
NRLNVKFKSVINKLKEWYSNGVAIIQMPRKIIQWIWGQYFSQDEPQFDKRSVDEEKMALEDDFLG
MLDLTWEEMEKIIDETHKVVSKKKTEEIFASRWNGNRWNGNRWT*
>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-372(+)
MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*
>TRINITY_DN17714_c0_g1_i1.p1 type:complete len:644 gc:universal
TRINITY_DN17714_c0_g1_i1:102-2033(+)
MADVEQNGTYDDSNEKTKLHSNGTELEEKVEMNPPVVVEGEDRGGWGNKIEFLLASVGLAVGL
GNVWRFPYLCQQNGGGAFLIPYFIMMVIEGIPLFYIEFAIGQRFRRSAIGCWSKIHPALMGVGISCV
VISLLLCIYYIAVIAWCFYYFFVSFTSKLPWNIKNCPEYDRYKLLDNACKANGTATSCNATKTFSDC
CVHDPQLYYFYRKALNISPSIEDLGDGVQWKLFGCLVLSWIVVYACIVKGVKSSGKAVYFTATFPY
LILVILFFYGVTLEGADIGIVTLFKPDFSKLLEPSIWMDAATQMFFTLSLGFGALISFASYMPIKNNC
VRDAYTVVLINCGTSIFAGIVVFSILGHRELMLGEKADKVGGGPGLAFITFCDAFLQMPISPLWSILF
FTMLILLGIDSEFGTLEGLITPFYDMKWVKMRKELFTALVAFGMFLIGIGLVSSTGFYIFQIFDDFSVS
LGLLFIAFFQVIAVSWVYGNDKFANDIEYMTGSRPNLFWMICWKYISPLAIFVIFVSNCIKMASNSP
KYAAYVGCEFQSVDFSSVAKGIKGSIAKVDYPGWASIIIFIFVTASMVPIIIFLVKDFVSNRQGWIDGF
KRKLGNRYEYLPDPSVADPSRRKSPEEMEFQIQKEEELF*
>TRINITY_DN250_c0_g1_i6.p1 type:complete len:452 gc:universal TRINITY_DN250_c0_g1_i6:131-1486(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQALDRIRKLADQ
CTGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNAVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYP
RIHFPLATYSPVISAEKAYHEQLTVSEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDV
NAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAVAEAWARLD
HKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVDAEDEEEGDEY*
>TRINITY_DN20282_c0_g1_i1.p1 type:internal len:202 gc:universal TRINITY_DN20282_c0_g1_i1:3-605(+)
EVPKDWVGDLNVTYRYGSLKNGLKADLRINNKLEVKRIRNVCGTILGDLEPDRYVLMGNHLDS
WVFGAVDASSGTTVMMEIARVLGEQLKKGWKPRRSIKMCGWNGEEFNLIGSVEYVQEFYNQLR
DEAIAYINLDSAVAGNYSLQTAASPLLHNLMYEVHRMVDDPYESNMSVFDKNRLVYKDKHDTE
NHKIYPLGAGSD
>TRINITY_DN6049_c0_g1_i1.p1 type:complete len:156 gc:universal
TRINITY_DN6049_c0_g1_i1:1046-579(-)
MEKMANVVYSFENELFKSFMFYAAVLVLKMIAVQYVTIYFRLTRKVFSNEEDLPKNNAGDKIKIN
MSDPYVERARRAHLNDMENILPFLILALLYIATNPAFDTAILCFRIFTGVRVMHTIVYIGCIPQPARA
LTFFIGKLVNVYMAVMVVRATM*
>TRINITY_DN3332_c0_g1_i1.p1 type:complete len:336 gc:universal
TRINITY_DN3332_c0_g1_i1:1457-450(-)
MKEFFILVIASCLVSKSYAYRSIGCFKHDSSNQYLLFSDKTEHRGEAFHSGVRIDWHHFQKYLLNAL
NRCEDAAAKQGKRFFSFRFFGICHGLNRLPRKKSQYCIHHSYEQCMKHHSKCVGSDEAEYVYRV
TKKITSGKVPGIKIYRNVFCEHKGSRVISCKTGEAIKVTQAYYGRTSKDHCGYRFYYNLNCEARRSE
AKIKATCNGRQSCQLNPHNSVYGDPCRFTTKYIDVEHICKPQRVRSRVACEHKGKRIISCGRKKIKI
TDAFYGRTARNVCGYRPYYNLRCKASRSEMKIKSICNGKHRCRLNPHNKVYGDPCHGTVKYISV
KYVCLR*
>TRINITY_DN8926_c0_g1_i1.p1 type:complete len:307 gc:universal
TRINITY_DN8926_c0_g1_i1:1655-735(-)
MESITTFKKVLIFTTPIIYIIHLVLNALAAQGGSDNKLFPNSVSDISKTFQLELTPVGATFSIWGVIFT
WQLLWMVYTITTVCRSSPATNILSNKFYIAFIINIIFISAWLFTWAREEGVISFVVIVLGQIFLDITIGYA
LFDLKKFLDDQLPHGRAQIDIWLQRMLVQNGTLFYGTWTTVATLINLAVVLAYYIDLSTKTASLIS

LSLLGGIALSWFILENFAIKNYAQYTFSPYIVLIIALTGVYVNKESKGNAVGKLALALLIMSAVLLVIR
CIVIVVRHVKSKNKQTEDIMASAKYSSNMNI*
>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)
MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*
>TRINITY_DN124859_c0_g1_i1.p3   type:5prime_partial   len:237   gc:universal
TRINITY_DN124859_c0_g1_i1:884-174(-)
HRLEEDMRCVHHHEPRVRGPVRVAGQSEGLVPAGGDDGARLGHDHGDHVGFGRLQGLQGVG
EEDVHVVHDDAATDVEAAPLRFRFAQYQVGFGLRWCIEAEGARNARADPSDAGNQRHERTQV
GLAGRAALQRSAGRHLPRLRIARAGLREARGDDQRGPFGIRLPEGAALHRQMHQHLRDEDHA
ARQHVGRRNAGRQKHLLEDFGEGKDSLEGVWAGRHGESGAPGHQPKVHHHE*
>TRINITY_DN141338_c2_g1_i1.p1   type:complete   len:720   gc:universal
TRINITY_DN141338_c2_g1_i1:2850-691(-)
MSEADETETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYQSLTDSGVLESNKDMKIE
IIANKDEKTLTLFDTGIGMTKADLVNNLGTIAKSGTKAFMEALTAGADISMIGQFGVGFYSAYLVA
DKVEVVTKNNDDEQYIWCSSAGGSFTVKRDTINEPIGRGTKLVLYMKEDQLDFLDEKKLKDIIKK
HSQFIGYPIYLETQKTRDKEVSDDEADEEESTDKKEDEENEDKEDDGPKIEDVGDEEKEKEKKKKT
IKENYTEMEQINKTKPLWTRNPDDISTEEYAEFYKSLTNDWEEHLAVKHFSVEGQLEFRAILFVPK
RAPFDLFENKKQKNSIKLYVRRVFIMDNCEELMPEWLNFVKGVVDSEDLPLNISRETLQQSKILKV
IRKNLVKKCLELFAEISEDKDNYKKFYEQFSKNVKLGIHEDTQNRNKVAELLRYSSSASGDELTSFK
DYVSRMKENQKDIYYITGESKEIVAASAFVERVKKKGFEVLYLVDPIDEYAVQQLKEYDGKKLVCV
TKEGLELPEDEDEKKRQEELKAQFEDLCKVIKDILEKKVEKVVVSNRLVDSPCCIVTSTYGWSAN
MERIMKAQALRDTSTMGYMAAKKHLEINPEHQIMIALKKKIEADKNDKSIKDLIILLYETSLLSSG
FSLEDPQNHSSRIHRMIKLGLGVDDDGDVEEIETDDLPPLEGEGDDDEDKARMEEVD*
>TRINITY_DN2532_c2_g1_i1.p1   type:internal   len:466   gc:universal
TRINITY_DN2532_c2_g1_i1:1396-2(-)
GMAWPNGLSIDYSSNRVYWADAKVDKIESIGLNGEDRQVVVPLTSHNFGLAVGEDYIYWTDWL
AKSIIRASKKNVSERTIFRTNYGALMEIQIYDKTLQPVSNICNNSQCEQLCLIQPNKTYICACGDGF
KLRLADNRTCAESNKTSKGHMCRTGFFKCASSNRCIKDSWKCDGDKDCIDGSDESILLCVSKECS
PEEFQCSNKKCIPSEWKCDGVADCGDGGDEKLVECTKNPECNVTSQFKCDDGQCIDKKWQCDG
EDDCKDKSDEKLCEPTGCSILQFQCFTRNNEKRYGDLKTGECISQELACDQVKDCRDGSDESIEA
CLKVNTCQRSGNRKCDNGLCIKESYWCDKENDCGDWSDEKACYDPAIQKDLWCSSRPPNSNGT
ANDTEFCKCRPNEFQCNTTKKCIPLHTKCDYTVDCDDYSDEKNCTFTMCDELQYQCANRKCIDI
DHQCDDVDDCGDNSD
>TRINITY_DN1214_c0_g1_i1.p1 type:complete len:752 gc:universal TRINITY_DN1214_c0_g1_i1:19-
2274(+)
MFIYHKILLSLILLLEIHYVTSQTTENRICQGKVRFLHCTEGTSMIIREAYFGRQYASFCKNRKFGTH
KYACKEEKVKEIISRKCDNQNSCVVGAIRRHLQQYYDICDGVSKYLYIKRSCINDDLKYIDTKENF
CESEERILSCGKNQVIEIKRVFWGRDENEDKCNGWYIQRFWANTCRSWYALGKVQEMCNGKRW
CNLVATKNIFGNPGCNSDTALSFKVTYKCVSGKTPVTTMATKKSTVQQTTTSTTMTTKTPNIAKTT
RKSTVRTTTTSRPITTKTPDTKNITMEPTTSTVYNTTTITQTPNITTTTTEATVPPTTPSGPIIRQLCEN
RNMILFCSNDKVIKIRYAFFGNKNAAICATKKVNTTSNTTNDFNCSTDALDYMKYFCQDQSFCYV
NAYAGNYGDPCPGVKKYLEFEYECAPKGNTTQPPIMVIPPVPIATLQPNMTKPSAKCGMNYVQS
GRVIGGTTPTKGQFPWQVAIYYKGDFICGGSLINSEWIVTAAHCFRSIITKDYQVILGEHDREILEGS
EVQHNVKGIFIHWKYNKDDRWSSSITHDYDIALVKLELPAMFNKLIAPICLPDDSYTKDNEECYIS
GWGKTTFPGQMTGILQHTKVSLVNKRTCQDRLRTAPGKPGDDITSNMFCAQGADKVSTGCHGD
SGGPYSCFSNNKWVLRGVVSWGSPRCNIKDMYLVLSNVQELEWWIDYMIDREANTPAPTMTTN
NSTVQRNSTSTPMITRTPDTKNITMEPTF*

>TRINITY_DN121236_c0_g1_i1.p1   type:internal   len:568   gc:universal
TRINITY_DN121236_c0_g1_i1:1701-1(-)
TCIMCAHDEYSPEHSSECIKRKSCTPSDYHQYWEPCKDDKTRKSFQWNQPKICNEYTGEKLPNSG
DFIECPPCNPGQYINGSECQFCPKGFYSNGKEACQRCPPETAPAPGLFYKFWNRIPKRPMHLFCL
ARPMSGCRTLVGWVVHDSYLATGLGHSDEAQLIMYIKIDRFIKKNSLFTMEFEISDCIGLTCRTKV
QTIDKHHSVQSIGVYEGNQPRTTIRYTRYNDVGTEYSILFEKKYDQDAQTYHYQSAQLKIYSIEITD
VENGGTRQCEACTTRGSGDCVTCEPGHYLSPNSQNCWKCPRGTYMPEHLQDAVGLQSCIQCPIG
STSEPGSTKCHSDCMLAFGEGVNRKYFNLTALAGPQFVRGPLLFTSKGYKFFHGFSISFCGHPYKE
SLCVDNITSTQGFHASICRSTFIPEEHKLLSTQSIIIGDTLQKINFISEESNANHTEQKQKRDIHRNEI
QYHFHAERITDVCNNGTSGVLRLICDPVASYSSKKPNIEFGNDECTSETCDGCNYAFTLKSPYACA
KCTKDDFEAITTSCNNGEKHIKYVWKEPRACVGGMEKPE
>TRINITY_DN4523_c0_g1_i1.p1   type:complete   len:1645   gc:universal
TRINITY_DN4523_c0_g1_i1:5332-398(-)
MEYDTDERQSAEEMDERRREQIAYEYLCHLEEARLWVEACINEELPATTEMEEGLRNGVILAKLA
HFFAPDVAPLRKIFDKDLTRYKERGLHFRHTDNIMYLIRSMEKIGLPKVFYPETTDIYDMKNMPRA
IYCIHALSLYLYKLGMAPQIQDLYGKATFTEEEINAMKQALDQYGIQMPSFGKIGGILANELSDND
AALHAAIVAINEAIDRHLPEETLTAVQNPAARMKDINVDQKKQYQDLLYESKLKKCQQAELKEK
KESDLDLYDKMLTQAEIQGHISKVNLEKYVELVNDLIEKRDENLLLKNLSSKEIALNNVQNQNGA
WYMQNLRDEKVSKAEQQGTPNAKLDHKEIQSAVNVSNSLADRVRNMESAVRQINNILENGTH
QELIQWLQRPEGLLPVVDASRPNLYMDNLKKSRMDKGGDLTHDDLTDDLKLLLAIATINQAIDM
NDENRLCDALENPEAKLADVDESLASRYLSHFVAVKKEKRDEVGVDHDDLNHVEIQALIEYVNT
EVQEENDLLSAISKINEAIKSMNSDDILSSLGITSAKLTNVRPKNAELYAIILKQAKEEKAKRSGDEN
TELWHEEIQQCVDKGNAIAEEAERLGTAVVAINEAVDKSDSADLLLALKAKSVALKSITPECADG
YHSELKEAKEKKDNVGWNGWTEYRVPQDYTYFFNYITKETRWSVPPDYQHDIGHLNREEIQVVI
SKVTANHDRDLFLKANEPSAVKIQAVWKGHKAKKEYEQRKHFILTQLPAIIKIQAHWRGYKARK
DYQKRLERLHGNEGAVIKIQSLVRMLVARKQYQDRLKYFKDHINEIVQIQAFLRANMAYHDYKM
LSKPQPPVKSVRKFLHLLEHDHIDFQEELELQKLKAQVVTDIRSLAQLESDLNTMDIKIGLLVRNRI
TLQDVVLHGKKLKRERSDSISASQGSSGLKSLSREKREQLQAYQHLFYLLQTNPTYLARLIFKMPQ
TKTTKFMESVVLTLYNYASNSREEYLLMKLFETALKEEIADKIDQIVEIVTGNPTVIKMVVHFNRGA
KGQTSLRDILAPLVKEVLTDKNLVINTSPVEVYKQWINQMETETGETTQLPYDVDNDFAMNQPE
VAKRVEVSMNALRVASDKFLTSFIKSIDKIPYGMRYVAMTLRESLKQKFPNAKEDDILKVVGNLIY
YRYMNPAIVAPDAFDIVDVSVEKGLTPDQRRNLGSIAKVLQYAASNKMFDRENSHLSPLNKYITSS
FARLKKFFVDASTVEDAEAHFNIDEYSDITMVSKPVVYMTVQEILDTHQLLSEHSNQITKDEDDPL
LELLDDLGEVPSVEDLVGSSSSSTGSNKETDDDDQRVAKLGRTEISLTLTNKFEVPEDDDSDMKAL
FVRTKKLIVEIMRVQQCETLIQVLETPATKQQEMDHQRFQKQRLDQEQKQKNSSNLRRSTSSVGD
HKLPLKEIKKKISRNLKALEQHGLVSNKNNYQDIVNAIAKDIRNQRKYRQRRKQELQKLKQTLE
NLTRKSTFYEEQVDYYNQYIKVCLDNLTKKKTGKVKKGKKQEEVINKGSVKYNAQKLAEKGVVL
EIEGLPKTQFKNVQFEISSSEDIGIFIVSAKFMGVAMEKVELVFQDLLQLQYDGVAVMKMFGKAKI
NVNLLVFLLNKKFYGK*
>TRINITY_DN8941_c0_g1_i12.p1   type:5prime_partial   len:771   gc:universal
TRINITY_DN8941_c0_g1_i12:2-2314(+)
ICGCECTSADGKTFQEHGPVVIATGGFGADFTDDSLLSKHRPDLSHLPTTNGDHCTGDGLKMSA
AVGADLVDLEWVQVHPTGLVHPDEPDAKVKFLAAEALRGVGGVLLDMEGHRFCNELGRRDYV
TGMMWKNKGVTMGSTSGFFLCLNGKASKEIEWHCKHYKGRGIMKSYKSMEEFAKEYGIPLANI
DATFKEYNALADKQTKDPEGGPYEAYGGGKSWDQWGKKFFHNLPMEVSDAFHVAIVTPVIHYC
MGGLEIDVDSAVCGADGKAIPGLYAAGEIAGGVHGNNRLGGNSLLDCVVFGRVAGQACCKYM
LGADMKDVSLADLSGGGLSGAVTSSKLSGGSYEDTMNKSAGAAGGAAAGGAVMNGGGGGGGYS
LEEVAKHTSKTDCWVVVNGQVLDVTKFLGEHPGGELAILTFAGKDATEEFNMIHPPDVIPKYAPD
AIIGKVGTGAPAAPAAAAGGAAAPLLDKSGHGKARDWSKSEKNRKMRMEGEGKIPGWIGALC
YMVLGFMKEILFTIVPQKNVTLTNDRIGLTRSAMFLFIFIIIHAVGNLHVFLGPDDFNGYGYFYVRL
YWTGFGLQANIVEEYILLAALLHVFVALKRTWDISINYTIASGKLNLAISGITLLTFMVIHLFQFRFG

ATQPFKLCPPPYLVNIGTVFHLRLNLFWVDTPGCTTAEVRDIYRMEFEVFKSLEWCLFYIFAVVVFS
THMCLGWAKAVPAPILDIPKRYHNKAIHVGYVMTAFIALIYVSFPVYTHLFPMSPGYISPEPALP*
>TRINITY_DN1339_c6_g1_i1.p1 type:internal len:570 gc:universal TRINITY_DN1339_c6_g1_i1:1-
1707(+)

GMFFQDGLTGSAWGDWALYVDSPLRFFGGGEASTYKTFDPATELGVQEPVGFWDPLGFASDGDE
ATFKRRRSVEIKHGRVCMAASIGYIVPEYYKFPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIF
FAGIVEGAFGVTDDYRNGTPGDYGWKVITSDDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLT
GSAWGDWALYTASPLRAFESELGVQAPVGFWDPAGYTNDGSMENFKRRRATEIKHGRVSMLAC
MGYMTPEITGKLPGYLSPSMKVQFADIPNGLGALSKVPGVGWAQIFAYCAYCELSQDQSAASPGG
AGDFGFKAITSSDPATLTRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWALYVDSPLRFFGG
GEASTYKTFDPATELGVQEPVGFWDPLGFASDGDEATFKRRRSVEIKHGRVCMAASIGYIVPEYYK
FPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIFFAGIVEGAFGVTDDYRNGTPGDYGWKVITS
DDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPL
>TRINITY_DN2357_c1_g1_i1.p1   type:complete   len:1733   gc:universal
TRINITY_DN2357_c1_g1_i1:5452-254(-)

MLKLFLFLIGAGHLSLAFAAICSETNGEGNKKNLKEPCFFNQLIDVKQWNMKRFMDQTDRFFDF
GVMRCSSYEVEGSGKMKLTCYHTKLFYIMKNIMSFGTTERTEFIFKFSPLTENDYKSTDVEISGKLS
QALRNTFIRATKPEGFQDFSLSTSAVFPQIDMETFIDQRKPDGFKTLTNNDKLENFPPKVAVNAEM
SGMFSALVTDTDKQAYEFLISFLGPMKEQQFYIFQSLTENINDELVIAFYKENPSNAGTTVRDIMDS
LRGVKWRGNKANEFVVSKDFAPIFEVQSSAMSISDGEIVNINSEALRNIAIKYVSPSSEAFILEGALI
YWHVDDSSSLKMSADQVPGVENPPTPTNETSTVPQENKIKRHTKPKTMKPLKREKHPATNKLTL
NAHIIHQNKIEIRSPDYLKGTYEKQLSTFLPYHYFKHDSIKNTLYPVKMIFDKITIGFKRKELRLYCNI
TQKYDLVQNFIEGEGIAVYAKAKLTMRKDADGDSEEIRFKDIGMSGTIEVLQGLVNVNLQYAKDG
TLYVVGLFDIANMTQFINATGMKHYLPENLRKTYPRLTNFAITRLKIKSKLNENVLRIIGRCLIFSEP
KTDDNLEAEKRDGIEDESPASLLYESKLRVVLTNTSGDLKYSVGIIGEDIPLQVAMRELFNATITGTS
WVKFKFFVMVMSNNNEINVAQAIDERLFNSFNSETGLQIKTVLLPPVEEDCKMSRKEKLDPLNKE
ALVKNEANGKETVEIHRSPFIVDYTCMFVKDQELLMENFEYATATVTPTSYEIKSLTQERFFDFQSD
PVVSVGNFGYTIKSVKGWDSIFFIEGEFRFMVKNDRLIFKGLITFDDMKGKLVLQLKQLHSGRQNF
GDAALINSGYSVIGKDDTFSKFHFDAFLYVGTVKTKLVNFRKNVEVIYDLRTDDIFMKGARNNNG
NIGATNKKRNSLLELFDAFGTDASSHVLLKELHAISLTWLIYQQNEEVVKTKHGIRRIQPGLNFYG
TLAGKGDRDLLFNMHYNKGMGALIADIELPNYKLPLRKDAKYHPFELQRSTKKQDLGGILFVKA
STTFTSAQAQGYLRVVGLEYDVEFPIMADGQFHMDLPYSNEIAKLFNEAEVRYRVSQDIGVTDFN
LVDPKIKIDLAPSLEKISRAIRHAIEAMIANVDEYLVNSGSFINFVTIVDGEISTMKEVINEIRRGMGK
LQSTLKQLVQQISSDCAEQCKDSKVFIYGYDFQGGKFVGNEDAHDVANVTCIAECEMIKPVKND
ERRSLLSSLKEALVQFKREKKRASIMQIMLDEHYNSLSKMNDAMHKNARAASLILSKTGNLKNP
KISVASLVLENQISVINFKGAGSKCLSGFKMAFSYNDVVGETDIDLCFNGEFDQFAAYAFVLSYYGE
DKYNQFGDLLDDAAELKQSLKTKTKIVTKLFKKIANARTTVELEEVQNEVEETILDYMDGLKKSQ
IPKHKIKAKKTKEAIGYITYGGKNVTLPGIDTEVLEALEIDQDYTIKNPKSKRVFMYSSPWAALNVL
HLHQNKSMESLPMITSIDNAGYCKRLTRLSSVLNSVRGSLSSYAASYVNAKKNFENVETNMKSGL
VELKKMHGSSIMHDDDKGNLQYWLTQYEKGVNRFSKLSNMKLHDHNNHGLARWKNEMDNS
LQHSGLGSIENVIEMLKKRSSSKRSNIDHDRWIRNASLMGKEISNLMKNSNKMRMADAELTVRS
MSQKFDNFFEALTKSCKASFKQF*
>TRINITY_DN7641_c0_g1_i1.p1   type:complete   len:1239   gc:universal
TRINITY_DN7641_c0_g1_i1:53-3769(+)

MAGTLLLLNVVLITLVLFFTINVSNGDIEVTKDAFKIYRQAHRQTQKNHIKLRFKTIHATGLIMFA
QGPNKKDYLSLELFRGKIRVSGDYGRGTDNKLRPIAGFYDMYLGKDLADNQWHTVEFIRNIRES
MIFIDRGTPNEKKNFMKSPPTYNELSVSSVTFGGFYSFAASELDSSKALARQGVHACFSEAIFSQTW
PSDNEVDKIDFLRTDIPVIGTINSFCSDTTPPYMPYFFPASSVHIALVGNYTIDSIKFKLKFRTYVSEQ
MIANYSTTNTGEKIMLGLDRKGRVEVRLDVQSNIIGGSNQQVIQTAKEEYHDGQWHEVSLVVDN
KLSADNKYIGQFTVDKKTRLFQITKKFEFDGYINIGFGFTGCMRDIEVNDDPVERVKKDPKKPTEY
YDLYDVGVIKGSCSLKDYCNPNPCQNGASCNQTEDNIMCDCKGTLYEGSTCHRPRFNYTCAGVR
KSGENRSDVHYIDFDGMGPMEPVLALCDLEKTVEATTTQINNTKFEDVDVATESGKNDVDIDYE

ASIIQMRELVLNSAFCEQYIKFTCKGTPIFRSPEGPPAVAWMGGDDILHYYWGGVPGRRGYCACG
LEEECHNKGKYCNCDSLDPFASIFDDGNLTIKQHLPVRQLKFDSVLKNSVEALLRVGHLRCSGFG
AHKIAATFRKPYSFLAVDHPDQPFDNIFAGELAFHFKTSMAYNYMVLAHAHGPFSGDYAKVMIW
SRTMVRVHLNFGFGDIKQDVDLAGTGRYLDDNDWHEFSMMFNLKELNVTLDGILMIQGLPLQD
DPVQFNVDDKSVYIGGSFHDPYGFVGCIRSFYVNGRIHDIYSYAEGQEDFGVYPGCGSACVILNRP
CNYGACIDEYDDFKCNCTVSPNDGKFCQNETFPKKFTGGQSITIDFTKLNGTKNQNIAQAIFVVG
FKTDQENVALAQLEGENMRHFSLALVNGYLTLFYTQKEKMAAQGGSLQDIETEILQISTRKLNNK
KHNIAKVHFSKEEIFLQVPNYDLVMGANVSERFIDLRNRNLGKKTDSFDKPVTFTVGQMKNIQID
PKSLTLPTSYTGCMSGAKIVFTPVATKEDRFPKAKAFDLFKLATESKKNDPALTGTFPATEPNGCSE
PLPTPGTLPSVGPSIQFNTRSPGLDNSVRVNTIDTLNRVVLFFVVLLIAVVILAFIYLLYKYVNRSHK
QYNRMRKTEKQKAYPIQQFTAKQRNYQPMDEPSYPSRSNPPPVEVHEPNPPLRQDDRDFYL*
>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)
MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*
>TRINITY_DN121418_c0_g1_i1.p1   type:complete   len:259   gc:universal
TRINITY_DN121418_c0_g1_i1:1061-285(-)
MAENDIGDWFRSIPIISRWWFVLSIAFPLLGRFGLLPIYYMILDFNLVIYKFQIWRLFTSIVFFPLSPM
NGFHYLINLYFLYNYSTRLETGVFDGRPADYLFVLVFNSIALILLGFALNLYLLMDPLILSVLYIWCQ
LNKDTIVSFWFGSQFKAMYLPWVLAAFNMILGQGGLMEIIGICVGHLYFFLMFKYPQDFGGRRFI
STPSFFYNYLPNRRGGVAGFGQAPVGRRNPDEGRGRGGGGGFRGMFPGGGQRLGDQ*
>TRINITY_DN57_c0_g1_i1.p1 type:complete len:712 gc:universal TRINITY_DN57_c0_g1_i1:140-
2275(+)
MGHDGSTLPSFLPKMSFERQTTLLKLLILSIAAILSFSTRLFSVLRFESVIHEFDPYFNYRTTRFLAEEG
FYEFHNWFDDRAWYPLGRIIGGTIYPGLMITSAVLYHFMHFFHVTIEVRNVCVFLAPLFSSLTALVT
YQLTKELKDAGAGLIAASMIAIVPGYISRSVAGSYDNEGIAIFCMLLTYYLWIKSVKTGSLFWSTFCS
IAYFYMVSSWGGYVFLINLIPMHVFALILTGRFSHRIYVAYSTVYCIGTILSMQISFVGFQPVQTSEH
MAALGIFGLCQIHAFVDYLRYRLTPSYFEILFKSLVIISATIAGIIGAILTVTGKVAPWTGRFYSLLDPS
YAKNNIPIIASVSEHQPTTWSSFYFDLQMLVFMFPVGLYYCFAKLTDANIFIIIYGVTSIYFAGVMVR
LMLVLAPVACILAGIGISSVLTTYMRNIELSNDKPKPIKKAKQADPSYPIKSEVARCMVALITFFLITY
TFHCTWVTSEAYSSPSIVLSAKQSDGSRVIFDDFREAYYWLRQNTPEDAKVMSWWDYGYQITAM
ANRTILVDNNTWNNTHISRVGQAMASPEDKAYDIMRELDVDYVLVIFGGLTGYASDDINKFLWM
VRIGGSTDTGRHIKEHDYYTPAGEFRIDKDGSPVLLNCMMYKMCFYRFGSVYTEQGQPSGYDRVR
NAEIGNKEFELDVLEEAYTTEHWLVRIYKVKDLDNRGQ*
>TRINITY_DN36217_c0_g1_i1.p1   type:5prime_partial   len:605   gc:universal
TRINITY_DN36217_c0_g1_i1:2-1816(+)
YLTFIESLRLRKKIKTINKFWKKKMNDVAYSKDNEAIEIDNFASTERLADDDTDAKPRGQWGNKT
EFLLACIGYAVGLGNVWRFPYICQKNGGGAFLLPYFIMLIVEGIPLFYLELSLGQRLRLGPIPLWKK
VSPWANGVGYGMCIASFLSGCFYNVIIAWCLYYFFNSFQSPLPWNSCNSPVNSTEWMKCEEIGAT
QYYWYYEALQISPTINDLGGFAWKITLCLLTGWILVALGMWKGIQTTGKVVYFTATFPYIVLFIFIG
QGFTLEGYAEGLKFFFIPQWEKLADPTVWMEAAAQIFFSLSLAFGGLIAYASYNDEKNNTLQDALI
ISFTNCGTSVLAGISIFSILGYRATRKSKFCISELGGNISPIPRNCTVQHFLEQGSGGTGLAFIAFTEAIS
TLPVPTLFSLLFFLMLITLGMGSMFGSLEGLVTSLRDTPFFQKIRKELIIVIVAVPGFFAGFGFTQYSGE
YMVQLFNKFSIDIPILLIGFCELIFIPWVYGMDRFSADIEYMTGRKPPYAFIIMWKFVSPVALLVVLLL
SLYNMMVVTPLYEQWNGELARVSMTQYPGWALGVGMMVFTVSFLFVPAGIIFNIIRRKRKNYLL*
>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT

HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*

>TRINITY_DN2113_c0_g1_i1.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i1:5257-146(-)

MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*

>TRINITY_DN39385_c0_g1_i1.p1   type:5prime_partial   len:154   gc:universal
TRINITY_DN39385_c0_g1_i1:2-463(+)

SNNITIKLSDNVTKINRSDGKEVAKIFLISDTHVYLLNSKTLQLIHQIEISKINKVTLTPYKDGIIVLH
VNQGSDKSLQKGDFILNSSNVIENVTRLAMLYESISQKNLDIDFSSNLCINTKGKNIDLVVQENDD
NNQLVFRKKGNQIMVSVQ*

>TRINITY_DN205_c0_g1_i3.p1   type:5prime_partial   len:702   gc:universal
TRINITY_DN205_c0_g1_i3:3651-1546(-)

SNMLKLILLSLLCTGTLASFKHHNELQTYTEEDAEDGVLCPGIKGQKGERGAIGHSGPQGNFGPQ
GFKGVPGGQGPPGKPGFEGPEGKRGETGERGERGENGLPGPQGPQGLRGKTGPQGKTGSIGVKG
ETGPMGPKGSRGYQGAKGPAGPKGENGDKGEVGTEGPTGEKGPRGLPGNIGPRGIDGVYGEPG
EKGEIGEQGQPGEKGKTGPRGNPGKNGSEGKKGETGPRGNTGAQGQQGEKGELGPQGFAGKN
GQKGNNGERGPEGKQGLQGLQGPQGEQGEMGLAGKAGKNGLPGPRGNPGLPGKKGIVGPIGK
MGEKGSRGQQGKRGFNGSKGDQGETGFKGDQGAPGKQGLQGPQGDKGPKGDKGVPGFNGV
NGFPGEKGKLGPVGKQGAPGLQGKAGDAGAPGLKGLQGEKGLPGKDGNDGLNGKDGIQGPP
GEKGNQGSNGSPGAAGPKGNQGKQGAPGVQGIKGTDGKNGRPGIKGEQGNQGEKGAQGQN
GKDGKSIPGPQGPQGAQGNDGPQGPRGFPGKNGKDGEKGNQGAKGENGKQGAPGDQGPQG
QTGDKGLTGSRGKQGIDGEKGTAGTDGKPGVQGPKGDKGAQGKQGSSGQDGESGSPGQQGDK
GSRGKDGSSNKLECVFVNGQGKYAQCPRSYQATSCSCSKDCTYRFMNQLCVCECPTYRGDAGAI
CCRMTGLSTKEVTKPDIS*

>TRINITY_DN2532_c1_g1_i1.p1   type:5prime_partial   len:719   gc:universal
TRINITY_DN2532_c1_g1_i1:3-2159(+)
DCGDNSDESHCDKPVKCDPRTSYKCQKSGKCIKYEKVCDGKIDCEEQDDEGPGCNINRCDNRN
GGCFQICHNTPNGSICKCRKGFYLLNDTYSCEDVNECEQSPEPCGQICINTKGSYRCKCTNGYTLR
PDGKRCRANGDKPVILFSDHKEVRQVDPITGETKTIVENLKGAIGVDFNWQKKMLYWSDVSEDK
IERMYFNGTGRETIINQGMNSPEGLAVDWVTNNIYWTDMRLDTIEAARPDGSMRSIIISDNLDAP
RALALDPSEGYIFWSDWGKNARIERANMDGGDRRVLSAEDVVWPNGLTVDLPTKKVFYIDARL
DKLSSMSYDGSNHKTVVRRGIINHPFAVSIFEEFVYFTDWSPGSIKRLSKLDGSLKLVYKKKLKKPM
DIQILQQMRQPNDESYINYCINHKCSHLCVLKPKGYSCKCPFGRQLVENSTRCESVKEVLLYARRQ
EIRGISLNPNDTVDKITPITGTQNAIGIDYHYKKQMIYWTDVSRDSISRVYLNGSNREDIIPSGLPSP
DGIAIDWIADNMYWTDAEYDKIEVSRLDGLYRKVVISTDLMQPRAISIYPQKGKLIWTDWKRKDI
EISLLDGSDRKVLVGDLGFPNGLSIDMDNDRVYWCDAQLDTISSVNLNGTDQRVLGISKTSIMHP
FGVAVFDGFVYWSDWGKRAISKVPIVGGPVIKLRENYLSLMGLRVYHKNKQKGTNMCANDTLC
QHL*
>TRINITY_DN100850_c0_g1_i1.p1   type:internal   len:182   gc:universal
TRINITY_DN100850_c0_g1_i1:543-1(-)
QDCFNPIQCEINGEWSGWSPWSECDRTCGDGNQYRNRSCTNPKPANRGKDCVGPSEEAKNCKQ
AECCDISYTNLGCFKDPGVEPRPLPELLFTDRDVLTLDSKRPLLGQDYQGDVTDLVCRCAKAAKN
KRYPIFAIQDFSDCLSGTQAHITYNNYGREDHFIYKPSPKPWIGCIDYDFNRC
>TRINITY_DN3655_c1_g1_i1.p1 type:internal len:191 gc:universal TRINITY_DN3655_c1_g1_i1:2-
571(+)
TLNVYKKVGNALQVVWKRIGNNGDQWKYAQVDLTSKYKYQIVIEAIRGVKYQGDISIDDIVLAD
DSCPPPPTCDFEHGKCAYTDDPTANFNWRRNKGETASKGTGPPFDHTYQTNQGYYMYTEASGR
RKKGDKARLVGPVLPGSNPMCLEFWFHMKGWHIGQLNIYIKTPNGGKILIWRRKGNHGMQWKI
>TRINITY_DN909_c0_g1_i1.p1   type:5prime_partial   len:313   gc:universal
TRINITY_DN909_c0_g1_i1:1-939(+)
RRVLFRSLTFIESLRLSRLVNKKNKTFMEMSEKGGIYNDNEREMNFTGNSDYESGDLGFCGWFLTV
LSFIIAVCTFPLSLFFCIKIVQEYERAVIFRVGRLLSGGARGPGLFFILPCIDTYLKVDKRVISFDVPPQE
ILTRDSVTVSVDAVTYFKIQNPVASVCNVEDAQRSTKLLAQTTLRNELGTKNLSELLLEREAISRNI
SNILDQATDPWGVKVERVEVKDVRLPPMLQRAMAAEAESSREARAKVIAAEGEMNAARALKEA
SDVISESPQALQLRYLQTLTTISAEKNSTIIFPLPINMLQSMMNK*
>TRINITY_DN1774_c0_g1_i1.p1   type:3prime_partial   len:208   gc:universal
TRINITY_DN1774_c0_g1_i1:218-838(+)
MGISIGFEEIRNKNFWLAVLAEFEGTLLFLVCVTTVALGWGGNGTSANNVEIGIGIGLAIASLAQA
FGHVSGGHLNPAVSLGLALAGRVSIIRAVLYTIAQVLGGVAGSAITYGLTKSSNREAMGVVGLGSN
VTPVQGLILEAIFTFFLVFFVISITDPRKSVEAYGTTLGIGVMILVAHVCIIPFTGCGINPARAFGPSVV
RNIFN
>TRINITY_DN413_c0_g1_i4.p1   type:3prime_partial   len:463   gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR
>TRINITY_DN101600_c0_g1_i1.p1   type:3prime_partial   len:312   gc:universal
TRINITY_DN101600_c0_g1_i1:935-3(-)
MEKSEKKRHFCCCACCTAAVVTAVVVLIGIMIACFGGASIPLFDDIYVSTIKKQMVLVKGSESYKN
WLSPPAPVYTKFYIFNYTNVDDYIAGKCKLNVTQRGPYSYREGRFNKVLYEDAEIITYLENKTLMF
DPETSCEGCTENDNMTVVNAAVITLMKVLSVKDPGFFVKIALGLLDKIFQADKDVALFINLSVHD

LLWGYHNPVLQRLGTIEKDLAKVSPVKLPFPDIDSFVALQYNGTKGADLTGNMTILTGNKNIDDV
QKYVAWRGIKEAPYWNDKYGRMLNGTDGTRFKPFLPSNERIYIFNSELC
>TRINITY_DN143676_c0_g1_i1.p1   type:internal   len:124   gc:universal
TRINITY_DN143676_c0_g1_i1:3-371(+)
QYLKMTRDEFNRYNVDMKVYFKLTFKLLLERYPFLETFTLQKLFDNFGTYRKERLELFGKLQTNV
LPLFCGIENKTYFFEMTYKELVEKCTFYDVDTEDEIFDESWKYVVSGKNENLEGLKSP
>TRINITY_DN33328_c0_g1_i1.p1   type:3prime_partial   len:1422   gc:universal
TRINITY_DN33328_c0_g1_i1:4264-2(-)
MLLKYFFLFLCLLLLNDIVYGKRRGGKKPARRPPPARRPPPSRKPVRRPPSRKPSPPSRAPSPPSPPSS
PPNRKPSSNKPANQASNDQGGPGKPASNAQGGGKAQELPDLNAILRAFAGKQTDSGSTQYEYG
GCVLDIGKDKCKIKFIPKKQSCHNKLALGKLFDKFVPKGKIKTLFKKYAPVDVFQVTRFEVDKCQ
GDLDFETEAKEAFNVINDKLKVNSGKLSVSFDYKKFMAAPSFDKLGIDIDGEVQLFGKKVPLTLK
KKRDSGEGIFSIKTASIKASDFAKLFSTKSVANAQSPPQTKMFTDAVIQNPSISGSRDDDGGFELVVK
GQVTGIKGIGAISLFVIIQKSSDSPVSVAIVADIKKIQPTVLLSSLTGKNLNSIPIIKDITANLAVEFANN
DMMMLKDPELNKLLGKYIANGKTIASGTKIKVELPIKEILTKVKTTASLSHVPSTIYMQMFLNGGK
VCFKFPDNIAMDLANVLVALLPKVPDLLFSKVLKTPPKIVIEKFDVNVATKYVDMVLEAPEEIVLG
SDLFKIKNAKFELKHEENKPWDFNIEATKQIGKTMIDINVKSEAKNYIFKATIDSLTTKELATTFGS
KATADGILTKMSFLNFGIRTLTVTAEFGDKFTLNIKGNPVLFNWEGAFFEGFIVGSGLNKKMAFGI
VVKNIRIDDIVFKLFKKRILQTTWMSELTATFLISNTDPDDNIDFTLPELKEHVKLKQGVFFKSELTI
PTDCRAEKICEVLRDKMKPGTKLYLEGEITLNGFKLTAGYKGHGLNFATDLTLTSAKLVLTVGTST
EFYLEGEVQMKNPNVKFIGKLGVGVTGIVELSLIMEGMWRTPFGLSYIAFGNLQLAVAIQPGVPVP
KLEFTAEMWVGKIGNNQEIKTKTAVGINPSNPLDMYFYGEINKLTLAEVAKAFEFKSTLPKVVQET
GFPEGLAAGYTTNPKGKTISHLKVNLKTGFFFRGAINILGYKLECEILVQIPKAIKVSVDMGPIKIAK
GLIKLAKGAKDLDNGPSLYVAISSNEVAVKIQAYAELLGLGAEVNIDVSDKGMKFFVYGNIFNLIE
ANVTVNAPYGNGDLAKSEFSVSSCISAGISDIQNTAFEEVDEGAKESQKIQKVADDEVKDASSWY
NSAMDKLLSYEKKLEEKTAIINRKSGKLEKLKEYLDASCVDHCPDVCQGGPVMRKRKGRFFNKK
PGWDDCKEMVKSIVCLGKCKGKKAYYQGKAAKKVVTMEIIEGSVKIAKKLIVIAKGFAERSKGL
MDLTQKAANKVVSLTKAGKDALGALAKYTKENLINIHLLCFDTTLAKAEGACFGVNVDLTVLG
NKKLQYEGEVCFNADFFKNMAKQVADKVFPGIISIKDKIMQAKNLFSDSDSKKKELEEYEKQSAQ
EEKNLEGQLERQNEDDDDDDEEFNGKYKASFDP
>TRINITY_DN5554_c0_g1_i1.p1   type:complete   len:316   gc:universal
TRINITY_DN5554_c0_g1_i1:223-1170(+)
MRIIIALLFCVVGYCYSADWGYEAGNPNVLEPKDWKQHFPKCGGRKQSPINIATRSAILSRLPKIIL
GEGWGTLLESADLSLANNGAKVSIKSSTPITTKQGGTIWNLAQFHLHWGKDSHSGSEHTINGMS
FPAEIHFVHFNSKYPTIGDAVPQPDGLMVLGFFIKVQENAVVPSILQKFFGSLDQIKFEDQKVKLDF
GGRALGDMLPPRGTSKYFNYPGSLTTPTCDESVNWNVMSTENAIVITEKQMTQLRSLSAGKKNE
AFKPQSGNFRPIQPRNGRTIRRNFRTATTKFRSVLRRYFPRIFSYFRVTPRFE*
>TRINITY_DN2433_c0_g1_i2.p1   type:5prime_partial   len:147   gc:universal
TRINITY_DN2433_c0_g1_i2:1-441(+)
LTFIESLRLRKVNMPISIIALNHRKQPLPDTVLKKFPLVKFYDEPVDQNIFGKLKSKWRSTMVFDIC
GRQQYKFGYPYSLLSYPFTRSGVMNTLNHHVSLCGKCNATLTTTPKETRPPTQVPRETRPKTTETP
MELFLANNRLTRV*
>TRINITY_DN69484_c0_g1_i1.p1 type:internal len:142 gc:universal TRINITY_DN69484_c0_g1_i1:1-
423(+)
SDNHAGKSIMKHFITSNVDSFWNSYDDSNISVTYDQVYHTNSTNHSTKLVTTSTCGHHLKLLILIT
THVSHVRQRELIRNTWGTDPKSDEKRWKTYFLIGRTKKIKDLNKIKLERDHFNDLVIGDILENFH
NLTYKVQMGF
>TRINITY_DN4513_c0_g1_i3.p1   type:5prime_partial   len:116   gc:universal
TRINITY_DN4513_c0_g1_i3:652-305(-)
KLQNDIEKLKTDLEAQKKEFEKLESDTKVSLEDKAKLSTENEKLQNDIGKLKTDLEAQKKDFAKL
EGDTKVSLEDKAKLSTENDKLKNDIEKLKTDLEAQKKDFEKLDGDTNIRK*

>TRINITY_DN31399_c0_g1_i1.p1   type:5prime_partial   len:382   gc:universal
TRINITY_DN31399_c0_g1_i1:2-1147(+)
YILFEQANILIDVFVSFQEPGTFSFNKPSNIVKESCGQAELEVERVNGADGKVEVVWKTKDQSALH
GKDFIGGEGTLVFEHGETLKSISIEIIDDHMFEKDETFMVELLEVKNEGAKFGRLKRTVVTIVSDDE
YQHMFDRVVNMAHMNLHFQLGSSTWGQQFREAMNVNGGDLESASFMDYVMHFITFFWKIL
FALVPPCTWYGGWLSFFIILGMIGCLTAVVGDIATIFGCLVGLRKDVTAITFVALGTSLPDLFASRNA
AMNEKYADASIGNVTGSNGVNVFLGLGIPWLIASIYHEAKGKVFKTPTGSLATSVVTYSVCAIACI
LLLIIRRFVPFFGGGELGGPKGPMYASGIFMISLWFIYVLISALVSYGHIAAL*
>TRINITY_DN177106_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN177106_c0_g1_i1:1-414(+)
NITVRARMQQQIIALNQLTNLAGEMQKYVEMATSNANAVLKKKYDLKQKIQLSINAAKEASELA
KTTRLLAFNLTFTLAPIFNRGKGVEEYASTCVDFIDVWLQNASKALIYSQNVLSGIALSIPDYAQVT
YLLIFVY
>TRINITY_DN2576_c3_g1_i1.p2   type:complete   len:145   gc:universal
TRINITY_DN2576_c3_g1_i1:807-373(-)
MMHKSSFLVFLVLGTFGTAIAIKCFDGEFIGGKIPSWVPSLPKPKSKECDSKFNACFTITMNKTFNV
MKFSKTFEMKKGLCGNDMAGCNVTCAKYTKAKSCEVSCCKKDDCNQQYFPTSDSIIKTSSIFVTV
AGIFYVFLNLLN*
>TRINITY_DN143583_c0_g1_i1.p1   type:internal   len:103   gc:universal
TRINITY_DN143583_c0_g1_i1:308-3(-)
SYPAQPNDTAYLIGSNIPNNNGFCISFWYHMYGPHVGSLNVYVVNSTAADLEFARIGTQGDKWK
HGQLYVAPSAGNPIAIRFEGVRGSSYLGDIALDDISVK
>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ
>TRINITY_DN72753_c0_g1_i1.p1   type:complete   len:137   gc:universal
TRINITY_DN72753_c0_g1_i1:95-505(+)
MARTKQTARKSTGGKAPRKQLATKAARKSAPSTGGVKKPHRYRPGTVALREIRRYQKSTELLIRK
LPFQRLVREIAQDFKTDLRFQSAAIGALQEAAEAYLVGLFEDTNLCAIHAKRVTIMPKDIQLARRIR
GERA*
>TRINITY_DN49617_c0_g1_i2.p1   type:internal   len:100   gc:universal
TRINITY_DN49617_c0_g1_i2:299-3(-)
CNRQCCGPARSFDLKILDNNNQEVIHLNRPLRCATCCFPCCLQELEVTSPPGTPIGYVIQKWSLCA
PKFEIQDAQRNPVLLIEGPICTCRCGDVEFKVL
>TRINITY_DN20671_c0_g1_i1.p1   type:5prime_partial   len:1266   gc:universal
TRINITY_DN20671_c0_g1_i1:4791-994(-)
KAYLKSRILLSSIGEVFSITMFEDYIYYTTWNPPYRIHRAHRWTGKETSVIKTSKDKFFGIQVVHHLR
QPTHKNPCENSGCKSLCMISPGGTSYKCGCADNVHLGSDSKTCFSNCTTGQFKCNNHICISKAW
YCDGEDDCGDNSDELNCKERKCKPDLFQCDNGDCTRRFYVCDGENDCRDNSDETDCHSRQCFS
FQYRCKNHNCILHNLKCDQKDDCGDNSDEEDCKKSTECSSSSFRCEDGECITKYWKCDGEYDCA
DRSDEKEELCKNTVCKPGFFKCHNSSKCISEHHVCDGDRDCSDNSDESIETCSNKTCTQSQFLCD
KKLCILNGWKCDGDQDCSDGTDEKDCKVPTACHSSEYQCKNGECINEQWRCDGDNDCGDNSD
EGHLANCTKSMCSRNNGFQCEKSAICIRRKWRCDGETDCRDGSDERDCSYGKRDCNPNEFTCK
DQSGCIRSDWVCDNTTDCLDESDEGYEFCSTHECNPEKQFRCKDDYTCIANYRVCDGQSDCND
GSDEKDCRPSCQWTDFKCGDGTCIDGAKRCNFYQDCKNNKDEEGCGRAENPITCNGTRGHRLC
NQLRCSPIQNNTYIKCHCDEGYKVVDSECVDVNECIEESSTCDHICVNLQGSYECKCAKGYKEIY
NFCKAKGDPSILMLPTADKIMILTHHSSPRPTASYFDPTDTSWPHMGSFDFFDFGYGSIMLVIADSK
RQHSLTGYLIKENFFRVGDPARRKRRTSEPIYEQSFKKTGMSPDHVSIDYINNNTYFADQNPNNRG
IFMMNLLNTLWIKKVIQLFRKVTGLTVNPDKGTLYWCEDAFEPIIYQANMDGTQVRSFVDNKLG

YPVSLVMDIPSQRLYWADYKKNSIESMSVDDTDEKTRMTVINQRSFPTLNRPISIDVFEGYVFGVM
NVTGTLFKVDKFGRVRRHTPKGSEKTKPKYEDYVLKADIQKITKLRIYQQNRQQAMASASPCSTA
YCPQLCVSLYEKPSKSLQAKCLCQSSGSNAVQSDCKKRNCDRSFCNGNGECREVNDRYTCSCDK
GFTPETNCKTGINDQCMCENGGECHKGMQCICPKGYHGKLCQHSCDEFMVRSNCVNGICHYD
DTNDKLMCRCKEGYSFSIEANLCEPVCNLTCPAKYTCVINRNGMPSCNCTTDDCETKTNPVGSIS
KTMTVVVPIIIVIIIVCIVIAVIILKRLRMRNKFAPYKMEIETENPAFEYRYFRNNVHDDSMPESDREF
FETKNFANPYAFEDQYEQSAFDDNYAEDAALVRDDDD*
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN191650_c0_g1_i1.p1   type:complete   len:239   gc:universal
TRINITY_DN191650_c0_g1_i1:957-241(-)
MRGKGATCIRYLLFSFNVAFWLAGACAVAIGIWMLFDPGRFDDYLGKYSFVIPASILIGAGLFVFFV
GFCGCAGAFQEKKCLLGTYFTMLVLIFCVEIAAGVLAFLFRHKIKDEITKESQEVVKLKFGTGDPKI
DHAVNLVQQELKCCGAKSGDDYKTSRWKDNQLATKTVPESCCSDPSKCTKVTQTQYVYKQGCI
DELVEYTKENLMILGGIGIGLACIQLFGMCFACCLFFSIED*
>TRINITY_DN21554_c2_g1_i1.p1   type:5prime_partial   len:348   gc:universal
TRINITY_DN21554_c2_g1_i1:2-1045(+)
WYKANYGASGYYIVNYEDENWIQLLNIFNTDHLILSAVDRANILSDLTFIENSGRRRINLTLEFTKY
LKKERHYIPWEMGIKQVELIESVFRETEIGTCLKGYILDLTSHVLGELSLYKNHSFLEQQLINVLVRK
AVHYGKNDIIIQLQNLFLKWLIAEGGSELPSNLRSVILRVGVENGNSNIWEKLLSILKTTMSQNDR
GLIIDALASTKNSTILQRMTNKITGISLLGESGYIAGLAKVCSNKYGRDNAWRDIKNNWNWISER
NSADEIKYLVESCFSLGPNIDAAYLEINLEKLDDLLDNYEIGPFKRSLYQVKEKMMRTIEFRKRKDEI
AEWMEINMPGCFL*
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND

NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*

>TRINITY_DN1628_c0_g1_i2.p1 type:complete len:556 gc:universal TRINITY_DN1628_c0_g1_i2:81-
1748(+)

MADINVAGLISIIIFYLAILLIGIFAAYVKNRKQAEAQTNQEKTNEVILAGRNIGLFIGCFTMTATWV
GGGYINGTAESVYTKGLVWAQAPWGYATSLAMGGIFFAKKMREAEYITMLDPLQHRYGKYMGA
VLYIPAFLGESFWSASILSALGATLSVILKLEMNLSVIVSACIAVGYTFFGGLYSVAYTDVVQLFCIGIG
LWLTVPFALTNNFVENISANNHLWLGTIKSNEAGKWIDYAFLLIGGGIPWQVYFQRVLSSKSPGR
AQVLSFVGSFGCFLMAIPAVLIGAAAKTADWDKVNITDADLVVNGTLTDARLVLPVVLQYLSPA
WVSFIGLGAISAAVMSSADSSVLSASSMFGYNIYKLLIRPKASPKEIVWVIRAGIVCVGIFATSIGLTV
KSIYILFHLCSDLVFVILFPQLVGAVHISFVNTYGSVAAYIVGLFFRLTGGEELIGFKPLIKYPFYNNN
HQNFPFRTLAMLLSFATLLGVSWLSNYLFDNGYVSEEKDYLGVLERRDKNKRRNAEDVLMTEVY
KKREEDDVHYTKNGKGMPNHEDM*

>TRINITY_DN21554_c1_g1_i1.p1   type:3prime_partial   len:650   gc:universal
TRINITY_DN21554_c1_g1_i1:1947-1(-)

MFPNNALKQQLFYHHYMFMTKKDDDNNIESETNDEEDNQEGEEDSPVNQLFPKKKSNVNSTS
NHYFTIPEFLSFGTMLLFIAGVALLASYQSFTKKKVDDIHFNVRKLMDIPENVIYDEVKLPKNIKPL
NYVIYLYPNLEFRNMTGVVKVTFQCIENSTDIVIHSSKHSVNRIELKNMSGGNIEITNIVRNEKRGY
LILSLKTALVSSLKYDLFLGFYKTLEYNPSGGVYLSQYLDVEMKTNLILTSMFEPTFARYAFPCFDEP
NLKAVFKIIVRHNSSDGYKAIANMPVEKRITVTETDVETHFEQTPLMSTYLIAITVCNYGYKETYSK
YGVPIRVYAPKDRLKEVDFAIKVAPLALDFYVDKLGMNYTLPKLDLISVTDLISSGEENWGLINLQ
EMYVLYNENITSSDWVPNIATSITHEISHLWFGDLVTPTWWRDMWLKESFAEYMEYLPINQYFPQ
FDLKTSFYKTNNVRAMTTDLGNYSHPLFTDETDPVILETYYDDITYLKGVAILSMLSDFLGDEDFF
KGINYYLKEHEYGNANVTQFWQAISAAQNNTNIAEMMNQWTVKTSFPLITLKIEKGKLYTKQER
FEFSDKVNNESSFWHVPLLVGFQDNDIIFRFHLKNLSDSYSLSSLQNKPSWYKANYG

>TRINITY_DN86076_c0_g1_i1.p1   type:internal   len:210   gc:universal
TRINITY_DN86076_c0_g1_i1:628-2(-)

IAQNAIHDSDWQVGHTKIFLKDAQDQELEIKRDRVVTAGVVLIQKTFRGHRYRKQYVKLRESTIV
LQKHWRAFTAKRRYKRMRVGFERLQAMVRSRQLHSSYKEMRVRIMAFQSRCRGYLARREFKIKL
GAIITIQAAFRMVLGKKKVMKIRQERMIQAEAERVRREEEARLRKKLGAAEAQRRANKAAEERA
NVLHMQMQQNALKEKQ

>TRINITY_DN16533_c0_g2_i1.p1   type:3prime_partial   len:396   gc:universal
TRINITY_DN16533_c0_g2_i1:1185-1(-)

MEEEKIEDTVEARLKKIRQRNIEELQNEYMKRCLHVDWKLGPLRIYLNPLTTIVSALVIWGLVIYCII
EKEEANSKFAILNEWITLRWTWLYVGTQDVWAVFVFWLYFSKYGSIKLGRDDEKPEFSDGTYFTM
LFSAGIGIGLFYFGVAEPIQHYSSPKGYKSNRYFNRYNMNVQAQDAINVTLFHWGVHGWIVYVVI
GLLLGILCYRRGLPMTMRTCFYPIIGDKIFGIMGDIIDIFCIICTMFGVCTSLGLGVIQLNSGLNRLNS
DIAENNDVRVVIIWCVTAVATISVISGVKVGIRRLSEICFGLGCLILFICTFADDTWYLLNLFCQSTGY
YIQWIIQLGFHTDAFAQLGIAPDGKENPTWMRNWTIFYWGWWISWAPFVGMFIAKISPG

>TRINITY_DN33467_c0_g1_i1.p1   type:5prime_partial   len:243   gc:universal
TRINITY_DN33467_c0_g1_i1:788-60(-)

LGAGSDYYAFYKFVGIPSIDISYRQKDLDNKFNTSYYPMYHSLHDTIHWVENFVDKEYKIHLTAGK
VAIQYLLQLADLPLLPIRTKKYGEGVHRVVKKIVNKFNGTKVKGNESMHFLFTSGLLSMKMNEL
DDYLSSVKKDKPSEMKLRVLNDKLMQLEKGFTYPNGLPGKPQHRHYIMISSSSAVDSEYPFPGVC
DLLPKINETDTYKEIRKQISITASLLDGVKIHLQRYLKSLPYTPDVN*

>TRINITY_DN15542_c0_g1_i1.p1   type:internal   len:195   gc:universal
TRINITY_DN15542_c0_g1_i1:584-3(-)

GGISFYGSTRLLFLTKPQERFFSVMHCNFLSNQATVGFAIGLATKNTNKGILGPAMSYQVVIANSLF
KQNYMVLTEDKKVIGHGTIYGEEVTLNLRENNTFIENRNTTIVLDSSSLLFHGNSNSIFYRNTGVE
GGALGLYGTSWIALGKHSVISFKENHATVKGGAIYIRSNGPSRISFNSTLLTTGRCFIRYD

>TRINITY_DN107813_c0_g1_i1.p1   type:internal   len:176   gc:universal
TRINITY_DN107813_c0_g1_i1:525-1(-)
SRIDEILESEVPNVFLLTVVFFALNFLAATQDVAVDGWALTMLQKRNVAYASTCNSVGQTAGFFIG
NVVLLAFSSPEFSNTYIRSVPKEVGIITLSGFLLFWGIVFLITTTLVWIFKHEKEDTDVEDHGVVGTY
LMLVKILKKPAVQDLIIILMTVKIGFAAADAVTGLKLIEAG

>TRINITY_DN179_c0_g1_i2.p1   type:3prime_partial   len:619   gc:universal
TRINITY_DN179_c0_g1_i2:84-1937(+)
MLSNSKLAVFLLVLGIGIITLTKAQGQCPPPLDRDCNDERNPDDETDGCLIDNDCSSGRRCCSDGC
NLKCTEVQQPPDPEPGDPGEPGRRGETGRSGRPGFPGPEGPLGNPGPPGGRGKKGRRGRPGPPG
PVAGGEGAEVGPITDGSTKGPGPNAGALGEEGMGADGFVTPKEGPGGPAGPKGRLGPRGPYGE
RGEPGLPGPEGDMGLVGAAGPNGSPGENGRDGVNGERGDPGTVGGVGPRGSQGDQGPSGANG
AAGYKGLKGDQGQFGEKGGVGIDGERGEPGENGFDGSEGPTGQQGLQGPIGPRGPNGPRGLAG
ALGSRGLPGPPGLAGLLGLPGAPGSRGAKGENGALGARGEPGEQGERGISGDSGSKGEQGSVGP
RGVDGPAGPKGTMGLNGPQGPRGQSGPRGLRGLLGPDGEVGATGERGVPGDQGVVGPQGNKG
TNGDTGPPGKPGPAGAQGKRGRAGRDGPAGVSGPDGDRGQLGIPGASGVPGTPGPKGSRGDRG
TTGTEGIKGSAGAPGTAGETGFQGKRGGPGPAGKSGRSGKQGLPGAPGKDGRPGGPGQQGARG
VNGQVGLQGNKGAAGPSGGNGELGFPGTKGQQGEDGPVGSVGQPGAGG

>TRINITY_DN8008_c0_g1_i2.p1   type:5prime_partial   len:1298   gc:universal
TRINITY_DN8008_c0_g1_i2:4205-312(-)
IMSPKERTCPLTQYLFTPIYTGSCKISDAEQRANDRQVKSAVQMAGSAIGTVVGTIFGGGIGGAIGG
FIGGAIGSLIGGIIGLFSSCDKSYEVVTRSWVEERKCILLEPDVRSITRPYSECFDAKIKANTGFKVPY
TCNCKVNDCIVKSPSPDCLLQNQQCERKRKDFLERTKTVPPTFSKLYKSLKQCQDSVGASILKVQS
AKKTVQFYEKEHTRIKNMLLALEEENKFSKQALSDATSILQDDLCVSNAFMNNKNINELIDIKNV
QFDTLLPLVNNIRINAHVKVKGNDVLVPFVHELSNDNKVSLNAFGRKIIMNTICKKIRKRRSLDL
NEDEKNDLAFVPWINNVNGTATVADLSCVSLDKTLEFIRHTVKTLNKKSSYANDLLMQLQYSTN
KLNPSLYTAFTAYSGITTEKNDIIKANEALLMSANNELNKIQDQVSVSNVLDIWGNEAEIVTGFNN
VSVCLNYKDCIISAIDTLKNLPTMFRNSREAYMKEVMELEKELTKIYEEKNLIGLSAKAQSVERIVS
RIKYMSFHCSKRPIVTLKEVKDMDVEKGKNITLRCIVRSARAIKYYWQFNDDILDEENSHSLTIPVS
NETSGIYRCIAKNLVGNGTSNQIRITTYTKPSFIEEPKDQIYILPSHPQSNLVLTCNVTNNYDTTIAW
YYRSFTIGKRPNIINGQTSILLDLDGTKQENSGYYFCQAFNKHGRIKSREARVNILNSNIARLEVNIS
LDILQTDEISSNSFKKISGDMLSEIKDLGRTLTTTVIKSKTKTRVTFNLKVKPITDNVKSLSESFNISSR
MRQNLGSAAAVLLGKLSENSFKLPINDGEFAKVDNDTMTYGMKLNICQEGYKLHKNGFLCVQC
PFGTAGKDCKKCPLNTYADAPGLGICKKCETSKITEQIGSTSKSQCIGTTERKVDIIFAVDVSKRFLE
QINGLQKIRELLSKFIKTYSGTKYNTRFALLTYYKYVDVYLSLTEYYHSDDILGLLEILGEGSRMPDT
KLALVEIETMFDEESSSDRKKVAVFITNGGTSDSYYLMELFKYKRQAITLQNKGVHIISVGLGTVDH
RGLRALASYPKLENAIFPSSNSVAVQKMIYSIGNELKDNCYTPAVDFGIIYHPNHKESLVQITKEQF
LRNANWLSKLLLPIYRMFKQQSYYFMYKHSVPSNSFGSFSETGFQERIVSYLQQQTSGFDIYKKIST
AINVDMTEIYRSFSKVKVLIIITEEPLDEAVLKQYEISVHGEKIDIYNFVKDASSIEKFEGPFSDKPRA
HRLVYGIDEVNFLVNAINCNRTKICG*

>TRINITY_DN252_c0_g1_i1.p1 type:complete len:182 gc:universal TRINITY_DN252_c0_g1_i1:1409-864(-)
MASTLVILLICFVGGTFAQGCPRNKTCRCDNVIKYTTGNQPNKDLSSFPGLSLSDGPTARSYVQTY
TKMYIDDKIKEAKCDNNKLRAVDMDLNPIVMSLKTMNTNYVDKKTEMQDIIDCNPNLDIESDL
WDVYDVLADHCVCISQIHKDLKMKMEMVEAEMKRCDERGWYRSMLESFSIIS*

>TRINITY_DN95415_c0_g1_i1.p1   type:internal   len:183   gc:universal
TRINITY_DN95415_c0_g1_i1:546-1(-)
SCVQISAKMIEAMDPKVDPCKDFYQYACGGWLKDTILPDSSSRYSRFQQLSDKNNLALKQILADL
ISKKRNTTTKSLEKAVIYYKSCTNTKDIEKIGDKPHKELLKKIGSWAVIDKDFNESDWSPIDILATIH
RNISRKPVFNMVVDADIKNSSQNIVTFDQSGIIMDRESYLRNTSFHKRH

>TRINITY_DN794_c0_g1_i2.p1 type:complete len:250 gc:universal TRINITY_DN794_c0_g1_i2:72-821(+)

MGLTGCGAVTKWILVIFNSIFFILGIGVLGVGIWLKLEREDYEDISSYDFVTPSNIAIAIGVIVMVVSF
VGCVGAATENSCFLLLHFLLLFLIFVLQIIACVLAYVNRGKVEDGLESDFRKSIKEKYGEPEYEAVT
KVIDKFQNEFKCCGFSSYKDWRMSKYNKRTASIPKSCCIESQKESKLCGSPNPSGLLVYEKKGCYN
EVLDFLKENLLVVGAFALAMAIVQVFGLIFAIYLYILVVRANKGTFA*

>TRINITY_DN14729_c0_g1_i1.p1 type:complete len:698 gc:universal TRINITY_DN14729_c0_g1_i1:45-2138(+)

MKDVYIKRFAALFTVLLIFQECNGLLKNHLVQNVNEAKDVYHDGKSAAVAVSRQKRAIFGGILIG
LSIASAGIDIYKQVRGCKEVTPELEPKIEQAKRMQKNLISYKDSVNLAWVPAESKEVYAQRLASDM
VVLRESITFFKATLVDILKLLDQNILDEMNRLKTDLENDIENNKDVGVENFEQLEQKFFTKTQFAL
SLTFKLLPVAFLGGKFIYSKIVKNFARETASDWAQRNPGKVKKMLGNAAERAGKMKSWTKAKIN
SFKNGLKAKWGSFKAKYPRFTNGLNKLTSSRFGQFLSRNMGKIKAGCKALAKGLVVALFVGIEIW
NLVKFINGCKENLKKVNNAIESLSNGKKELDVIKSKIDRLQRDADKYWGLMKGNITSDGYLNVV
AEVAKLGENAKDQTTEIVKASKEIRRYVNEIKNAGVEKTDDLNKMVISAFRKINYKLDCLYSKTAI
VADLIDNCAIGWGKNEELYKRAKDKQKKITDDCIKGKYMDKNEVLRMMRGAMELKKKQTICIR
NNPAKKTIVCEKWYDDVSNSDILKVVSDLTLDDVKYMISVCPPAEVSQKLKDEICMKKNQDLITV
DEIRKQLHKYNQYKVAAAYFTCQLSSSSVNDICNSKKSGYDFNHVYKKYNVFSDKIVKTAFDGCK
KETNITPFDLQMICTLKNIAGLTIDSKGFDNYRAKYDLSALKRAYDQC*

>TRINITY_DN51907_c0_g1_i1.p1 type:3prime_partial len:421 gc:universal TRINITY_DN51907_c0_g1_i1:1262-3(-)

MITRGVTSITLELQDLQRNFNGSYKCIAKNLLGKREKILTLIVFDNPDPPINLKTESSTSTSILVTWES
PIFIGNSPITNYTVYYRLSNESIVINRTTTALYFNLTELVPAQEYIIKVMTSNRYFDSDFSGVIIRNTGE
AVPGEPTNFSAKHNNQSQQLYLNWDTPNPTNGMVSSYNYCYQMTGEKAWICKDTTDNSTTMI
NIKNLEKYTLYNVKVQARTSAGFGNFAVLNDIRTREEVPDNVCGIRKYIESRKIIVRWKPPLNKFG
ELRNYKVDFKNDDDSSDYFNICDTLETSCTIAKYILPFQKYVVRIETRNYLFSNSTTIAVTTQAEPPP
APSESLPAPSDDYVKEKHFTIKLVEFNESNGPIQKFDVIVVKRLENSSPVDSPSSYTNNDIASGVNG
LYIALRKNGAPKQNQEVQ

>TRINITY_DN1850_c0_g1_i3.p1 type:5prime_partial len:164 gc:universal TRINITY_DN1850_c0_g1_i3:659-168(-)

LSNVLDWLEERLELQSISDDILSKFVPAHVNIFYCFGGIVLITFILQVVLGFCLTLFYRPSVSEAFDSV
KVLILKVNFGWLIRSLHRWSSSLMVLAILLHISRVFLTGGFSKPRELIWVSGVLLSVASVSFGVTGYS
LPWDQLGFWASKIVTAVPESIDELFP*

>TRINITY_DN32804_c0_g1_i1.p1 type:5prime_partial len:746 gc:universal TRINITY_DN32804_c0_g1_i1:3-2240(+)

DNVTSNNNIEPSYKLIENLLHQKIERIFSSNDYEINNKQFRTPVGKFFKYDLVNQPQDIYKVVETGK
NELPSWLHFDYKKKRLLGVPTKQDISNGLKIEFHVKNNEALNGDRQPNHYITIDVYQPFRDPLKC
MNSEAASIASIIFNSDISEMDGLGRVELIKNIARAFGKRKKELFFEAGNRMDSTDSLYSANVQVAG
PGDKVVEDSSGFTVSFIIRCSSDITGSPEVASLKGLSQQGDFRSLSKESVLGWFVSTSKTNRVKRAVG
VGGTPGVKPTAVQGTPVLVPSSSISAKSSVMVKPTPSKSVEIVMSSTAVATTETPTTETPATETSSTEA
PATKPVTTTEEISTEITSTESSTTETTTPELSTTDSTTEPPTTMKATTTEDRSTPAVPSGNKPPVKSGEIG
IIYLFENQFFLERLELDLFSDPNGDELTVELRHIQNFEGGERETKVDKGNWIEYKNKMLYFSPSAK
HVGSHRFSLVATDPYYESVKALFEVRVQKDQSYKYVFNITLDMDYAALSNDVEAKFELLNTLANA
LDLESYNELRAVRILPGSVIVQFSPEELKDSDCNDPKIEAFKNKLKSSEFKEKFAPSYRVLDVGATER
QECVSQPIEDDSEGVLQHILIPIIIVVIVLIIILIVLCCVCRRKRKYNKAPINEDDKLYLNHKKPIIFQEE
YDEKESFFSLTPTTLPHEKPPVTNNHNEYSEGPGSSTTVSTESDEKALLAQGSPKESRQPFNSPPPY
GA*

>TRINITY_DN7849_c0_g1_i1.p1 type:complete len:251 gc:universal TRINITY_DN7849_c0_g1_i1:1417-665(-)

MGKRGCVTLSCVKTWFLVFAAILFILAAGLFGIGIWTLIAKNQYESLLGSVTYVTTVGLMLAGGLF
AMFVCIFGIIGAIKESRFMVLGFFLMIIIVCLMELIGGVLAYVYRGEVETEVKRSLNVTIATNYGLPG

NERKTIAIDNLQINYKCCGDVDYKSWERSDWYKQNITGNPVPDSCCITPSTLCGKRVHPSNIWRN
DLKPIGCFESLEGYLINHLFIIGVACLSSGLAQVICICLSMWLYRLIVEFR*

>TRINITY_DN99404_c0_g1_i1.p1 type:internal len:112 gc:universal TRINITY_DN99404_c0_g1_i1:2-334(+)

SNLEAITKSLEKQHKFYQSKLFKLQTDIHGVALEITKLKTSLHRTQISSSERRSSLLYINLRILKNKTDI
AIKGGLDVKEEAMTMLNTVQNFMSVATNAQNAANQALKKYY

>TRINITY_DN129928_c0_g1_i1.p1   type:internal   len:154   gc:universal
TRINITY_DN129928_c0_g1_i1:460-2(-)

YLGLFEGPAIIEPTTSTTTASPSTSYVSSPTASLNISRTSTVSSTNASVTPTPSSSSSTPTTSSVATTLAPQ
NYPREITFTFPNANCTVLFTPSTRASFLIDLRNKIANAVSVLSSTMKNFNFTCGSITVNYEQTHSGN
QTAEQASNNVKNAV

>TRINITY_DN62874_c0_g1_i1.p1 type:internal len:197 gc:universal TRINITY_DN62874_c0_g1_i1:2-589(+)

TNGAHWYNVPGGMQDFNYLISNCFEITLELSCCKYPNANSLQKHWNYNKNSLLKYLEQVHIGI
KGQVADSETGIGIPKAKISVEGINHDIKSVSNGDYWRLLLPGKYVVTVKAANYETIMKGGIIVSKE
KPTIVNFDMVRISSTSRPIRQTTIGHDTSQQTPIEISTSLNKKSSVPPSTDITNTATAPSVIKSTQN

>TRINITY_DN76789_c0_g1_i1.p1   type:internal   len:381   gc:universal
TRINITY_DN76789_c0_g1_i1:1140-1(-)

AKKNKQDIVKYDVNKEAKGLDFVGYNESSKYRDYGGLLIVLVISVILLVVGIILMLSAHIKTDSCEV
NTKTSKDKSVNKKASSDICSYSKEAQRINLHDFLHNVSEEYFNMFPEEIAWHPFADTQMIVKRFV
VHDPRAQNIKRITDKAKSLLDQGVGLKADLSKLKPREHKAYLQVLHFLESTFGASYLNYTAGLWL
MGPSGFCSEPICYVEYSIYNALGSMVIYKQKDIDNLMFHLKAFNESIFNYIDVLNSGIKKGMVRTK
VECVAGINALKGKHQNISEFGEEGIRVEWYGERFFVSSFYQNVTKELDAQSIKKYGKNVTQYIKDS
VIKYIGRSLVHLLKYLENDHIRYCRPNDIGPGGLSALPLDFVYLDGKKTNE

>TRINITY_DN4295_c0_g1_i1.p1   type:complete   len:245   gc:universal
TRINITY_DN4295_c0_g1_i1:1031-297(-)

MGENNEYFFTPLALLFMPEKCHNKFFVEFNILDAPCLKITISKLLGYAIILGSVLVKVPQIAKLLKA
GSGVGLSLLSIFMEMAAVTFTMAYSLQRGFPFSSWGEALFISIQNVIIVSLIYYYNKSTLGLIFFAPVFS
AITVTLCSTITPIYVLVKLQESNLIIMLISRFLQVFENYRNGHTGQLSMITILLVFFGGIARIFTTIQETG
DWLIASQYMLSSTMNAILLAQILWYWNAKVDEKKTQ*

>TRINITY_DN63421_c0_g1_i1.p1 type:internal len:278 gc:universal TRINITY_DN63421_c0_g1_i1:1-831(+)

QKKGTNGCTSTNAKDKCLFICLPLENGKHECACPDNLIKDGNTCKCPKNEVLHNGECKPKPGT
TCLSTQYACLSGECIPKHWKCDLENDCADGSDESARICSTCPPNRFRCSDGRCILSSYRCDGEFDC
TDKSDEANCTAPTASTCSSDNKIVCPNGRCINKNWLCDGDNDCQDNWDEDPKQCPNKNITTTV
APTFGPCPSNKFQCKVTGRCIPKDWRCDNIDDCADHSDEVNCDTKTCGPNEKSCDKNATCYLPF
QKCNGLADCFDGSDELGCVTV

>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)

MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*

>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-2(-)

GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT

SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE

>TRINITY_DN172717_c0_g1_i1.p1   type:internal   len:213   gc:universal
TRINITY_DN172717_c0_g1_i1:1-636(+)
GDYYVVPKPISTCTKDNDNILRRDQIRKLPEWPGLKRSCIESSTSISSMPAPPRIPCMCYPGEMIDSS
DINNVLCRKCTLGHYSDGSGTACHICPTGYAALPTLQMYMLNNNYLDKDTLVQKCSGTLCKEG
DNFWESRGDYLATKRLPGTFDMSVSINNISITYYNARLIFNCSLDCRMTPSGDRLAKHEHCYLKIV
TYRNGEVLTNRDCVG

>TRINITY_DN45008_c0_g1_i1.p1   type:3prime_partial   len:388   gc:universal
TRINITY_DN45008_c0_g1_i1:1161-1(-)
MGLANWVHWTAWFIKNFVFLLLIMILATIMLKAGKIFEFSEGGIIFVFLLLYMLASIFSLFFVSTLFS
HPIRAMLFGATLWIATLAPYLSFASNEDFDALSNPLKAASCLLPNSCLGIMIRIISKRETSRIGVNWS
NFNKGTDIKGEDFTLGSAFGMLIIDCFLYALLTWYTENVFPGDYGIPRRFYFPFQPSYWCGKKTKA
CSPSDSDLQMHCKNKNNDYEDEPLGMEVGVHIENLRKVFKGPSSSKVAVDSLNLNILKGQITALL
GHNGAGKTTTMSMLTGLFPASNGTATINGKNISTEMDAIRDSLGLCPQHNVLFDRLTVTEHLDFF
TALKGVPKSQAKIEVQQMIDDIQLRDKANDASSMLSGGMKRKLCCAIALIGGSQT

>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-
481(+)
CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL

>TRINITY_DN71928_c0_g1_i1.p1   type:complete   len:202   gc:universal
TRINITY_DN71928_c0_g1_i1:73-678(+)
MEKQHLLSRTISQVICFFGILQLLFATALGICGFVTLGLYKNINCFGIWAGLPMMVPALLSVMILGT
RHRLNAAAIFITNIVVLAITGYHAYLVYDETDFWISYREQASKQTPGAGNALINGCYNRGDHCVC
EDNRVYLEKNYVVQFCDQFRTGEQLFWTMFVLSLAGIVFSLLTWVLSFFTMFICTRKEEGNHRQK
DVYM*

Band 3
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF

QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIIINGNTIVATTVFDYEKKRFYSFE
VQQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSYY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA

EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ

104

HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*
>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)
MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG

VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)
KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT

LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID

ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC

KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*

>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK

KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ

CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYCH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN1366_c0_g1_i1.p1   type:3prime_partial   len:4702   gc:universal
TRINITY_DN1366_c0_g1_i1:236-14338(+)
MMEQDRQRPSRQEYNNRSLSRERIGSRDGSRDRNLSRDRDLSQTRDLSHTRDGSRDRSNLRTRDG
SQDRSFANRSDLYSSPYSSNSQAMPQTSATVEIENLELQATVSSQEELINQLAEDLRNVRKARDFSA
EVEILQKEQQCMDFKEQLEGKEMTIQHLKTELVQSQTVTEEVYKKYESIRSNRDAKDKSIRRYQQE
LHQVHDLLETAQKDKLACVDKMRQIQNEKSALEFDYQWLFDKIKNYEEHGEVFDMSSVSKSTTT
IKRTTTVYEDGQKIRVEDYQSDDSIMPLQNKFQQAQKGYRKAIGMQDDQLMRDKENLMNEFRS
MQSQMHDLKRIHENFMRESKEKDTLIERLKEAKMALDQELDHLTRENENLRQTNDKLENENSD

LRTELNSARNQVSKIEVQYDNCMKQRNYMKEQMEIITQNSAKGRDDYNSIEATMRDSQRKMDS
MQRDLTNKENLNKQLKNKIKILEEDFEQCRQDYNQCMVSRESLQQQKLDVERELKERHDRMDE
VETSYEDIQRRKADLQQELASLKKNLTRFINEEDSSNQMKSHLQNEVLAANKRISRLEAAYEASQ
QEKLELQQELAPATQRLSMMRAAYETLQQKKEQIQTDLIASQKRCAEYQAMNERLKQDRGEILN
EIQACKRRAAQADVDLDEAAKQYAILKGKLEDANRRAQSASEDLVTRQRTIEELRHKLEVSGRET
IQRESYYERIKQERRSLEDELRGCVTDLERVQNEARDVQRDNEKLRQDLGTAQQRLHETEAYWQ
KTKMENAKLQRDYANMERTVQELRDLSHKLQQDKEDCEKILYSTHKKYANLDKENERLGRENT
DLERELQSSKNKQSKLDAVIQDLKRKEAQLKAQLDDALKNRDELNRVKIVMNDLQKRLDGVTK
DGEQKDNLIAQLRNEKDNYKRDCDKFGRDYEGCRTMLETANREKDRLGKELNAANRRIADSD
VLVKRLQDENMRVRKDANSFEARIPILEDALQKSKANESKWALEANTYKTNVIRIEKELLVFKEE
HHSLVSHVSQNEDKNDGLAKKLDDALRKIFELEATNEMVSRENDELKRDIDNKTRQLEEQLTTV
ERANNDLKNQLNELRGRNKKQQDDYNRMQIDYNEFQSKWDGLSSDGQGKDRLIEQLRSELQN
STHEINQQHTDNENKKAYIERLTEEKQDLLNDVNTVNQRIYELEGLYKSSEDDKEGLQKEITELNR
KLNDVESDYDTLQRESDKEIRALKSKLGKVESQVDMILKDRDYIQDQLDAERLLSQKYKDEFERV
QREFLEHQKICERYADQILERDRIIDDLKNQMYKMETEIDTLKEQLRKAQTDQKVAEQQRDKAVE
KLNQAEMKIKDLENENDYLRKRLAELEREISVLEMKLNDAETENKNLRNKIKDLEDLIKTLRAKL
SNTETELQSIRHIISDRDVMIERLQKELDDANDQAHQLRRQVSELESQIELGDQERDDLRSRLANS
ERTIIELRKNLDKVIHDGQDLEAELAALKQKLIKMEPQMKQAQKQRDDYKTAYDNLKGKYQDL
KDELLANQRQLTDAKRAAEQYKKELRHKDHLLEEARGKILALAGQLQSARDELVKKQQENEQL
LDEKRLIQEELLRLRQKLGDLESANQILAMEKERLNEELISFNSKYTELRIKLEKSEQDRLESQRQA
MAYEQRLAKLEPQLQQILRENSELHLQVDRLADELRNALDENRHLKNDVEELQRIRDMQLKELY
EKDTIIEQLKAKLSNLENTVNHLQQENDKLHNLNDALEQEKHSLAHRLDNANSRIKELDDLYEQ
ERQKRDQLQNDLHDLQKKFVTLENAYKKSQERERDLKKKIDDLLGRIKDLEDQLAAEKKKNSDL
EAENDRLKDLIHDLEGVIDDLRRKLTEQENENDRLRAENDDLKQQIMNLQRRIDELEGVIAGLEQ
EKNFLEEELNSLRQTVNKLEAEIDNLTKQRDGLQGQLEDLRREIMRLKEVIMKLEGTNRELQRTID
ALKQEIYRKDRIIETLEAKRKQYELEIDNLKNEIIKRDVIIDSGDESKRDLEIQIKNYEGRIAIMDGRI
DKITLEKTEIERNYHNAVNRAKGLESQVLILNREKAELKGDIDQHFGKIRDDNEVVNKTQGELRE
KVRIIETYKKEIIEKTTIIERLTVIRQTVESERDQLKKDNATLKITVNQYKDNDKGMNDEIQKFTFKIT
TLEKDIINMKNERDEFKVKADNATSKLVEVETQLKRSIERETRLRGELDTLHNKYQNLETIYNELL
REKNDVDRKYKDLLQKHRELDSKYNKLLANFNDLKDQLQQANNKIADLKAKLDKEIYENRDL
RDQLDNLKNQYNKLRDDNQRLEQELADYKYKYEDAMKELAEKNDLIDELKAKIANQDRQINA
LKGTVNQLRADYERSMREQARLQDEIVKLQAVVADLEGKLHRLELENEKLRKENNELQAKIPAL
ENEIENLKDKLENLIKENRDLRNDNMNLKQENVQLEKEVDDLKDDIEKLKDEIRNKDNIIADLR
KVRQELEEEIDQLRHDVKQKEKEIDDLFNRIRDYESTIQILNTKLAEIEPAFEACKDRLRHQENQIQ
ELRNKITDLESALKQSQENEAELGNKLALTESKLNKITQLLDDIKRKNMELENENGHLKDELNKL
KDQNKKLENDNDRLSNELNECKAVIQRIEPMLDHLQKHKNQLEKELEDALNKLANLRNEHEA
HLREMKEKLHVIEVITRQLDEKDDLIEKLKQEKAALEKENESLNDALNKLHQTLDAVQRRKEEV
EKDFFEAKKRIAELENLLNALKEDKDDLERMLRDAKEKNADLDHALRNSQHNEAKLKGELDEA
RGRIQRQRNELAKLQIIVGDLRAANERLLRDNTEKQNVIDGLHSQIRGLESQNGSLKKENQKLRD
ALDKLQRELHNLEQENQQLKAKVFSLQLLNDSLREEKDRLYDNFQELEKDYNDLKDKYNQAVR
ENDRLKDELAFANKRIDELENMNNQLNNEIENLKNIIAGLKRQINDLQGVIDQLRRDKSDLEQTI
NIHSETTINQRPVFDESDYVPRSEYDELKALLEAANSTKEGAERDRDQYHQEHLELHKRISKFEAE
LEGATGKRDEYKRLLQEAERRIRELEGVNGRLEDREKELQKELLNALNEVSGLQQQIISLKVKLGK
FEADRVNYEDKISKLNNEINDLHQRLSQVLASIEEKDHIIEDMRQELADTQRRHAELDSQNQILR
DEIEKLHGIINDNERKIDDLEVKLQDDQRNQNSQLKNQINELNARNNKLKDEINDLQRKVSDLER
DLDQAKRDNQEKQNVIDRLNQLKNQLENDLEALRQENAGMKSDLDRLRLDNRQLLQEKHDLE
MKIMGLESDKGTLEDNVERLLNEIENLRNKIQKLKDENDRLIIENKRISHELYKYNKKSGPSDYDS
LKDQRDKLQREIADLTKELRNYKTNITVLQNEKDDLYNRLKELERDLADRDHVIEELEREKDRLE
RELESARNRADKFELSNGQLENEKNRVQEELMDLHRKLTKLEGDYELACDKRDDLQKELDSAIA
RNKTLEDNYKRSQERENKLHQDLLAAQKKITILEHELQSLKDRVNSLERANKVLDDKKNELKDD
LIAAQKRISELEIMLEGADDRNKDLQNELDAMKRKNDELRETLRLTEHGKEDLINEIQNLTAKLS
KVENKLTQAENEKRYLEQQLEDAKQRTQKDRDEIMNLQKTIYELTRKCDSLTKDNANKQALIDD

LRAKKTTLEGEIESLKRDLQNNQYEIERVENDKKNLYDELENMKNKFNVQEQEYLVLQEEKEKLR
QDMIASHQSVCRLKENYENSLGDKGKLREELATFHRKIAELTTAYDSCRSEMNRYKGDCDNYKD
AYDDIKAKYDASQNEISKSRNDYEVCLQKYQKGEQAFTKSEADRERLQKEMLDVHRKSSEIAVLF
QTTKEEKRVLENQLSMLQDDLERYREGYETFNDKTNALQDEILVSHKNYTKIEHAYNRAVEREEK
LEKDCEEAKEIVANMEKDLDNARGKANELENELRKLQDKLRREQDEYEQNSEHAGKLQMTLRD
YESKLSQLRNVEDENKTLRDEINNLKSSINKVEMDYRSNHNDLTQVQDQYESSRNNINKLNNEIN
ELQRDIRQVTSENEKLQNDLQNAAQDKEQEGERLKSTIRMLEREIDSLKTQFGQTTEQLDIVSKDR
NVMHQEIQVILKKCVSIEMTYITKTEDSRFQTSGGDEYEKSINELKNHLDKSEREFDDREKKYKYL
EDQYVREKKDKSQLEKEIDEIQRRYDNMQHEIRVIEEDKKRLSDEYQDMFNKYNDLDRDFKNTQ
TKITTYETEINTYQTTINDMQYKFTNNEDQNKKNSQVYRDLQQKLDNATKENTTLKGELNDEKA
SYRNVKKDFERQVRELQRSSESYGKASHEKDTIIEDLKSKRQALESDIDQLRRDLNHGKDEYKRLQ
REFTQHKSDYQDQQRVITDLQQKVEEHKHSKITIEEEYKITVEKYIKEIRETHIKLSKVESELQTTRE
AQNLDSDERYKRLQNELQQERETTRKDIYGKNQEIEQFKSQISNQDQEIRRLRREIEELDKQLKEA
GSNYSSTILIQKQDAPKYSSTQVTESRISSSSAPRYSTEQEVLIDASDKDTEDEKKRYQSSFYRSTATIK
PGQSDYGSVDVVLQGSQDQGQDDKDYDYNRRATGLDTNAVNRSQ
>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*
>TRINITY_DN4494_c1_g1_i5.p1   type:internal   len:439   gc:universal
TRINITY_DN4494_c1_g1_i5:1316-3(-)
LTDGSQTQDVGAEDPAKIAAELRADGINLLIIGIGKGVNQTELTNIAGGADNVFSAASFDELIGTD
FVSAIKSGSCEEAKKPPLPKLKRVLDVGFLLDSSDKVKDVYGIEKDFLSTMASIFQIKTNGTRAGVIS
FGKDNEYNIRLNQYFDISKFKQAVDSLQYMGSGRDLKNALQYARTDMFTVGSGARVGMQNVMI
IITGEKEVKDFKSDDVKYHANEIRSKGTAIIVVGIGNIKIEDLLAVAGDKKNIFIAPTPFNLTSYQFLN
AVTVRLNEIDQKPSGPKCEAKVDVGFILDSSGSLRNEYGKEKDFLKTLASTFGVSSNGSRAGVITFS
YYSEHSIKLNDHSDISSFNQAVDNIPLMGSTTRIDKALRLTQKELFSIKNGGRAGVPKLLIMLTDGS
QTQDAGAEDPAKIANELRADGISLIVVGIGKGVNQTEL
>TRINITY_DN1535_c0_g1_i1.p1 type:complete len:779 gc:universal TRINITY_DN1535_c0_g1_i1:86-
2422(+)
MMKYFMLIVFTICLKNIHAQDKNLCTSAETCGKCLLKGGDCFWCIEEDFKFNRTRCNTEANLAA
QGCTDYGMGRGKKTNDADLDFTSVRQVKPQKVTLEIRPEEEQSFRIQVKSAKDYPVDLYYLMDL
SKSMENDLDKLQTLGTNIAAEIGNITKNYRLAFGSFVDKTVIPFVENDDANYKPCAECEPTFSFKH
VFDFSNDAKSFEKAVSEQKISGNLDTPEGGFDALMQVAVCEKEIGWNPKDKCRKIVVFVTDASPH
IAGDGRIGGIIRPNDGQCYLTEDGDIKMYTEATKMDYPSIGFLRSKLKDNAVIPLFAVTKNVTEVYK
SIAAELKDLQAVTGILEGDSSNIVEVIRDKVREISRTVTLTDDSSPDITVTYRVQNDPTKPNVCPSPV

113

APNRCEDVEIEQTVDFDVYVKASAKNCETKEKQDQTFTVNIPAFGKVEVNVKMICDCDCAKTSE
PDSPKCDGQGTFECASCKCNEGRYGDRCICDGNENKDMSLCKPNNVTDKICSGFGNCVCGVCQ
CNIRENPEERIDGNYCQCNNFNCPRHQNIVCGGPERGSCECGTCVCREGYLGENCGKTDCRIGV
KKCLDAKGQNCSLNGICECDRCLCDKGYEGKQCQTCVSCPGKCSEYKTCVLCKAFGETGEQCD
GCELIQHVLVNRTNEECVVPVDENCFVIYRFEIDPVSMNETLYIQRDKRCIIIVKTKPPILAIVLGTIG
GIVLLGLLLLLLWKLLITAYDNREFQKFEKDRMKSKWENDENPIYRPSKQQFQNPAYAGAN*
>TRINITY_DN1043_c0_g1_i2.p1   type:complete   len:700   gc:universal
TRINITY_DN1043_c0_g1_i2:2410-311(-)
MKESYLKRFALLFSVLILFQEGGALLRENLIVNHRLRRNVYSEEKVTAVDLPQSREKRFVGTALIIIS
AASAGLDIYKQVRGCKDITPDLDDKIAEGKALQQSLLNLRDQVNLAWVPAESREEYTRRLASNM
IIIREQVSTFDSLQADLVKLLDQKLLDKLNNVTKHLENQIDRNNETEIGSFEDLEGKYMDTTTFALT
LTAKLLPVGFLLGTKFLLPKITARFSKGVAKAFAADNPSRVQKMLSSFAEKQGKLANWKAEKINSF
KVSLNSKWNTFKLKFPRITAAMNRMSNSKIGKALGKAMGKVKGIAVGVGKGAVVAFFIAFEVW
NFVQFHGACTEKRNKAIEGIATMNANKKNMTDLLTEIHDMKAKADEYYNLMKSNVTNDEFLN
FLEDIADLGENAKEQTKVIVDATNQIKQYKAEIKNADDSRTDALNTMLVTAFSNINFKLDCLRSK
LAIIKGVVDDCGIGLGVYDDIYARALAKQKKITETCIEGSYMDKNEIKGLMVAAMDLDKKQSICV
RNNPTKKQLVCEKWYDDVSDADILAANPDLTKDDVTYFISTCPPAPVNDQTKTTICVKKNNELA
TLQSIQQTYQKYDQTAINSAYEECQLSSISVTTICTAKKEGQTVVYAQQKFPVFPASMVTNVYNSC
KKETNITPADKMMICLLKKNGFALDSPVMANYVKNYDYATLEAFYNQCS*
>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN691_c0_g1_i1.p1   type:complete   len:1726   gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG

QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*
>TRINITY_DN477_c0_g1_i8.p1 type:complete len:985 gc:universal TRINITY_DN477_c0_g1_i8:3548-
594(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGVRW
HTWRKLWWCQFNNISAL*
>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI

GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*

>TRINITY_DN2028_c0_g1_i1.p1　　　　　　type:complete　　　　　len:274　　　　　gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)

MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)

MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*

>TRINITY_DN72625_c0_g1_i1.p1　　　　　　type:complete　　　　　len:1964　　　　　gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)

MKLAFNIFTISLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE

LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATGDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*
>TRINITY_DN12627_c0_g1_i1.p1   type:5prime_partial   len:1061   gc:universal
TRINITY_DN12627_c0_g1_i1:3456-274(-)
YGENNRLKFNDARQYCQQWKDDQGDLVAIHSNYENSFIMSQLYDVNEPMYIGLTDSFSERTFLW
VDQSSVVYTNWYARQPSFVGNEDCVEMMPYFKTHGRWNDIGCSAERGFICQRTPSKTPLPTPEP
VKDSKPCPAGYRKFMKACYRVVHTPMTYDDAVKDCRTSVGGELGDLVSLHNQFEQSFVFSQFAK
FDFHSWIGLKKIKGEKEFKWSDETPYDYRYWLSLRYDNTVYNDDKCTTQEFSSKVDGKWKVTDC
TQKHPYMCKIERDFDQPHLTFIGNCTDGWTKFYDKCYKLQNYFSNWPAAREKCKGFGGNLVTIT
NSDIQKQMEYLARDAYRSVWIGLNDRAKEYVFEWSSGIPLLPDSYQNWGPNEPNDNSGTENCV
HMTTESSGGKWNDLSCSQRMPYICEHPLECNSALGMEDGSIPDTNINATSYVGTYFPKYARLNAK
SDNNRNTAWCTNITTGAESLTINLGEVMQITRISTQGLLDSSLGFSRGGYVVSYMLEYSNDGTTW
MTYISEDAYDQKPIALPGNIDASKIDGTTINLKAAYLRFIPKLYKNIICMRVELYGCKSVCSRALGM
TNFAISDKQLSVSSSQAGSEKAQLRPNIDGSWCAKDDDYSPFVRIDLPRLTKITRVTAISSSKVQYKI
AYSDDGELFTRFQTLTNEERVFSTVPSTHDLETAISAKHVKFDLLKKDQGKLCLKVELYGCLKDCD
AVLGMETKIIPDRLITASSAKPSNPARNARLSVGVYGDNSWCSSETDNAQYLQLDFVQEAHLTEIA
TQGFNGDSAKYVSKYNVQFSDDGDFWHQYSEELPGNSNGYSIQRNKLKEPIIARYIRINPTEWKN
GICMRVEFYGCPMKPFTAPKILTQKTYNGAIRILNEDFNENLLNANSIEYIELANKVETDITSLYLLE
ESFKDGFNSVTVNKFREGSVITEFTIKTHTSDASLDAAEPLRKAVQTGRVGTFDVDPNFFEIVTAST
DKSTATNDDSGGLSNGGKIALIVFFVILICIVLAGGVVYYLRSRRNGFRLQFQHRAFENPTHVDDL
QNDDMKVEFMNDDY*
>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML

117

NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN761_c0_g1_i2.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i2:87-2576(+)
MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*
>TRINITY_DN1936_c0_g2_i1.p1 type:3prime_partial len:1894 gc:universal
TRINITY_DN1936_c0_g2_i1:5680-2(-)
MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKKVSNNMTKL
WSLTGTQGNRWISANVTFNGGSQFQMAIEAIRGVEYKGDIAIDDITVDDGSCNADNGQKGNVTS
YGKCTFEKDKCGFKDGNTSTLTWTRHKGKTPSKGTGPLVDHTFGTGLAYYMYVEASNNPMQSA
RLYTTYTNLDSTGSCLSFWYHMFGPRTGELKVYINPPEIGKEIPSFSVGGEQGNLWIRGEVTVNTTT
ALVVFEGTTKYSYLGDLAIDDVSMERGKCEDPDSCSFQKDLCAWYNLPKSSGLDDFDWIVGAGV
TPSRFTGPTSDHNGDIAGKYLFMESSSPVKMGDKTWLSSELFNSTGKGKCFVFFYHMYGRDVGSL
NIYVNTSSGVELVWTQSRSKGKQWQNGQVDVERPGTYKVLVEGVVGKGYLGDIAIDDFKFKPGK
CQIVPSNASPKKPQTTMRPTTKRPTQPPTPILDCDFEFGVCSDWRQDYKNDTDNWKVGKGTTST
AGTGPSFDHTKGTIYGKYIYLEASYGRLNETARLISTSIPATGDTGGKCLTFWYHMYGPHINRLNIY
VMIGGHTGKPIWSRVGTQGNKWNKGQVTLVGRQPFQAVIEAVKGAKYQGDIAVDDVSLSSKKC
PQPGATTCTFENSQCGYIDDTSSDVQFQWTWQSQATSSLNTGPKFDHTLQSVSGFYMYTEASNA
KQGDKARLISPVNPGTSGSCLKFWYHMYGAGMGTLSVRLLVNNKLQSVPLWSETGNKGNEWK
VATTTIKTKDAYQVVFQGVIGTTYASDMAIDDVKLSDGECQSPGFCNFEDGLCTYANSKTDDFDW
LVGSSNTPSSFTGPKVDHTFGNASGSYLFLEVSKPIKAGDVAVLESQQFNAVGGKTRCLNFWYHM
YGSDIGTLQVIYKVFSGSQQERVLWKLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSG
YAGDIAIDDIQFTTLACRVEPSIANPTPTTPKPPTTFPKTAPPTAAPTPFSCNFEKDFCSLTSDSTAVF
NWTRSQGYTASQNTGPSTDHTYGRGFVKTYGPGSIRHAAGMCIHISMGGHTKPKDETALVLYNG
CGQDRTEFKYDNGLIKSTQYNMCFKLKGASTSAGTKVVISDTCTNKWKMLANGAFQDAKTNLC
LAPSGKLAYPQNNSPLIVSKDCKAKGVIFTFSPTMGFYALIEASAPQKPNDTARLISPVLNKPKCLS
FWYHMYGANINQLNVYTKSPNGVYGNPVWSKFGSHGDKWRPAHVYMNPKSSSYAYAIEGVRG
NGYEGDIAIDDVSVSDKCPAPVECTFEETNPVACGWTNLKTDDFDWSIGQGATSSQNTGPSNDH
TYNDQRGKYLYIETSSNLKAGAKALIQSPVYRGNGRQQGQCFQFWYHMYGASIGRLSLHLDQVG
SSTTKNRAWIQESDQGNRWSIGQITIKSQAAFQLTFEGIRGKSFTGDIALDDFRMFDGPCNNIATCD
FENEKCTWKNSYHKDDFDWIIGQGTTLSLNTGPVTDHSTNSGDGHYIFIDASRKKQGAKARLYSE
IIPRGFFTFIPYCIYFWYHMSGPDIGTLNLIAKHGKGKALEKVIWSLSGNQGSKWLQGTAPVTSSVD
FHLVFEAIVGDGYKGDITLDDIVYKLGLCSISPKAADPKLISTTSAPTPIPTTAVPAMYDCNFEKNSL

CQWKQDLTDQFNWTLVQGQTPTLGSGPSVDHTTGNKTGYYLFIETSNPRKAGDKARILSPSMDS
DKDHGHPHCLKFWFHMYGPHV
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-2869(+)

MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVNQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN1058_c3_g1_i1.p1 type:internal len:485 gc:universal TRINITY_DN1058_c3_g1_i1:1452-1(-)

IGSLTDWRCVCNAPGYYADANNSRRCRKEMCSENDIDAEKICGTGAISCVGPVVSPICFCDVKKN
VVSSTDGSRCIPASCKTNKTAITQCGNGNSCTGSSDNYICVCNSYGYKLDDNNNQACVEKTCSDS
DADFIEICGQGGLSCTGTMKKPVCECDHTKNFVPSDDRRSCVLASCRANPVVDAACGNMNTCY
GSESSWICLCNAPGSMLNPNNVRECLTGTCENGDIDVQTVCGRGALSCKGSVASLTCECNNHKG
YVQSPDRRSCLPSGCRQNTTMQEQCGEVNECIGSLTDWSCICSAPGYRPHDSDQMKCHRRMCY
DANVNPVEVCGVGAIGCNGSVVTPQCTCNTSAYYVPSLDGSMCIPAPCHSNKDALKKCGVGNS
CFGTTNNYVCVCDSFGYRLDDTDPHKCVEIQCDDDGVDIEKICGQGSTICDGTARKPFCQCDHA
SHFVPSLDSSSCLLASCRANGTVTDMCKDGNTCFGSM
>TRINITY_DN1369_c0_g1_i1.p1 type:3prime_partial len:1577 gc:universal TRINITY_DN1369_c0_g1_i1:93-4820(+)

MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN

KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV

>TRINITY_DN11248_c0_g1_i1.p1   type:3prime_partial   len:1700   gc:universal
TRINITY_DN11248_c0_g1_i1:111-5207(+)
MEIRSLFVAFIYIVHSINAQCSSPWKSYKDSCYLFTAVSTVSPGHTWEDSRFICQRYGGDLLKLDND
NETKYINSQFDDLKIKYNHYWIGLNDIKKEGDWRWADQAPLNVTTQWRVSRGEPNNWQGNED
CIETTYDGQWNDNECSRMFGYICERSKDAVIPVTPTLPPFPTATDKPTTCEAGWIPWGTSCYGIIRG
LAKNFQDAQADCLRRFGDLVVINDQAENDFISNEISRSVGGLWIGLSDTYKEGTFYWVDKSELNF
TSWRAGEPSNDYGNEDCVEIYGRWGPGQWNDNHCTALRDYICEKPGGVHNCPRDWVSYKNY
CYQINAHPGQKVTWEDARKNCLDFNKAWRKSVNVAQADLVSITNLEEQKMLQKEFSKVNIKN
DNGFYYWIGLTDKNSTGGFYWTDGSTYKYSNWIGSPQFASQCVRSNVIGYQGGSWSKGDCSEAY
NYVCKVGRGQDRCYNPLGIQSFAVPNKAMTSNSVLGPSTPALAGRLYMKAGNSLDGAWCAGN
NTKTPYLQIDFGKMQKLTYMGHQGKSNSDAMVTSYYIKYSQDGIVWDTYGYIPPAQYYKFKIYIG
WRTNYEKVMNLPLPAPFIARYVRVYPLEWNIAPCMRIDFYGCQEEVDNQRCGLGWREDKKTKN
CYKFHNQITTWDSAQELCSIQGANLATIATPDEREFLSEQLGEFKSLVSEFWIGLNDLDYEGVFKW
VDGTPYQLSNWYYGNPKVRNEKSNCVVVRTTDSAWVNTECTVFRKFICKRNYISPYTPKESYNG
YVYSKTDYFWPLDSATDFEGSLPLTLNGNVDRVPFPIDYDVGVSRYALNVSGSSGFFKIDVANDVC
IHHPDADSCPHGITVSFVFKMSKKSSSKRQVIIDTTEKNKPLGYKVYTEFGSIYVNLRGHQKSYSGS
TVYNAHIFNHMTFTWSSLKGLSLYMNGKSRVFDLLGSYAKDYPKVDYGKSLLIGISGDSQDPAEL
MIRSLGIFKQVLDAKSIEAIYLGEFGTCKSHQFAHGSYCYEYNSTEVSWSNALSTCRDNGGDLISIH
SPVEQAFFNLKIAQYNYQRTNWIGLNAKSKNSFFKWADSSRLEYSYWAPLEPNNNNGRREDCVE
TFANGGWNDALCYLRNPFVCKYSRALHIMGSENTDDKEYKVFFSPYQTLTFGCPLGRSIEILTASY
GSVKDGCVKDVKDKVSNACVKEHCVRVQASDFFFNKINPCKDKNRFALKRLKVTYKCNLATPE
FDSTGCSNGKDSENSYRVFDKSNICYKLYRKPKTFKEAQKVCKDDNGDLVRINSRETQVYLTSLLH
TMYQKTDIWIGMMYNSTTQNYEWLDGSHVYYTNWVNRQPDPRNGDYVKVGLEEGAKNFLFW
KNGEANETLPFFCQRVKVGKTTQAPPTTQPRTGTCPKGWFTYNKNCYYVNTNRLSFPDAQAEC
QKYGKSSHLASVLSYEENRAVFYDVVNATVDFAWFGLTNEAIVTGFRWVDDQPVSFVNWYTNEP
HKINRHLCVGMGSGGKWIDLACYLKYPSICKLPLGEVIPTTTPLPTIPPTQASGLCEPDWIHYNGS
CYNFANRTSYADFHNARVTCNKMGAHVATIHYQKENDFISAQLKRMYIPNAYIGLTDFSIEGQW
QWEDESVVSYINFGEGEPKNWHGMEDCVVVKSIGEWNDIPCNLKRSFVCKKNNGTVVKTVNTT
AAPDSGYCPSGWKLYGNKCYYFRYGE

>TRINITY_DN10485_c0_g1_i1.p1   type:5prime_partial   len:604   gc:universal
TRINITY_DN10485_c0_g1_i1:2-1813(+)
NYSRLKSYFVAMKRTTKRIALAAAAVFLLVVIVVVVVAVVVTRDDDEDEILTAKHEPVEAREYSK
ASVAADRLECSNIGRDMLKRNGSAIDAAVASLFCIGLLNMHSCGIGGGGFINFYKRSEKKAYIYDF
RETAPLSASENMYVNKSQERLSTVGGMSIAVPGNVKGLHYVWQKHGKLPWGDLLDPTIKIATDG
FKISKAVGDKIERESTNKLYLNEGFKEFLQKDDKTWYKTGEMLKATLLADTLKRIKANPHDFYNG
TMADEIVLDINEAGGSFSKKDLEDYKVTEREPVTTNVKGYTIYSMPPPGSGAVIEMTMNILEGFN
MSEANIKDNAELIKTTHKIIEALKFAFARRPLLGDPSFVADVSKVLTAMLNKTFAEELRHKIKDTPY
PNQTFYGGFYSQHQDPYGTSHLSILSEDGDAVGATDTINYGFGSGVRSTRNGIIYNNEMDDFSTPG
LQNLWGYLPAKSNFIKPGKRPLSSMSPTIVTNSDGDVVMVVGASGGSRIITATALTLIRTLYLNEEL
GRAVSEPRVHTHLLPYEVYINDPYTVSEELQDGLKDLGHKLVMSKYWAAIQAIYRKDISSPILAKC
DPRKGGLPAGY*

>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG

GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*
>TRINITY_DN1676_c0_g1_i12.p1   type:complete   len:1631   gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL

QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*

>TRINITY_DN991_c0_g1_i2.p1 type:complete len:3229 gc:universal TRINITY_DN991_c0_g1_i2:278-9964(+)

MKKKMKVGDLLYSKTVMFLMLLFVISVSSEDLLDRNQNNAYFAKYYECPVGWVLRCEKCYLLVE
TAKTWTDARYYCKKHGGELVTVKDDSTNFFLARYVQQTNKKIHNVYIGLHDREKEGDFKWSDG
SEAIEKEFRWLPGEPHKSLTNENCVEMFTRSNQYLWNDAPCSDELSFICQMPACVQGSNRCDNG
KCVSKQAICDGVDDCGDSSDEKNCTKCGGYLNGMTGTFQSPNYPDKYGNNRRCSWVIEVPTSH
KIQLAFKDFGIETGFDYVEIFDGKTLAAKSFGRFNGDENPELIMSTSNQIRVTLVSDMTTSFKGFLA
TFKAIPDKCEFDLVIPKNGYEYIKSPMYPDNYPDNKKCIWNIRSEDPFGTLTMMFVELDTEENNDF
IEVRDGKGVKDLLLGRFSGENDVKFMSPIFSTAKHMFVKFQSNYMTSKKGFRAIIRSGCYAEINAS
QGMITSPGFPYQHYPKLIQCTWKINEPDNKAISFMFHRFDTELNLDVLYIKDKSGKIVGTYSGVLS
NNALQVQWILETSQSSLEVTFTSDVTYTMSGFNVTFSKGCPSISVLGGKVKGKSHYGGKISYECDE
GYHLRNGKTRTCLYSGKWSDPMPYCAKINCGHPGVVVDGGFQTYPKKDNFDVNTRLVYYCDA
GYRLIGNNERVCQNDSTWSGSQPECKLSFCDTLTTPKNGKIVGDDFTVGQSVTIKCNPGFNIVGV
TTLTCGKDGKWNADEPVCEAVTCPIIKPSDNMEVLNLPNNTDRFPYGAMFDIKCKNGFELNGEN
QIKCVAPGIWSPKLPKCYDVNECLQKSSACKGVGHQCINTIGSFKCECKNGYQKNGANTCQDID
ECKISNATVKCSQKCINQLGTYKCDCEEGYYLYSGDNSTVSRIELRTAVVNHTCYGVRCSVAPIPD
NGFVINYGRRHPVRLIYQCDRGFVIKGNEMVMCQKDGTWNREFPDCVHAGCQNVTVAKSATF
KVNGTKLSDGRYKLGTEVIYTCARGFKITSGNLRQECIQNTTHAFWSGELPVCERKSCPTLTAPVN
GKVSSMNNLFESEATFTCDDGFQLLGDAKLTCTESGKWSGATPVCAASSCPYPDVPKYGEFVGRL
ELGRRVIYSCYKTGYTLVGNKERTCLYKKGTGHYWTGDTPLCKDITPPVFTCTKQINVQLPRSENS
MLVKWDVPTATDSTGKRITVTVSPDIHPPAKLKAGQHNIVYTATDKAGNNATCTVVVNVQDKQI
PRIKCPPNVEIESDFPAKVTWDSGLFSDNVGISRVSFNPSNGSTFQSGKYHRVEMTVEDLQGNRDV
CVTEVYVKGCGCESNKSCNSIAPHNGGISTCHINMGITSCSLTCPKGLSFVQDNFKHDNVMCLPQ
GKWSEKDIPGCGERKSVTSCLNAVLEFEYNTIDTSKVDEDNLATYFNDLFKNFGNMKTTYCDAV
KFIPNEYELKSKNIELLFKMEPKGDILKDALKEVLEGCKTELENRFQSSKQDILNLVSHASVNLQA
KSIIKFDAASCCGDSKYYCCPKGHSVRAKGANVENIVCLPCSPGMFLNASSNHCTSCPKGYFTDT
SGNEACQKCPDNLNTLKHQSTKCTEKCPLGTYSSTGLQPTCRKCDYGEYQNEIGQTMCMVCPSS
TTTASRGSQKLEDCKAPCQLGHYSDTGLKPCVPCEKGTYQNETGRSVCKACPSGGIYAGIEGATK
EEECPSDNACDMKLCKNEAKCVPGVYSYQCLCKPGYKGKNCEIDIDECETKPCKNNGTCVDLV
NDYNCTCIPGLTGKSCETNVNDCKNDTCINAGVCEDLINDYKCWCPLGWEGKRCEKFINKCLSS
PCQHKSKCTPLLNAYKCDCTPGYKGHDCETDINECQSSPCYNNATCVDLLNDFECKCQPGFKGE
LCAIDINECVGSPCFNNATCIDGINGYRCECQPGFAGQNCSINVNECDTKPCLRNSTCIDLINKFK
CECEPGFYGDRCEFEINECEDEPCKNNATCIDQVNAFECLCPLGYKGVRCETEINECDVNPCKFG
TCIDLIGDYRCNCTPGYEGRNCDILIDNCVAKPCENNATCTNQVHDYSCKCLPGYEGKNCSIDTN
ECLPDPCNGNALNCTDIVNGYICYCKPGFRGTNCSEEINNCIPQPCMHNSTCKTIIETNDYQCNC
TAGYEGKQCENETNECLGSPCQNNATCIDKLATYECVCPTGFTGFNCETNIDDCKNVTCQNNG
MCFDKINDYYCRCHATHKGRHCEKKIPDEVDIKLPGGTGSVIIHSNISTVQEFSLSIWVRYLGSNSR
GDFLILANSNGKVMTSHFLKLSHQRVMVEFNGNMDIFSLDKMLNDGLWHHVFVSMSGLSSKIV
VALDSKVIIEETKSYLNGQSFFKPSGYLIIGKNVNRTGFFSPSGFAGEISQLAIWNRVLSPNEMNNLA
SNCSVDLKDSIIPWVGLLDNAGSKVELLERWTCGTNVCPAGFMGRFCEILIDKVAPTVASCPKSKK

VVSLLTSTRVNWPEPRFDDNVAVTEITRSHAPDQVFGWGDYVISYIAKDAFNNSATCVFELYVTPY
DCPDLEEPNHSASATGRWLWGLFFDFQCKPNYELAVPKPPFYSCGKMGTWSHGPPTYMDNPKN
LLPSCTGTARPIVIGTNAFTYSTTSKCDETFKAEFMKQFKRKVLEIHQYFKICGEKCDFANIRVKCT
DEDITTSRVKRDASLNEVKVYFDSKFNESLSNSFNDTQTLQAAIKNDKVDLSFTVGGETITSDKNN
VDIAEPKLACNPGWKFVKDKCVLCPAGTYRDSSMIKCELCEAGSYSSLGSATCVKCPHPKITYGT
GAKSMNECYENCSSGYYFNNGSCSKCQIGFYKSFKGLEECTQCPKGTTTTVIGASRLEDCSVECPL
GHELVGTECQPCMNGYYRSNKNQPECLPCPYGTTTYLVGSASNICYKKCELGFESSNDGKVCMP
CNTGYYREEEIQRKCLKCSGDKITLVYGAKSKNQCKEQTGTKFDVELRFTSLEWNNTLIDEDSAYF
RTTAYNIANKIAKIYENDKELLYIKIINFSEGSVIANMTISFEKEKKDPLEVLRKTVATGKLDGLSVDP
DSFKTDRCEFFDCPKDRVCWYNSTGRGCKCKPGFYETSDGKCFAGCEPDYCLNGGACVESDSGR
NCRCSKEYSGERCEKEEKDFSLALIIGLVVVAILILLLLCYCLRRRKRSGNVSLYKYWKSEDKEHGLS
SIPNTPIVQPVKGDNGDIAYAAENKLVEKDDEEQSESSDRK*
>TRINITY_DN165469_c0_g1_i1.p1   type:complete   len:2668   gc:universal
TRINITY_DN165469_c0_g1_i1:41-8044(+)
MVEEDLNRSKELDIPKTLAYCFHNVTTVSLNRKQDIFRLLTQCIESQGCQDGHLKAVCKIISLTVM
RYRDSKSRQLVLKFVQKFLDIHELQAVKCLLTEIHILAKQLIKCGASLFSASCGLALLSWCSSISKKK
VQEASILKILYEVEAMCYSVICTCDSFRVKRLLKRAYLYLQDGKDAEQLENCLGVIISNSNCQLESIC
LVGFIFQYLTTKKEIQRVDEVKKRSLIDIIIKNYIQTKVKADYHYLKHAVPFLKYITHDDFKEILPAIE
KGLLRNPETVLQGVGYLLEGLSIDSSNYIEELSKCIAVHLISKNASLQADAVFAVSVIAKQCSDFSAI
NHLLKQLIKVLNESEGKLVFPEQKNAVLQAIKSVDCTSVTGSDHKENLATTLHDGLFPFILLEGHE
GVLTQALNVMKTWCKYFKNNLPKTFVDNIKKGLSLKVSTTVIQAHYLLVVSEALKGNTVSQASG
LLETLLQVIEKVKGQSHLINNVFLCISSSMVLLKMFLSDDVQVNAAKEDSFWNVILDPVKKNLVSE
KFLLSHQKEYFYHLSQCMNTMFLNYSSRFSQKLLEPWYRAFNVLMVYGDWKTKKSVKILLSKMF
DSGNYDTDEFQSRLFADLDSLLDQEMSKSSKIEDTEDILVVNHVVDAYLFLCIWNKKDINEDEVLA
VLRKCLIYVHHDTIYQHDSSLFSKIGSVLKKDVAKEFVEKYKDDLLKYFINLESLSKADNHSLKTLL
SLYPEALLDTLVDEIIKYFTKPDLINVTSQEYEIMKTPDGVAYDQSVFESAKAANQKSGNLKRESKA
YSYKDQKAEMELRKELEKKKGKSDKIELNKKQKEQLEVILTQEKAIRDKLKSLEQGVMKHASILSL
LLDMDSDLLCYHYLDLMNLLLCLCQSHIAAPHVIPIYTKLSEKLFEGDLKHLGQLVANVILRLKKP
VCELPMGWSVENLPEQAKRALNTLHTFVNERNVYLMMTYTRKKTFSVLVFSYCLPLLKSILKDQ
GALVKGSEEFRMKALQLIHIHAKLRSPMDMGSEKNDPELLPRKEMLQILSDVIVSCEGHNKEAKV
QQQATLAFDEVCKCASGRLGCAVATEEEINILLSNILSQCSILRRVSLKGLLEFVDILPTENVVIMTQ
LTRSVLIGRFDIVDENATLAKRLWDEADICIEPSMIQHLVENVTHPLDDVRLAASLALEFSLNERKE
VDIIPQLLDIYFEKLKIPPPIIDNLGRVVSQQFVDSWEARQGVGLALEKIAETVGEDKLGDLFSFFVP
KALGDRNESVRKQMLNASLQYVNLYGQKNMDMLLGVFQDFLDSAPDSKELDTIRQSVIILTGSIA
KHFDKTDPQIKSIFSKLMAALSTPSQSVQQAVANCLPPLCGAMKSEAPELFKNLLEQLLESESYGE
RRGAAFGLGGLVKGLGILSLKQQNVIPTLNDAIQNKKIWKHREGALFAFETLCTMLGRLFEPYVV
HLLPHLLLCFGDGNQYVREAADDTAKAVMKNLSNHGVKLVLPSLLKALEEDAWRTKTGSAELL
GAMSFCAPKQLSSCLPSIVPRLTEILADSHLKVQKAGQQALRQIGGVVRNPEIQEICPIILDALSDP
NKHTVACLQALLSTSFVHFIDAPSLALIMPTLEKALGQRPTETKKMAAQILGNMYALTDPKDLQP
YLQAVVPGLKKSLLDPSPEVRAVSARALGAIVKGMGEVDDLMPWLLETLTSEASSVDRSGAAQG
LSEVLFALGKDKLDKLMPDVIATSMKTELSPNIRDGYLMLYVYLPATFEDQFLDYIGLIIPAVLKGL
ADESEFVRDTSLKAGQRMINMYADSAIELLLPQLEAGLFDDHWRIRLSSVQLLGDLLFKLSGVTG
KQTTVSEEDDNFGTAYSSQVILETLGFDRRNRLFAGLYMGRSDVALGVRQAALHVWKVIVQNTA
KTLREILPVLFELLLGCLASQSYDKRQVAARALGDLVRKLGERILPEIIPILEAGLDHEDGDKRQGV
CIGLSEIMDSTSREMISMFEDSLINTIRKALVDELPNVREAAASSFENLHNTIGHRALEGVLPTVFQ
KLDDPQLSNYALDGLKQVMTVKSKSVLPFLVPKLTTPPVNTKALAILSSVAGEALIKHIEKILPAMI
QAIQVSQGTGLDGDSEFESTRTLILSVYDEVGVRTIVDELTTSSKSQMPGIRKVAASLLMVFCKETR
GDHVPYIQSLFRTIIQLMNDVDQDVVASAWGALDALVKRLDPSEQLQHLSSLRQAVRFIKDDIRN
EQLPGFCILKKGITPVLSIFREGILNGPQEIKEQAANGLGEIIKLTSPEALRPSVVHTGPLIRILGDRF
NSSVKVAILDTLGLLLQKVGALLKPFLPQLQTTFIKSLNDSALGVRQKAAWTLGLLTVLHTRVDSL
FTELKNGIKNNEDSAICETILGALRSITLKAGSKMSEGIRNTLYETLVELISSNEDGIRLKAAAALGA
MCQILPQDQIEQLLNDNLLDINQMLDWSICHGRAVALSYALYHAPSQVFDAVDEDDIVEAVVKY

STYDRVPICTYGVHSLGHLLMFSKDNADVAPQIVVSSIKKTLLNSSVDIRLASLSTIKHVSRNTPEV
MTFERIRYLIPEFISLLRDRNTSVRSSAEITLAFTLQMDKNDILFDECVNTISEASHFLEEFKKNTFSK
LNDSLATDKDDYFFAT*

>TRINITY_DN2003_c0_g1_i1.p1 type:complete len:370 gc:universal TRINITY_DN2003_c0_g1_i1:89-
1198(+)

MGVINTLVVLTLALALEAADHMTPHEYEFWIKTATSCTQEIYEGDTSHSTYSDLKTKLEDGIKAAY
TNNTKYFSARVKSMQCTTKPHYVAAKIMLIMTGHFTFDEALADLKNEIMDNVLDGSALNLTDN
MLRASMDEGAKPKEKVTLKFSFTNELFCENMATLKVNLAKRVILSDGMKRIESNRIVIYEHECNE
EANKYKKAVMKFYIYDDNDFLTADAALTNLAYQVVDQLQYDGTAWKLGVIFHKHINDVDYESE
SEDEDFTEIEKTYIGFGAVVGLLLLIVIIVLFVSCICPNACGKQEDPYLIEDRPSRFTNVNTHRDAYSN
QVYSKEEYANGYEREVEMDTVLPHEEQTVFHGNQPNEGMKESV*

>TRINITY_DN984_c0_g1_i1.p1   type:complete   len:1485   gc:universal
TRINITY_DN984_c0_g1_i1:4558-104(-)

MVKSSWQQLLLLLLILFCGFQSFEIDGEDKPGSCPPPLETLECNEVEPGELSCLTDSECSGTDKCCSD
GCNLICAAALPEIKGEMGAKGEPGPPGRNGTTGPQGPKGGAGIKGKKGKQGKQGNKGRRGRP
GPPGPPANDTEPGPDPLTEDDHGKPGPGGILEDDLAEGGVAPGVLTTQDAPEGEKGARGRAGP
RGPYGERGNAGPIGDAGEVGDKGEQGPKGQPGPPGDDGQDGDRGAPGPIGEPGERGERGEIGK
QGRPGIGGYKGDKGHPGLAGPKGVGGEEGLKGDTGESGPVGEGGPAGPRGMPGKTGNQGPPG
PTGPTGMSGPQGLPGSAGLTGAPGSPGDQGPQGPKGDMGPVGQRGERGEQGERGLTGDNGPK
GERGLTGTAGRPGRDGAQGQTGTEGRPGLIGKRGPIGQPGSQGSEGPIGLPGKRGESGDIGLQGP
DGDKGQIGDSGAPGQTGGAGLPGRRGIPGREGPTGPQGETGRRGPPGLLGTPGSPGEMGSKGLR
GERGAPGVIGGKGATGAPGSAGETGAPGDRGLQGLQGKTGRPGKTGSSGIPGKDGRPGSAGPQ
GLRGVRGAVGLQGIKGSAGSNGLVGENGALGKKGDTGDPGLKGSPGAVGAPGKDGNVGERGV
PGAAGERGAQGPIGPIGQAGPPGKDGEPGKTGERGSDGKLGPQGLRGAPGLRGPNGNPGVAGQ
VGERGEIGADGAAGSKGPNGMLGTIGNPGAPGLAGSFGQKGPDGQKGAVGERGPKGFRGEDG
RDGERGGDGIAGPSGPQGVSGVKGEMGRTGANGIDGKRGLPGLMGPPGSTGPPGDEGAQGQD
GAKGIKGAMGPRGDKGPAGSIGEPGIDGGAGPIGSLGGSGPKGGRGSIGPSGEQGAQGLPGPTGR
RGVQGNRGSIGPVGLEGREGVKGSSGEPGMPGRTGENGVPGMPGKDGRNGDPGEDGIPGPMG
KPGMEGARGPRGQLGPGGLPGMPGLQGIQGVKGEPGLDGGDGLKGRKGSTGMQGVMGSSGLP
GKPGDDGAAGEDGIPGTPGDRGAKGDIGDVGFLGPIGPPGSPGFSGDIGEKGMIGAPGEQGNDG
EPGNPGEPGYRGLIGNPGAKGNKGGKGEVGDRGHKGYRGMRGARGPTGNVGDQGDDGLDGL
KGAKGPPGLPGPRGRTGREGPSGPIGDPGINGTKGFVGIRGNPGEDGSPGPAGPPGPTGNPGFPG
GLFGGALNYYPDQQQAEKGPLYGYHYGYNYRYYKSRREEDTDKEEIKAKNKKANRNVFRYAEE
LKMRMEAEIKPDGSEEFPAKTCKDIQMCFPDAKSGSYWLDTNGGSKTDAYVATCNFTDDVTETCI
APTVSSFDRKRWVTTGGKSQFTWFMKDLLEIDEGLTYTASVTQLKSLRLASTKMRQNVTYHCKNS
YAHHDQLENTAKTFVKLMSDDEDELHALGGRKERLDVLSDKCILKDDVWRKAVFEFSTKRTSKL
PIRDIAVFDVYDENQEFGIDIGPICFM*

>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)

DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA

KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN69276_c0_g1_i1.p1   type:internal   len:887   gc:universal
TRINITY_DN69276_c0_g1_i1:2659-2(-)

FDRPKYQYSVFENANIGEAIDTVVVTQNTEINVNYSFYKPNSLFTINSMTGEISIAANLDYEEKTQH
FFHVEAKCISGSNIFTAYTSVKININDVNDEAPVFFGTNEAVVPENSLVGTPVLIVQASDADTGNN
GRVRYDIIDEVENLPLAINSDTGVIFVSGNLDYELKKSYSLPVSATDLGSPSRRAISMIKISVMDKND
NSPVFSKNYYELAIAEDQPSQLIACLAASDSDSDENGKLSYSIFLSDNSLAETFFINGTGCLSTLKKL
DRESKDSYSFTVVANDNGNPSLKGIAEVHVKVIDINDNIPIFSKSQYLLRISKNTLVGSTIISLDAVD
NDEGINGTVNYSITDGNIGSSFDIDSGGTVHLVRELSNTIAKYVLTIQAKDQGMVTSFLSTTKVEIE
VIGNSTSSGCYPLFTSSIYDVEISENIAINSNIITISANCPNNSNILYSLIESSINSGGKFAINGNGEIFVV
GTIDFEQTKFHSLIIKAYAESTPNMFSTSIVRIKLSDINDNRPIFSRTSMVIFLARNSKAKSIISTVYATD
KDSGSNQEISYQIQPNIQPSDLFEINALTGDVILSREILFKDIKNYRLQVLANDRGTPSLSSPQLTIIDI
KIYPDNMHTPQLQPSNHVKFPENSGINQLVYQAQASDLDIDLSIEALQNRPEAGNFGKFTYHLRN
TTGSQFFSISETNGRIENLISFDREKKESYDLIVEARDGGSPPRKSIQTVVVKISDVNEIPLFELSSYVF
YVSESSKIGLSIAQIMAKDNDAGQLGTLKYFIKGGNVGNKFSIKENNGILILSDFLNYMEQSVYNL
RIYAEDISNRPLGNNADVVINVLQVNASQIPVFDLSLYTYQVPEEQTSTLGTITARLGANRQTEIIYT

>TRINITY_DN22240_c0_g1_i1.p1   type:complete   len:513   gc:universal
TRINITY_DN22240_c0_g1_i1:155-1693(+)

MFRYKEKDDNKILQAYIKYLADVVLTLDHTKMTSKEIFSLANETFQFERELYKIHIPPEKLTTIDQTY
HKATLSYLQELVPSVDWVPYINHKLKRANKSVNKDEPILIDTLEYFKKLDEVLKKTPKRIMKNYLL
FRTADFYSVLLSDEFIKLKDPLYLAKFGVYKEPPRWKRCLYATEAKMGMALSSLYVKKKFTSGSYEE
ANKMVKAIREAFVSGFPDLKWMDKKTLEVAQEKANFIEQKIGYPKYILDSVKLDEKYKGLEFDG
GFFDNDFKGDEFIVANRYKHLHEPVNRDEWELTPMTVNAYYNPSENQIVFTAAIMQPPFFKFDYP
KSVNYGSMGAIIGHEITHGFDDNGRQYDKNGNFVSWWTDKSVKGFKELSKCFVEEYSKFTEAGL
HIKGNVTFGENLADTGGLKAAYKAYKRWVEENGEESLLPGLDKSNDEIFFISYSQSWCTEELDSRII
TQINTDVHSPAIERVRGALYNNEDFARIFKCPVGSPMNPKTTCSIWTDNSH*

>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)

MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN

>TRINITY_DN2576_c3_g1_i1.p2   type:complete   len:145   gc:universal
TRINITY_DN2576_c3_g1_i1:807-373(-)

MMHKSSFLVFLVLGTFGTAIAIKCFDGEFIGGKIPSWVPSLPKPKSKECDSKFNACFTITMNKTFNV
MKFSKTFEMKKGLCGNDMAGCNVTCAKYTKAKSCEVSCCKKDDCNQQYFPTSDSIIKTSSIFVTV
AGIFYVFLNLLN*

>TRINITY_DN10094_c0_g1_i1.p1   type:complete   len:264   gc:universal
TRINITY_DN10094_c0_g1_i1:1210-419(-)

MRHILKVFAVAFVLHCIDRTLSLPVSPVPPLLNKLLKDQNVTLGFILKGLQGPPGRDGAPGSSGLP
GPPGPPGWKGDPGTPGMNGAPGFMGNPGSPGAPGNDGLPGPPGLPGAPGWPGGSGMQGPPG
MPGLPGLPGSSGPSPIRYNGTVKCEEDTAWLRCNEYKHISIMSAFWGRRNFGLCTEHTGNLITNK

YCPTTPLFLTKVKDACEGTTMCEIRCTKFFFHDQSCLDVYKYLEVYYKCIEVINGHEVVNEDNLL
MANFLG*
>TRINITY_DN1071_c0_g1_i3.p1   type:internal   len:375   gc:universal
TRINITY_DN1071_c0_g1_i3:1124-3(-)
DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTPATTTESTTTTLPTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTTQATTTTTKATTTTP
ATTTTKATTTTKATTTTPATTTTKATTTTKATTTTPATTTTKATTTTEATTTPTTKPCECKVLQPVGV
SDGRIPDNQMTANSVLVNVSGPTFTGASQARLNNKPSKDGVGAWEPAQQEEIYLEVHFNKIEDV
REIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDEDLYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVS
VGDPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPT
>TRINITY_DN2217_c0_g1_i3.p1   type:complete   len:566   gc:universal
TRINITY_DN2217_c0_g1_i3:1820-123(-)
MLRLVLIAISAAVAYGCSPLKHGCYAHSKSDAHLLHSDNSEDTHADIFSGTVIDWNNFGPYLQKA
ACRCNKAAAKAGYPFFSLRDFGECHGVGKGSTSFSALNLKKSVYCFGTDLGICDSSQHKHCAGA
EEGEFIYETKPEELTLLSEGKPSKQSSTYLGNEKTYGSYLAFDGELSQKVKRTCCHTKKSAAPWIQV
DLLQPSTIYSIKLANVLENYRNRLNNVKIYVSNNENFDGMKQLCASFVHMKTIVQTFTCQTPLTG
RYVRLVNNNNFLHICEMQVYGVQNSESITCPIEKGFCVKGNGHDQNSGVIKMNSVDGNTDNAQ
KECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPI
EKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEVIWNQHNRGCYIHT
QEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENA
QKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFSKCNL*
>TRINITY_DN123121_c0_g1_i1.p1   type:internal   len:127   gc:universal
TRINITY_DN123121_c0_g1_i1:3-380(+)
LNQKLCAQQVIHLEITDANDNFPVFSQSRLSLNVSEYTEVGQVIATVRANDLDERSQGNLLFSILK
DEDFFGILSNGDNGVIFLKQSLDAERRLTHQIEVTVSDREGKSSLQNMEIIVFVEDENDN
>TRINITY_DN17095_c0_g1_i1.p1   type:internal   len:607   gc:universal
TRINITY_DN17095_c0_g1_i1:1820-3(-)
CVEHAHCKRNEFHCIGTMNCILKSSLCNSVKDCQDGSDEGPKCTFSSCNDTCSYKCQKQPSGVG
ACICEPGKILADDGHSCIDENECDQVPSPCSQHCNNTEGSFMCSCTYGYILQDDKRGCKLNVSKE
EELLFVDVKEIKRYYMRSKLLQPVFTNLSRGVAFDFDSASGKLFYTDVTQNVIYSSYLDDFAKVVH
GEKRILDRGLAIPDGIAVDWICKVIYFAESAANRIDVIEFNGKNRASLISANLTTPRGLALDPRVGY
LFITDWGGKPKILRSQMDGSNLKVLITEKVGWPNGITIDYYDKTVYWVDARYDYIDAIDYNGNN
RRNIVKGKDLIPHPFSLSILDDDIYVTDWVLNGVLKISKLPGTKKVEQLVYNLSRPMDIHVISEKRQ
PYTDNPCDTRKKGNRCDQLCVIKSATESSCLCQARYILGSDGRTCEPANEFLLFARSWEVRGISLN
ASYLNDVMTPVLGLNSAVGTDFDALSEYVYFSDVKTDKIGRTFIGNDKGGKIEWIVEGNLDNPDG
LAVDWVGRNLYWTDSRISRQSEIGVSKLDGKFRKSLIQEPLGKPRGIVVYPEKGYLFYTDWMRPAK
LGRIDMDGSHLMILVN
>TRINITY_DN30613_c0_g1_i1.p1   type:complete   len:975   gc:universal
TRINITY_DN30613_c0_g1_i1:154-3078(+)
MPVFHTKTIEAILEPVAQQVSQLVVLHEEGEGGNAIPDLSGPVNAVSAAVSNLALVAKQTAASSK
DEILRKEMPPAYSKVEESSNQLVEASSLLKDDPFSSAGRKSLINGARGILNATSALLLAFDDGEVRKI
LNVCRQVLDYIQVAEVVEVLPDCVTFLKNLSPGLLSMAQKVDNRIPDLTHQTHCELLQKHIKSTK
ANAPLLINAMKAFIVANNKGVGRAEAQENRNFVISKLCDDIIEIMRVLQLKVDDEYDLEDPCNL
MRKNRHKIMEKMKMAKDWLGNPEADPNGTGERALKDMIKQARHVGALSNDPQIKNLCDELD
GMLDRLSQLRAQGLGNSPEAIQLAADIDKKLETLAKLVDDAIAREAAAGTRLPAVTTEGQYDQA
MRWIDDPRHDPSSVGKRAVDALLADGRRLAEQLMGPEKQELVGTINNVEKLSRQLQDLKAQGK
GNTPEAQRIAAQLKKELEKLKGLLQSGATKSVLDAFLDTSTPIKQLEKAAKAPEDAPNREQEFEE
KAGAFEYHTSKMIDAAEQTSIHGKNVSKQLVDNIQAAAKDLAELTPQVSHAGKLLLLNPRDKAV
ENHFNDLKQGWINKAEEVTALVDTATDTLDFVKASEESMKKEQAGALDGIDQMNLAMVVGKG
GNMARMANRVVQVAKGEADNSEDPEFKQAVSVAATELDKGIQPLVLSTKAVAMNPKMPPVRVE
FKATSDGLIGRVVDVRKAIEPEEVPPPLPPPPQLEEEPLPPPPPEDAFAKLQLKAKSKVAPEVPPPRP
PPPIVEGLIAADESRELHSMLRAPEADNRIAVAAHQLHVEASKWEEEGNKLIQAARKMAILFAK

126

MSKFISDEEYCETHSKRELIDTAKMITAAANELNKHARDIAVKCPDKRMKHDLLVTIDRIPTIATQ
LKILATVKATMFGANDPQADIEATEMLVGCAENLMGSARSVVKDCEAASIKIRTGQGQVMQWK
RETDYDYYS*

>TRINITY_DN2113_c0_g1_i2.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i2:5257-146(-)

MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*

>TRINITY_DN26392_c0_g1_i1.p1 type:internal len:469 gc:universal TRINITY_DN26392_c0_g1_i1:2-
1405(+)

PDILIGASNSDKAYLFRSRPIITISDRLELNVTSVPLKKNCDNGDGRNYFCAVLKVYLSFQGISVSNK
FDLELSLTLDDDQVEKRAFIKTVKKNDTSLNSQFKRVLNNITVNTPVTEDFMVYFLVKADLDIQKP
IPIVSKYKKIEKSGGCGANPCPIFNIYGSIGSSIQVPYLRECGDDKKCTIDLVTTGSIELPGKEKEFEILY
GVTDEVYLNITVENLGEAAYLAYMKINASSDLDVISVNVNGGPNILWKSSNIDAETMQVEFSIAN
PIDKGGKYHILAKFSVGKQPRPSTPIYEFGMEAFALGEDKNMDNNRKTLTIGTKVETCIEVIGYSSV
PQVIYHSTAKQPPDVNATVNDIGDEILYQFLVQNKGNKPVDTLTVDIDIGAEKEKTTLMYISDLTV
DSVRCEEEKLNPKKFLIPDDISRTLNEESTKSSLKRKRRDVANDDGTEDKKGYKYSPLNCRTASC

>TRINITY_DN4815_c0_g1_i1.p1 type:complete len:595 gc:universal TRINITY_DN4815_c0_g1_i1:79-
1863(+)

MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI
DGIAIVEKCENVKCNVNTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGT
RGRDTICEDINECAIKNICGGLKVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSC
SKTCGAGDQKQTRSCSNPSREAPHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKT
GEEPKKDFSSFNGLSITDGETSRRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKK

YSSTKMEMQDIIDCNANIDIEKNLWDVYDVLAEHSICNYQVQKDLEMKADRIQAEITRCNNRG
WYSTILDAII*

>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)
MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGGQQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA
QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP
PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA
DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*

>TRINITY_DN13467_c0_g1_i1.p1   type:5prime_partial   len:782   gc:universal
TRINITY_DN13467_c0_g1_i1:2472-127(-)
LSEIFTGTLYNMYQPPPGFCFDDFCTDPPIQDDPKLFDMNVQERVNLFVEETCKQAESYKTDHIILT
MGSDFQYENAHRWYKNLDKLIKYVNEDGRVNTFYSTPSRYLKALHEADKEWEVKTDDFFPYAH
CPHCYWTGYYTSRPAQKGYIRESNNILQACKQLEGMQKDNLHYPSSDFLRRAMALNQHHDAVS
GTEKQHVSNDYDKRLSMGRVECQDLMSRAISSKYSRSHNSNAAKQFHFQYCDYLNISVCRITETE
KSFVINVYNPLARPVATYLQIPIDSKDVIVLGSNGEPLKAQYNPISRQTSYLRKFHKGYAAFVLVFE
VCAPALGYATYFVNQTHDLKKKFKEFVPQPAYVSKVKVDNDFIENSKLRLEFSSESGRLVRMIRKD
RDLTLTVDQQFFWYEGSVGNDKSRQTSGAYIFRPNKTEPSPVCAENIAKVQVIKGPLVEEIRQTFGS
YVSQVIRLYKDAPYAEFEHTIGPIPIDDKKGKEIITHFSTNIESAGKFYTDANGREMKERVRDHRDT
WDYKVTEPVSGNYYPVNSRISIKDSSLQTLIMTDRSVGGTSFLDGDVELMLHRRLLRDDFLGVGEA
LNEPGVDGRGLITRGKFRVLLTTPEEAGRSHREQGELMLLQPLLSFSANPFTKEEWMEKFVPIYSG
LTKSLPENIHLLTMERIEKNLMIIRLEHFYEQNEDPKLSEPVTVELRGLFADFEIISLVEMNLSANQVI
NEKKMLKWKTTKVKKDKEEGASSSDDAGSKRFGEVFGILLKPMEIRTFIAEVAYK*

>TRINITY_DN1936_c0_g1_i4.p1   type:3prime_partial   len:1762   gc:universal
TRINITY_DN1936_c0_g1_i4:5283-1(-)
MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKMANDNMTK
VWKLSGTQGNKWSSVNISFDGSSSYQMAIEGVRGNYYRGDIAIDDINIIDGNCDGGDGSKVSASY
GKCTFEKNFCGYQNDTSADMIWRRNKGSTPTGGTGPSSDHTLGTKSGYYMYIEASTKKRYLAARI
SKTYTSLDSTGSCLTFWYHMFGPHTGTFNLYINPPVNSTNTPAFSVVGQQGNLWLKGDVTINTTS
ALVVIEGRLTYKSQFYKGDMAIDDISMTKGKCQNRDICTFQDDFCLWYNVPQAAGLDDFDWIRG
SGGTPTAFTGPTTDRNGNIIGRYIFIESSKPAIKGQKGWLSSELFSASGNGKCFTFYYHMYGGSIGTL
NVFVNTTSGLELVWTQSGSKGRQWKNGQVNVERPGSFKVLIEGIVGNGYRSDIAVDDFEFKSGKC

SIVPAEASPKFKLTTIAPTTIKPTIPKNLIIDCDFEFGICSNWKQDKKTDVVDWTLSRGRTQSRGTGP
RFDHTKSTSAGQYIYLEVSKRKMNDSARLISTFIPATGDTGGKCLTFWYHMYGPHINRLNIYVMIG
GHTGKPIWSRIGTQGNKWNKGQVTLVGRQPFQVVVEALSGISYKGDIAVDDISVSSTKCTQPSSTT
CSFEDSQCGYIDDTSSDVQFQWTRSSLSTSSSGTGPKTDHTMQSETGFYMYTEATRKKTGSKARLM
SPVNKATSGSCLQFWYHMFGADMGTLSIYLKVNNKLQSTPLWSEQGDKGNEWKVATATITTQDS
YQIVFEGKIGRGYRSDMAVDDIKLTDGNCPPPGFCDFETGYCTYFNSKNDKFDWLIGSSRTPSRFT
GPNFDHTYGNANGSYLFLEVSQPIKAGDIAILESQQFNAVGGKTRCLNFWYHMFGSDIGSLQVVY
KVFSGSQQERVLWNLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSGYKGDIAIDDVQF
TSLACTIDPPEANPNGKTTMKPPTTYPRTAPSTPVPTEFSCNFEKDLCKLTQDSKGTFNWTRIQGY
TGSPGTGPSTDHTYGRGFVPKYGPGSLRHAGGKCVHVLNGGFNKPKEGNPLVLYQGCGQTRLEF
VFKYGYLKLTRLNMCATLEGSSTSSGTKVVLSNTCMNKWKMLDNNTIQDVKTGLCLSPFKGSDY
PSNNSPLVVDKDCKPKSRIFTFSPTMGHYAYIETSPPRQPNDTARLISPILKTPRCLNFWYHMYGAH
VNMLNVYVKTSNGPYVSPAWAKYGSHGDTWKAAYIYMNMTGPYVYAFEGVRGIGWQGDIAID
DITLSESCPAPVECSFEETSPIMCGWTNLKNDDFDWSIGQGKTASTKTGPKNDHTYGTSQGHYMY
IETSNAPAKATAYMYSPWYYNTGQKCVQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNN
TWHMGQVTVKRNNVYFQIIVRGTKGNGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQ
EDNDDFDWIIGSGSTNSFLTGPSIDHTTQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCF
SFWYHMRGYSIGNLTIYLRKVSNTKTLSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVRFIYLRL
FHCKICLPCY
>TRINITY_DN61_c0_g1_i1.p1 type:complete len:625 gc:universal TRINITY_DN61_c0_g1_i1:2929-1055(-)
MRAVILLCIAMCTMVYADVYFHNIRGSNNRLKGQNRNRDNAYRMFDSQNNDRGGYNVGPTPM
YFYTGSILTLEWTNQHQCGGPNANCDLILQYMCSENLRDGLEERTIPERNKDCKDDDCNTDIRY
GMHEDYDYYMNCKNRQRNPGLFLADQELEGTSAKYTRQNPDGDRYGYECPEERDHYPYWLPT
PWIDIAIMTRDLRRCNYYRENSQNNNAKYYCKPPQKYLDELKKRDPPSNLPRIPISQDDCERFHY
PANDKTDRGVWTRHDSWNVDPPECIAAPPSRDNHNGNGEDGYFNSYNFTIPNAPHKNCAIRM
RYNISTSDYDVNLDADGNGDPARAINIHDLVGIDTKKEATERGYVFKDYPKVYPMKGEIGKKLGL
ALAINTAQYFRTFEDRSHRTSFKARTPELEGVEIRNLNVKGKRGNIVQVYPAVEYGFVPDRMLAE
VGDMIHIQWTGSDRNPRNNDGEGPAGEDRSNIAELDQPRVAQVVADYNEYGDLTRSYPAHLDN
ATFLGLSRDELISLALAKGDCEFDRQGARSRTPYFDMGPVALTKKGIYNYLCTINNNFTNRSQKGT
AIITEKSKAGGGSKATASASKSASFRSVNGKDQEKRKYHAYNYFEQYKKK*
>TRINITY_DN4595_c0_g1_i4.p1 type:5prime_partial len:1639 gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL

GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN99404_c0_g1_i1.p1 type:internal len:112 gc:universal TRINITY_DN99404_c0_g1_i1:2-334(+)
SNLEAITKSLEKQHKFYQSKLFKLQTDIHGVALEITKLKTSLHRTQISSSERRSSLLYINLRILKNKTDI
AIKGGLDVKEEAMTMLNTVQNFMSVATNAQNAANQALKKYY
>TRINITY_DN942_c0_g1_i3.p1   type:complete   len:5105   gc:universal
TRINITY_DN942_c0_g1_i3:15631-317(-)
MKMKLALLVLFTGTTLAAPFWVLDDNLPRAEIKEVGCSGKRFQNGKSHVYEYEGVTYNTIEGST
DKKTGIKLTATATITPMSECKFMMQLKSVELMSKSMNQDTFTTNAESAKLKDELEKLMVGFTMK
GNQIVTIHASENEPTHVLNIKRSILSSLQLDESTEKETDINGICDVEIVTKSGKIVKSKTLSECTERAQ
NEIGFQSTSIKSATTLKPLDSTSKCEYVMEGDVIKSVVCEEKHIFKPFSAGYKTPSGAMTTVKQSLSF
KEYTVAAISAVPSDFTVETNLLFDHSTEEPTATSTINDQVEKVMLRLVDPAQKSDLSAKENSAQEFK
NLVTLFRRMDEKRMEATWTKYFDCIKSGVCTDANTRDLYRQYLLDGISHCGTSTCIAMVRNVIV
NGQITGERMNMFLRSIPFVTKTTMKMIGHVLEICEKNPSRQAYLTLGTLLVRHCKQNPEDCSENL
RNPVTMAEEHLVKKLGQECEGQDDHERVEELLRVLKAIGNAQRPARVQEKLMKCAEKSKHSNI
TTSIFDAFRGFSCDALKQGELLRVFEDINNEDETRIHAFITIMKCPTVEILEKVTMMLEKELSNQVA
SYMWSYLTNLMESSDPRHQVARDILTKMTAQKPLREVNLPVHQFSKAFEKSLHSEFLKSGLTTEG
HIIFNKDKYIPKMGMLNMKANMMGNSLDMLETKIGLDGIEPILETLVGPNGMLPKDLNIDLGSY
GKFNSEFLRKMLEKKNNKRKLFNDNLTKMHLKANKQFEEPCAHLSVKIMGQEVSVLSYDDILW
MIDQIDNMNAVQLLTNIAKGGHKTFSKSLMFLEMSHNVPTGMGLPLKLKLTGSAVGTVEFNGKF
DIRNLFWGTPAVNIKGHMKPSTVVELSGQMGVEGHYVSTGMFVKSSMFTSQIVKGAIEYKHGQIL
KINMDVPEEPLAAVKFSSSPFLFMNEESELVEGTSRFVNPEHCTKSALLGYGLCASMRLPIAFREYE
APYYPLSGPAHFAVRAIRGDEKLTTWQFLVELNKQSGTTFGNIEFSTPGAAYERKLNGKVSMKQE
GKMNMFTLSTEGYDRKASVELNFNKETYSTAIITKNNIFTTKDMTTKLAIFNEEIDSGRQYGIQAL
ATMDWYTFDHITKFVRKPNVYMFQTSTTYYPKKVVMGTIVYDTKENKLSTRIQANQFQQAYEFS
GKFSDDGQEKGVTVTGKCVTSGKSITLYGGIQNTKQTKQILFTADVLGYSAKQYIRYENNNDVHT
VSQFLSVNGKIISLNGELSSFTEMKRLKFVADIIGRKADTTFLLTNNKGEKSLSVDMNAMQKHAN
FKTGCYQAKDSNECKFNFKIGTKEGEILMKQIMRDGNVITTLETLFDKYVAGFRNVYSNKNANA
KSLCSSIFYGTEEKEHEPVNVCLKYNAASDEKKILAITFDIVDRNQQGEINMELTKQTEFVKMQTE
VVYNKNSLAKAMQSMKYSKDLNNEIKMEVNVGKYNAGFRWFTLKTTNGANVGIEGYAMDKKI
QFVNKYVKDVVSGTTESKVTSELYINDKLVPVTTETIFLNGKGIAGPKFQVNIGKHSVSYATLVTYG
KGVYGIDLEFLVAKESNMLFKLFNGAAASVTPKKMDFQYKFGFGINGKQYTYGGDMSYNNLGN
DEKMEHSVKLGLQYSINRRSSMTFVLSNDKTKAALNMEFEYIPTKSVSHSIEYTKNDRILQVSVEFL
PKMFYTFKSQLVKNEGYSLASSVTLNWKNYNRVLKMINSMVNNDKKFELSTVFGKDLTFTFTFG
KENQKSMTLSASGFKRSLKVIGTFVKPNVQLQVYKNGEKIMDVTTSFDGITNKFQFALTNGKDTY
LKMMKSYNEFVLASGKETYLKMKKKYNEFVVTSGKETYLKMMKTYNEFKNQYKFQINGKIWTK
VQEWYLKMTKMTKDNKITKFLAPFLDLTVKLDRETNDMKLVLSNGKQTFVKIVKSYNEAKNQH
DFQIFGMSKEWVDLMAKYNKRNKVLKVSFSFFGKELAMFTLNMKEKDTVSLTTGSDYWKKNIV
LTGSLDRSQKSIAGNFQYGKTKVQLKLRADWNNMILENAFTFNDNVAKIGLLREQNSMVFRVKL
SPTLMAQVVMEVKNDNIIKMTIQRSEGDKLIEETSMQFKLSKDLYNLAFKWNPETFKAVIRAVQN
MIQNGYYKDIKPFITNVFVKGQRMSRKALTTTVMTFTEKVKEAKTKLIDLITNFEASVDKINFVAIR
EQIGQLSLKTIQKLKELVKVTLKELMTKLENAKENIPELLKKYKQIRNKIEKLSKDTAEVLPKFYKE
TLEAMDKQYNKLNGYWKDVSKVVMSNFELVSKNLTDSTKPVVEKAIYLISNFKLRGKAVKEIVSI
ARELVEKYIQILIEQGKIIMANGKIQLENMKLKSMEHYKNLKLKGMEQYNNLKLKGMELYQKGK
MPYLDETVEGIIKISVEKYMDLKKKMTDFDFEKYIQSVRDQIMEKKINGKTIVEHLNTAKEEMKNL
PPALKENYVKLIELITKLTKALNTNLKEWKIFAKPLTNYMKLVALSTKKHFGPILTKSMDKILPLITG

IELPDFKMMALEQWKQLENFMLPLIKPVGPLYENIKTQIRNIKVSGYPIGSFVDFNIEIAKTFIQTSL
KTTKQKLDENVKMVTEYANLIKKMTPEEIMNQITLKSTELTKEYKEKVLKVYEERQERLKVLVEKL
KELYNEFKQQYERITAVPVQDHIDDMMFKSSKFVKGNLEEISKVVKQITEIEISKPTWDAWKQADV
MGHLDKYGINQKMIDFIKAVKEVDMKRIAQKTTRLIQDMISTIYSKAFVRFVQVYGKLEKVHDYL
RSIPKKEYEEWVKELKEFSLENKERVIEFMGKMYKQTQKKSLNLYTQSKFLYAIMHKIVLKNMEKI
NINLVKPSQELYSDIKYRSEQVYGDLEQPTIDVKNHYQKIINDFVEEQYTIVKGAVLRHYKSLEEYK
EIMYTKAQEKMEEVKKLIELKYNELLAKYGDMTYEEMYDNAYKYGKSQYKVVRKTVKRGYKKL
REQMEKMEERLNALYQLYSTKYSDLVNRIKTEIIPQTQEQYQKYRLIVINLIKKYQKVLMEKMAEL
KTRGMTIYNDLKTKGMTIYTDNKDKTIKALFREVKQNAIKNINTVYVLVKNFGDEKLKQVRTIIV
TYYNKAKGVMVDVIIPEVKMELVSIINQTLRSSKVMTEEIMKAYTPHMVLAKNFANKGAILIIERG
TVAMKASEKAIREFMDKAPAMMKDIVKKIKDQEYYNKIVNHEVVKKYIAKTQEMIENLKTKVEQ
LKQDPTVVKYQKMFSDKVTELKERAKIVIDKLNQRIEELKNHPMTLKYQKIVTEKMTELKKKAQ
LLLEDVKAKIEELRNNPSVLKYQNMMNEKIAELKAKVKMLVKELKKRIEDLRKHPKTIEYQNMIK
QKIVDLKKQISMYKQKIENLYQHPFVTKSMVTMKRIKRSALFTADKINVNLQPKIKEASEMAQKRI
EKVQEQAMSAVQFFKNEPEEAFWTGVSNLEKSGKDLYEQIKRLFNKELIKKQFDVLTTDAKMQW
KIFLNDYFDDWSKEASRKMYEQVVTLVKNMNMKIIDMKMNMQKLPEVYKPIIEDYKNQIMENY
KNIVEYSLQNMIQGKVYLSNQWVELNNQWKACPYRLIMENPVWSEIGDEIMQHEAMTAVKYVS
NLGNLKFQAMKTILMKEYEIKKQLLNQKITELQVSLKKTVEDLRSKGLKNYQLAKEKAEQMVKN
IKEIAIKMDKFLEEKTIGEIVEITLEKYQMLITKVEFLRTQVVGLSQWYKEKATVIYNEKRKRAEKIF
EEQKEKVLAVYQKYKAQVMPIYQKYEDKVKQYYNKYSSIIIEQYKMLLKKSAQKYIQLRTKYEEL
DLKNKLNKLQKDAIDMYQNKKESALKLWEESGVPTKLVELKQMTIRKTIEALKQLPGQTKEQLT
AVFDKYLNELKVQYKKYYSAGYTKLIKEYNDLKAKFEAKFELNRNLLIKLAKPYTTPVVVAYKWV
ENEVAETALFVYRYHKLGERYNNGRELIKSEIERLTPILKNNFKKYNAEIRKYVKDQADKYSAQAL
EMSKDLKQKAIVLSKDLSKKVVASLKTYSLMTGDKILRSIHSSMKCIDNVDFGKVQKQISKKAQDF
YREFTKYVIIDPSKGEILINIPHGDMVPSFTHQFEQIKLRARRSVQVLKENGKVLMKKINNRMAEL
KVKIEKVRNKVMKKVMDNTVEVRRDLLSSYNINKRIFDRVYVKAQIIYKKSLRKATNQYKVLKTK
SQDYIRKATAQAKAYYEEYMTKAKDYIRKNTELAKVYYQKYMTIMKERYLTVNKIIMDLYNTPPA
ELYKQLKESKASLKVIELIMHLYNTPTAELYKQLKASPTYLRIDRIIMDIYNTPLSQRLEQLKTSSAYL
KVNKMVMDIYNTQYMDIYNQRLEQIKNSPRYIKVKGMIIRLYNTPAKELLSKLQYRGQKLYKIWF
NKVKVMINKAIEKNAPLIKARLNAIKKELRPYTESLKTMYKKIKLGYSVKDSFYPMYKQMKFATK
FYRGEAMRQARKIKAQICKEDPKLCKAIKSSAKVHSFIINKYATRVNKVLNIALDKYQEGVAKTH
RAYRHALNMIARPKSTYAAVAMVFKDHYVTFDGKSYEFDIPSSKCQYVLAHDFQNADFTILKTQD
AIKINNKDMKVVIFKNGKTMTVFPDKKISNGLPVQAGESKCIRQHNEIICNFVEDKLRVVVDLEN
DITTVSISAWHHGKLQGLLGTNNRESFDDMKMSNGDLAKDQLQFTNSYEMTGSPKCQLNKVAF
KKLQCGKVTQKCKKLFENPKSELAGFFNIINAEPFIKACERDLVSCEKSKEAKHCSSVNAYLSMIKS
RGYPVELHSECMKEGERMTGDKWQQKQSNKEFDIVVLVSQRKTVNKKPIMKVLQKLQSSFKSNS
IDTRYALIGFGGKGVNEEAHVHALGKGASVFSNMNDLKRAITNTMVFNGDEESNDAYHAIVEAS
LQRFRPGAHKIFVMFNSEPHTSHKYGATLKEAIFTLEKESHASLFVFDEINFKSLNKKGLTIGQTNS
KIYTTKNLKGLRLSGMELPKSEFKDMVESTNGGMFTNELMNKQNELATVLFDAITDTVTQNQRQ
CLDCEKHTTWYGSTRQLCHPVAC*
>TRINITY_DN6542_c0_g1_i3.p1   type:5prime_partial   len:545   gc:universal
TRINITY_DN6542_c0_g1_i3:2-1636(+)
SSTTEAPATTAPTQSTTTTVATTATSAATTAAPEITSTASSTTEAPVTETPETTVITSKPSTTAAPTGYS
RVCYYTNWSQYRNGAGKFFPSDIDPFLCTHIAHSFAKIEGLNLAPYEWNDIDVLYPQMISLKLAN
PKLKILLAVGGWNHERQGVARFSDMVQTKSNRATFISNTIGFLKLHQFDGLDLDWEYPASHPGSR
PGDKQKFTELCKELLEAFVEDAKTTGTERLLLTSAVAAGTSTIATAYEISELTKYLDALHLMSYDLS
GGWNPTTGHHTAVNADSGNSVTNGLNAWISGGFERNKIVLGMGTYGRSFELSNPASNGIGAPAS
GYGSPGKYTKEKGFISYYEICEMKNAGMTVIRDPIAKAPYGVKGNQWIGYDDEESLRYKVQHFVV
KEQLAGAMFWALPLDDFKGQFCGKGNYPLMNAVKEELAKHENMATTTQSPAITAATTAAPEITS
TESSTTEAPATTAPTQSTTTTVATTATSAATTAAPEITSTASSTTEAPGNSNPNTISFHNCSNICYARS
HNSNARDNFNKKFNN*

>TRINITY_DN5584_c0_g1_i3.p1   type:complete   len:962   gc:universal
TRINITY_DN5584_c0_g1_i3:2920-35(-)

MASEMSSPFDEEETLLDEKRSKSNDYEGGFCKKNWPVVITGFGVVVLICLGVVIGTAFKSDINSSN
SRLAREEKFPYKNIRLPGNVIPIKYRIYLHPNISDNEFGFSGNVRILVNVLNKTNSVLLHSKDLNILK
VKIFSNSAAFNQKSESLATEIPTQEFLHSKKLEMLHIALNENEYLDAGEYVIYISFKGSLSGGLEGFY
KSSYTTRSGEKRYLATSHFEPTAARAAFPCFDEPAMKANFIIIIVRDPQHVALSNMPIERNVTRRDG
KVTVHFQESVKMSTYLVAFVVCDFAYVSAKTKKNNIEVRVWAPKELIAQAEFAIQVAPNILNYYEE
FFKVDFPLPKQDLIAIPDFGAGAMENWGLITYRLTSLLYDENESSSANKQWVAVVIAHELAHQWF
GNLVTMEWWNDLWLNEGFAAFVEYIGSDYHDKSWRMMDQFIIDDVQNSLALDSHANSHPISVP
VHDPAQINEIFDSISYDKGASIIRMMKNFIGSDAFHTGLTNYLTKYKFKNAKSDDLWACLTDAAK
DKDIDVKRVMDTWTLQMGYPVLNVKRDGEKVTLTQTHFLKDQDKPAKSIYNYKWDVPVTYFT
NGENTTQFDWFYKDNKSIVIKIDENADWFKINRDEIGFYRVNYDKDTWAALKAQLLNDHMKLS
ASDRSNLMDDAFELARAGQLDQIEALNMTEYLHKEKEYVPWITALSGIAFCGKMLQGREGYKYY
EKYIVQQVKPLVDELGWEDKGTHLQKYLRGSVLRSAVDHNYTKAKNQALEIFKDFKENNKAIKP
NIRSAVYLAGIKYGTKDDWDFMYNRYKTSQFPSEQRKIMFALTDTEDKNILKKYLSWTLDNDKIR
SQDSCGVIEHISMNPKGTEMAFKFVKKNWPEIYKRYGTSSFDMSSLIKTIIGTRKTKSGKEEAKEFL
DTHKLGSGRLAGKQALASVQNHINWLEKNEKKVVEWLKNNINNKKITK
>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)

MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*
>TRINITY_DN71276_c0_g1_i1.p1   type:5prime_partial   len:1201   gc:universal
TRINITY_DN71276_c0_g1_i1:1-3603(+)

LTFIESLRLSSIKNIFKMMISFETFVPSTTPYAEDYNTNPQVMMLSNKIKETIDTSLNPLASQIDRQKA
FQVQEEFKSSSPHCAEVGLYLYSVERKNSDAVRLCALKFVDHFIETKWNDLTYERKTFYKKESLKL
VEQMTFENETYLKEAAAQIVVEIIKRTWPQSWADLFKNLEELQAKGDAQLELVLIILMRLSEDVN
GLDERLTTQRKRDMMTTFQDNANELFEFFIKTIRDKVTALKTESSSLLIRLSEATLFTMMEFVSWA
HFDCLFNNEKIIFQILFWLLEVKYLRYYAAACLDNIFQRKGTPEKRIEFMVVLSDDVLNIVENVVRS
LKKTPENVLPEEGYKFLKKLAEMLVSFGKIQILSLWGDERGFNEKPVGYDRYLRLMLLLFQHESM
KLTYDVSKFWHALSIHPHGKLDDTFKELMPDLLDCAIMKIAKISDPKIPNNPSSHYSTMDFDDKE
NYAEYFANCRGHMTDVCRKITIISYTVVLDHCLAKIKQATSKPPPDVSGIPKNQIQITQHYLYWDA
LVHFLKNGFAGVFFRANKEISEDTISKCNEIITLLIHYKCEVPLFTIPVINLLESVFPIFKHSRDHLLPT
MQLLFSIIRLPQNDEDPLRDHVFKLKRHVCEAYAALCKEIPHCLVDYFKQLEEFAVYQMMHNASL
TGQEKCRLIEGVLRISKHVTVKEEQDHCINAIFDMIDSMFDKEPVRRACESPISLIQYIGLDQEGTV
AADSELRTRELLFAINLWTAACKALAMSKEEEVKDEITEEEMRTQIETYGWIKRMVTMLPKMLSL
LQSYSLIWQHQDKICDKRILVHKIITEINPTIQVFQPKCADEVNEKRGLGQYYLCTFYESAYTSLGSV
SKSVGPSLFSIGGLAEAMNEKLVQHWNNLPNYRLGRITRTFIKDICLACPKKYFETFIGPFVSQVLR
LYFERISNEWAKLAQLKENPREVTDKLQEQIEIAEERMIYLMSKDLLDLLLSLLTFKRKHLRSTTKP
ADGSLETFGELGHFLLDCEETNFIIVQIIFTSLTWPDTSAAIKVSQIILAVLKKIFTDTSKLNPELPKQL
LLLILQGLNIHGGDEFGRAALTNNVLQFYLHLRMQYRGIVQVMLMIPTCEEQHLREFDLAVFVQE
LPLTEQQQKKIFRRFVAGACGTVISKLHEKDVVIQDLPALMPRQKEKTLNKNGDADDDLGLCSLF
GV*
>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN540_c0_g1_i1.p1 type:complete len:480 gc:universal TRINITY_DN540_c0_g1_i1:1503-64(-)

MATDKLEGLIARLEKVTGKLESVSVRGGSGGGAAVEDDPAWYDEYIAIHEGQWESFLKATKENG
DNDMVTLEQKLRAAFNAHKDLLTIAARNGKPSPKDLPELVKPLSAAIGEVQSFREKSRTSKKFNH
LSAVSEGVAFLGWVVSPSKPGQHVIDMKDSAEFYTNKILKEFKETDKVQVEWARGLRKMLMDFA
DHLKHCHPVHLLWNPDKPAATASTKASGGSGGPPPPPPPAAAPPPPPVAAPSSAPSGGSEDSRA

ALFSALNQGSGVTAGLKKVSDDMKTHKNPALRNAQPVPGKTSSLNPRPYAPPQLKKFNAPVAEK
PPVFELQMKKWIIEHQKNNQSLVIDETNDKQTIYMYKCNNSVLQVKGKVNSITLDGCTKCGVVF
EDLISTCEFVNCQSIKAQANGKVPTISIDKTDGTQIYLNDKSLDTQIITAKSSEMNVCITKPDGDLN
EFPVPEQYKTVWNGTKFVTTIMDLNL*

>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)

AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG

>TRINITY_DN413_c0_g1_i3.p1 type:complete len:350 gc:universal TRINITY_DN413_c0_g1_i3:1286-237(-)

MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCG*

>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-550(+)

LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW

>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)

MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*

>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)

MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT

133

DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN775_c0_g1_i1.p1 type:complete len:635 gc:universal TRINITY_DN775_c0_g1_i1:1927-
23(-)
MKQMIFLLAVSLAILNFDGHVVDAITCKSNSVWSWECQNSRCVKVLASSNSDAIELNTCKLTCGK
YSMLFPKPSGEIQLGKKTVPFIPTQARLRSVKVKKSNPKATWLVQNAYSLFLNTLEHSYKRYSGSTS
RLYNNMCAQEAQKRVLVMDVILEDGDTKITLDTDESYDLTILADDKEITVSINAQNFFGARHAME
TVSQLAAFSESYNAMQIVSSAQVKDDKPSYAYRGLLLDTSRNYFSVDSILRLIRAMSYNKMNTLH
WHITDTHSFPIEIKSLPEMLRYGAYSSKRIYTHDDVRKIVSYASINGIRVLPEFDEPAHCGEGWQWG
PKAGLGNLAVCVNRQPWQKYCVEPPCGQLNPTNDNVYDVLGKIYKEYFQLFDPDIFHAGGDEI
NFNCWNTTTEITNWLKQNYGGVSEKNFMDMWGMFLDKSSSKIYEANNNKELPMILWTSKMTS
EEYLTQYMDPKKHIVQIWTASKDKELSNVIESGFRTILSTYDTLYLDCGYGNWLVEGNNWCSPYK
DWKLLYDNDPVKILESFNVTVTDKIRSTILGQEAAMWSEQVDEFSSEGKIWPRTAALAERLWTNP
NHNWRDAEYRLIYHRERMVERGVQADALQPLWCLQNAGNCYYDPAIKGEH*
>TRINITY_DN144508_c0_g1_i1.p1   type:internal   len:265   gc:universal
TRINITY_DN144508_c0_g1_i1:1-792(+)
PRRPNDTARLVSSDVPATSQMCFEFWYHMYGDHIGNLTVFKRIGKAMTMLWAKSGTQEPRWRH
ATVDITSASVFKVVVEGTASSGYMGDIALDDLFLTPGACPPSAECTFEDPQLCGWTNIAGDDFDW
TRGNAGTASWGTGPRTDHTYGTKQGFYMYIEASTPRSKGHKAWLKSEEYKPTLGRCLSFWYHMF
GLHIGELNVLISQNNSMSAPIWQMKGNQGRPWRPSRVTVKSSLNHNIVFEGRTGDGYRGDIAID
DVMISEGP
>TRINITY_DN71243_c0_g1_i1.p1   type:internal   len:422   gc:universal
TRINITY_DN71243_c0_g1_i1:1265-3(-)
PFVGIRIDSNTGSVFLAQHLDYETAQQHNVSIFAVEKDPPTRYVSSYFLINVLNVNEHSPQFQNNE
TLVITVNEDIQPGVIGSSPATDKDAGVFGNIDYKIIRFDDQLFDVTASGEIRLIGKLDYEKKRVHQFL
VEALDGGQPRRKSLRPVSVIVGDMNDNVPLFSQDVYNVSISDLTAIGSSLIKLSASDADDGLNGEII
YDISNGNFGTTFIIDKSTGVISLSRKQLLSELRKFTLKVSTRDKSPISPRNGETATVHVNFIEASANEP
FFSTTFQKLNVLENQAAGIKIGQSKVINSKMEAVYLIVSGSKTRITDYFGINYRTGEITAKQSFDRES
RDHYTFVVSARFIDDNSLTGYQTVDVSIIDENDNRPMFLGNISQTVSISSSFDGSRPVALLNAFDKD
LVSLDKIEMQLLNSQE
>TRINITY_DN278_c0_g1_i1.p1 type:complete len:470 gc:universal TRINITY_DN278_c0_g1_i1:3091-
1682(-)
MAPSFNKTNGHMEENGGMIHANGKSSEKPINLGEQTYSYMTFKKMGLIMITLPLVFLLLVGLPSY
LYPVLVLLFFIPVFAGYIGLNNVIYCLYERHNQVSKIDNYIEFLDEDLKKKFTGRFIPIRDLYELYAEG
KLNFKGDVLQCLERRNEYVSYKLQLWHLKFFLSKLLPELLHARSQDKEQVCDHYDRGNDFYNA
YLGPLMVYTSGIRYSESDTLEDMQMNKLKAVCEKVQLKEGDRHLDIGCGWGTLVNYAAENYNS
QSEGVTLAKEQVCWAEEKAKSKEIMDRVNYLCMDYRDIPKKKYDKITCLEMSEHVGIKRYHHFL
KDVRNMLEDDGIFFLQIAGLRRAYQWEDFLWGFFMDTYIFPGADASLPLQFPIAELEAAGFEVES
VKTVGIHYSDTIKYWYHNWVKSDSHDKMIQKYGRRMVRVWDIFLAWSTIIARQGNSTCYQIVAH
KNFNHYPRRRFIQPKN*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)
MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN1682_c8_g1_i3.p1 type:internal len:117 gc:universal TRINITY_DN1682_c8_g1_i3:348-1(-)

VKEFLLSKKCIFSPILNLFMFMKKWTQFCSRLSLVKTTCKSDTKSCIETRFLYLIVIFITEYLGRSLKFC
KGAKFLEKLIIYQILVLGQLLKQSIFDKYDHKNQFCRSRTTKFKIQ

>TRINITY_DN195348_c0_g1_i1.p1 type:internal len:311 gc:universal TRINITY_DN195348_c0_g1_i1:1-930(+)

SGCNSIDLGLLVDFSSSKDYDSKQLTKFVREFIDKITNVFAFSATKSHLAYLPFSSRINENITGQWFD
NKYMKTIGDWDYQELTQYLDRVIVPYTPVTGYETGKANAHEAFQATNDKMFNALYGMRYNMT
KVLIVISDGNEDFKEKQNLVDRAIDQLKAKGVIIYTVSIGNNVNWDRVFRYASRESSIINGANFDD
VFNRFFDFAKMLCEDSKVPIPATRTTASTTTVSINTTKLTTTTTTELVPVTISTTTTMSTTLRPIQACY
EDIDLGFVVDFSKMNANDMKERQTANDIVKVIKKIASSFNIAANK

>TRINITY_DN113_c0_g1_i1.p1 type:complete len:1417 gc:universal TRINITY_DN113_c0_g1_i1:4413-163(-)

MANWSLLYAALLFLYSVSAQEEERPITFIKGEPGPKGSRGMPGDDGSVGSTGRQGNEGRQGPRGD
TGPKGFKGEPGLIGPAGGASGGETKGPDPLAARVGVKGGTYGVNTVFDYQLGPPGPPGVPGNTG
GYGFKGDVGPVGVKGVPGLPGPPGSYGERGEPGEAGLDGVKGDRGDAGQTGPPGKKGVAGAV
GFPGLQGPFGYKGERGGAGPVGDEGVSGRKGEKGYAGEKGSRGDQGDAGFQGVQGPTGPIGPL
GNVGPRGPDGQRGIAGAIGAEGLKGAPGTRGPQGPKGQLGEPGQRGVKGVVGDKGPTGQQGS
QGPTGNPGDPGQPGKTGDKGSIGDVGLIGLTGPQGMQGERGTVGPRGPAGGAGKKGERGQAG
PIGATGEKGNVGDVGLDGARGAPGKSGIEGKVGQPGPQGEPGAVGLQGAQGPRGTDGQAGQA
GPKGNTGEGGFPGAAGGKGSKGLKGRGGDRGMQGEPGSAGKPGARGRDGKRGAAGEDGKNG
NPGQRGPQGSQGLTGAMGLVGAPGAPGDMGVAGLPGQQGRKGTRGLAGPTGQRGLRGEGGL
PGERGEQGAAGPQGTQGTQGSPGPQGRTGLDGKDGSPGDKGERGSMGTRGKQGEPGADGKQG
SRGTPGQQGIRGDSGDQGSPGLLGERGLAGQKGVAGRDGAPGMPGRTGRQGTIGATGAVGLRG
AKGGRGKDGETGEQGPQGQEGPTGPRGPRGASGEDGAPGQNGLPGLTGPMGEEGQPGRPGQP
GKQGPRGSQGEAGPVGPKGPLGARGDQGEQGPVGIEGVVGALGAVGSEGTKGPVGAMGSMGP
TGPTGPQGATGETGPIGPLGAQGRPGIAGNAGGKGPNGDPGNPGRPGSSGDQGPPGKDGSNGE
PGSPGKEGARGLIGRPGAEGIRGEAGTSGSTGRLGRKGELGPKGFPGKRGKDGTNGKRGEMGVS
GADGIRGSKGNSGKDGSAGIAGEDGVEGQIGEAGYQGSRGVRGDTGAPGDSGQPGDNGPNGA
KGSKGSSGRAGAQGVDGRLGARGDQGAEGARGKEGAAGAEGERGEKGKMGAPGIYGPAGDP
GFKGDEGEPGPVGPVGPHGPRGSPGEDGPSGKKGASGITGTNGRKGNRGQSGANGDTGTPGIPG
VPGSPGRPGPPGEIAGMSGAFARFFSAGGMGMKGPGNYYNNYYGQYRYYKAGNEKIRNQIKPH
LSTFKQYYELLKDVDDMMKATGTKSKPARSCKDLFTDYPNKITNDYWIDPNGGSTDDAVKVFCD
KMKNETCIFPKSYRAELENHYTGKDKFRFMYEDIKEDGEIEYAADITQTKILHLMSSKVRQEFSYN
CKNSLAVMKNNKDRYEYALKLKLDNEDIISMNMNTRSLDINILNDECWKKDNTVRTATYELISH
KPIKHQLPLLDVASFDIGGPNEEYGLTMGPVCFS*

>TRINITY_DN4781_c0_g1_i3.p3 type:complete len:183 gc:universal TRINITY_DN4781_c0_g1_i3:2965-2417(-)

MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*

>TRINITY_DN113_c3_g1_i1.p1 type:3prime_partial len:1162 gc:universal TRINITY_DN113_c3_g1_i1:3485-3(-)

MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI

KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK
>TRINITY_DN61668_c0_g1_i1.p1 type:5prime_partial len:453 gc:universal
TRINITY_DN61668_c0_g1_i1:2-1360(+)
FDGSDELGCVTVAPATTKVLHCDDDHAYCEDNLECYPKEGRCDNTYDCRDRSDEKNCGAIKTD
KPICFDFQCKSGKKECISNDKKCDGRRDCKDGEDELNCQKSDCLPFPFGFNCTRVKEQCYLHKIV
CDGSTNCRDETDEDKEICGVTKRVKNLRSKLDDLSTGGIQVRLFWDAPDVSLSKVKGYAVSFIDD
KFVQKALKVPLSPSRVTIPSLKRCRKYVFAVAVDHTDLKADKLLYESTEEIETPGRRSPNAPALISTH
GNKVLWKEDVGDCIDHYDIYNRFLSCMEMDSKTVVKNRLKSANVLFDIQSMLNSNSNDTKLYN
CSIYINYIRKSDGTPFNLQTDYFTFPHTHDHHHKTAASTGGKGKRNTLVWAMPVAVVVIVLCIGL
LLMVYKYRKLQNSFLAFAARGSYNRQVDDLDDEDDDNMAVAFHTGEDSPMINRFSDDEPLVVA*
>TRINITY_DN25375_c0_g1_i7.p1 type:complete len:811 gc:universal
TRINITY_DN25375_c0_g1_i7:112-2544(+)
MNVNEKMNIYFCIGTLLFQSLLVLKVEGIFNDCQTKGSCGKCISSSPECAWCEDIIYKRSLNSKSYY
KKCDVLDNHKRQGCQNITNPPSSSTIDKDAELKGDTRVSPQEITVKLRPGQATTVDITVKTPKNFP
IDLYYLMDLSLSMKDDLEQIKDLGDILGEEMKNVTTNFRLGFGGFVDKPINPYTTIKPDEIEAYIRD
EDAQYTFTYKNYQPLDEDPSLFSKTLEQVNISFNIDGPESSLEALMQVIVCRNDIKWKDKRKARRI
VIITTDADFHYSGDGLLGGQVIPNDAQCYLSKGNYTAWNQFDYPSLSQIRSVMIENQIVPIFAITGN
FELYKKVAEFFGAGSGAVADRLSKNSDNVVPLIKEAYEKIAKIVNINSDAPKGIDMKYTAICGTGK
NVEAREGTDFCDDVEIGETVVFKVEMTAKDCELVGEDLKFKIKTNFDDVNVAVKLLCECPCEQD
KSKIVIDSEHCNSRGNLTCGQCQCDLDFYRGRFCQCTVEEAKNQTLCRLPGEVGPVCSDQGFCEC
GECICDEPKLNRFGEIEYIYGDQCQCSNTSCGRTTNENLLCGGPSHGRCDCGECTCFSDWQGPTC
EVECVKSSAACIDEEGIECSGKGKCVCNRCVCDPGYIGDLCQECVSNCPDPCQDYRECVKCRVFK
MSDLSDEECKSECLKHNITSHIVTDKVPEDKRCIARDEDDCSFVFTFVKSNITDEVQLIVQQEKICP
AEPDILAIILGVIAGIVGIGLALLLIWKLLATIQDRREFAQFQKDRQDPKWDSGVNPIYQQATSTFQ
NPLYGNKGEETEKILDSQ*
>TRINITY_DN77_c1_g1_i1.p1 type:3prime_partial len:1965 gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRSGRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG

LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN55094_c0_g1_i1.p1   type:internal   len:107   gc:universal
TRINITY_DN55094_c0_g1_i1:319-2(-)
LTLDMLAQKPMNVIALIDEESRFPKGSDETMLNKLIRQHSKNPAFITVKSHAEKKFGIKHFAGSVY
YNTVGMLDKNRDTFSADLNHVIAQSRCKFLLHLFDKELKM
>TRINITY_DN247_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN247_c0_g1_i1:38-
1156(+)
MKLVLVIFVILVYTWNVSAGGKKCISNKDFMTPYPTNFWTEHYPKFVNNRPTIGIVAMEVLGQKM
LVNVPWSWNKDYFGSSFVKLVESAGGRAVPIKEDITEDDLDKLMRKLNGVVLPGGDADVGDSGY
ERISKQAIAFSKKMAKKNVTFPVLGICRGAQMMMMAEAGKDFLEVTDSLNLSIPLDFTSEQKESR
LFGNAPQGLIKSLSEDAITFNAHAMGIPTLNFYNNSGLQKAFRAISTNYDRNGTKFISTFEGRDAPI
YGLQWHPEKSLFVFNPVLAVDHSIKGVMASQYIANFFISEARKNNHTFRDRVEEEEHLLMSYYPS
YVGNITETPYEQIYLFDFVKPFQNPKYTPGKVNKNDDDNSGDDDDE*
>TRINITY_DN141561_c0_g1_i1.p1   type:internal   len:248   gc:universal
TRINITY_DN141561_c0_g1_i1:742-2(-)
RQWRKLEESESLFSCRPPVLLIVMIVFLFISYLLKETLSEECGPFGYKTDTLLSPKYWYFDTTNCPPIP
YGAQAGGENQTCRIYFNLCKVQLYQCSGTVCGRYLDDRDLVLLMGEYKYEPFSEGGDSFFVSYQ
GEEVACTKSKTEVKSKINTKMNFMCNHTAKWNNTIKRIHGGAQAPKPKSIIWNNKTCEYEISFDY
DEACIILPKGEKEGHDISVGSAILILFLPGVVLYFLLGALYNKMRGFKG

Band 4
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID

VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ

DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR

VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*

>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)

KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT

LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID

ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK

MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-
1359(+)
MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY

YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN1616_c0_g1_i3.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i3:218-11782(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG

IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC

145

PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV

>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)

MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYVIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)

MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN

MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-
494(-)
MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*
>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQASGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG

AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG

>TRINITY_DN3078_c0_g1_i1.p1 type:complete len:1109 gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQISK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*

>TRINITY_DN71276_c0_g1_i1.p1 type:5prime_partial len:1201 gc:universal
TRINITY_DN71276_c0_g1_i1:1-3603(+)
LTFIESLRLSSIKNIFKMMISFETFVPSTTPYAEDYNTNPQVMMLSNKIKETIDTSLNPLASQIDRQKA
FQVQEEFKSSSPHCAEVGLYLYSVERKNSDAVRLCALKFVDHFIETKWNDLTYERKTFYKKESLKL
VEQMTFENETYLKEAAAQIVVEIIKRTWPQSWADLFKNLEELQAKGDAQLELVLIILMRLSEDVN
GLDERLTTQRKRDMMTTFQDNANELFEFFIKTIRDKVTALKTESSSLLIRLSEATLFTMMEFVSWA
HFDCLFNNEKIIFQILFWLLEVKYLRYYAAACLDNIFQRKGTPEKRIEFMVVLSDDVLNIVENVVRS
LKKTPENVLPEEGYKFLKKLAEMLVSFGKIQILSLWGDERGFNEKPVGYDRYLRLMLLLFQHESM
KLTYDVSKFWHALSIHPHGKLDDTFKELMPDLLDCAIMKIAKISDPKIPNNPSSHYSTMDFDDKE
NYAEYFANCRGHMTDVCRKITIISYTVVLDHCLAKIKQATSKPPPDVSGIPKNQIQITQHYLYWDA
LVHFLKNGFAGVFFRANKEISEDTISKCNEIITLLIHYKCEVPLFTIPVINLLESVFPIFKHSRDHLLPT
MQLLFSIIRLPQNDEDPLRDHVFKLKRHVCEAYAALCKEIPHCLVDYFKQLEEFAVYQMMHNASL
TGQEKCRLIEGVLRISKHVTVKEEQDHCINAIFDMIDSMFDKEPVRRACESPISLIQYIGLDQEGTV
AADSELRTRELLFAINLWTAACKALAMSKEEEVKDEITEEEMRTQIETYGWIKRMVTMLPKMLSL
LQSYSLIWQHQDKICDKRILVHKIITEINPTIQVFQPKCADEVNEKRGLGQYYLCTFYESAYTSLGSV
SKSVGPSLFSIGGLAEAMNEKLVQHWNNLPNYRLGRITRTFIKDICLACPKKYFETFIGPFVSQVLR
LYFERISNEWAKLAQLKENPREVTDKLQEQIEIAEERMIYLMSKDLLDLLLSLLTFKRKHLRSTTKP
ADGSLETFGELGHFLLDCEETNFIIVQIIFTSLTWPDTSAAIKVSQIILAVLKKIFTDTSKLNPELPKQL
LLLILQGLNIHGGDEFGRAALTNNVLQFYLHLRMQYRGIVQVMLMIPTCEEQHLREFDLAVFVQE
LPLTEQQQKKIFRRFVAGACGTVISKLHEKDVVIQDLPALMPRQKEKTLNKNGDADDDLGLCSLF
GV*

>TRINITY_DN72625_c0_g1_i1.p1 type:complete len:1964 gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE

LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATGDDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*
>TRINITY_DN1119_c0_g1_i1.p1   type:5prime_partial   len:949   gc:universal
TRINITY_DN1119_c0_g1_i1:2934-88(-)
FFFNPQTVMHEKKFSRMKFILLFSFFAISLGQNCNRMHKKIGCFWNDKNAKVLFNDRDSINNSTY
GALSDKLACKCNAVARSNGFKFFALRHFGICIGYNKITTGSKSIEHCIDTKSNGVCNLGDMNTCT
GTQNTADMMYQIVPEKCPSRHKKVGCYTEDRNATFLFNDRSNIDWPNFEKFLVELACKCNKVAL
EKGFNFFGIRFYGVCVGFKNISTEEKSAFHCKDPNYRPYRPCNMKDSNVCAGDHFLTDMIYKTER
QNVDKLFSEWSGWSTCSKSCGGGTQKRTRECKDKKSCSDAGGEEFKSCSNSFCKGSTGVAKAQE
VVETFLETFHKVEFPDIKPSGKYLKTIFEIQKAVGEEFNSVDPSVKGVPLEKRLTELEHFLKIAVEGG
SIDFARSTLGKGMFVFMKKKIKEGLPINDIDTAAKGFLNKLTGDIGSKKMNEILSSKGDATLMFTID
TTGSMAQEIAAAKAIAKQIISATREYEVDYILSPFNDPRTGPVRYRSTNDRANFVSDINKLLASGGG
DCPELSIKGMLNAFDKGPKYGSPMFVFTDASPKDATPSNMAALKAAASSNNAKITFFTNLKGCG
KELGIESYKEIASHTGGQVFPLKNEAELINFTEYVKSSLQQDTIIAAGGSLNSRISKRAAPRSHIFMV
DQSITRLIISVAFEKQNTGKHIKLLDPNNKNVDSSTMLAMSLIYDIKNPKVGLWGLSFPHIVGEFGY
NVQAVTENAIEFAHSFLHQHNVKGSDVTVSLENPIKGIRNMMVIRLGGADHIDLSTIKVHLVDHS
GNKLVSNVMTDRLDSDEIRNASIVPPTVQFKVLLTGKTKSGQQFQRMSQGSSTPVSAFMRTISAGY
DFTATMGKDWISIQIEIVNKGSAESFNFQAKTKYGTLKNPNQTKTVNKESMITFSYKPPNRHDLK
GKTDKVTVIAKRASGEKINHFISILLIK*
>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT

DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGGQPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN1653_c0_g1_i3.p1   type:complete   len:1023   gc:universal
TRINITY_DN1653_c0_g1_i3:180-3248(+)
MMRRSIKGSEDNWVEMQNDTFKNWVNANLKSRGLEVDNFETDFEDGVRLINLFEAVSKKSIGK
YAKQPKFANQKLENVSLVLRAMESDGVKLVSIDSDHVVNGNSKMILGLIWQLILRYQISGSDDKSF
KIALKKLLLIWLQHVIPEQGIRNLTTNWNNGIALCNLINVLKPGIFPEYNNLDKRTPVENLAKGM
QLAESELDIPQIISPENMASPNVDELSMMTYLSYFTQDGGIGESWTVDLVNFWNSSLSVTNFNTD
WNDGMRLGRLVETFLPGAMPIMESTDNLDNCRIAMDVAHEKLGISKIITAEEMSNPQIPELAVMS
YIVQFTKVKRVERASDKFSASGPGLVEPKIGIVNEFYVRSDAGYPLDGLQVTIIGPNNNYIPIEIDDS
DPQLRNYSYSCEEQGQYHINIIYEGEDIPRSPIIVTSQQDLNTIRVYGERLEDKHLYAELYERIGISVD
TSQSGDGRITSKTIGPDEKEIYSEVDAEGDGSYTVSFTPEVIGEYHTNVFWSGKPIHGSPFVVWVSD
PNKVFARGKCLYETRVGVESSFEVATNGAGPGHITGYAETNGVEYPINVRKREECLHDISFTANQV
GIYYVYINYNNVPIKDSPFQIKVGNPSLIEIEKHEEAIMESNQPQSFIVNVLKDAGFGDVLCVVRGP
AGEDVQCTIKDVNDSLKEIMFLPNYPGTYEVFVYYAGGLVERSPFIFAISEPKLAIYPENIRVSGNGL
SRAKLNELARFQVDTTNAGPGHLTVQIEDEKDDVEAGIRDNNNGTYDVTYTPKRSGKYRVIIKW
SDQHITDSPFEIIVDNRAEEVLVEGYGIKEGTAGQPVLFTLDGRNAGPGQLSCRCRAPSGKMTYVL
ISDNKDGTYTVDLNATEPGLHTVEVEWDNQAIPGSPFLVRIMQAPDVKKVRASGPGLRSGTLDSF
NGMFQVDSKGAGPGTLKVRIHGPKGAFKVEMSRENPKDRIINVRYNPTEPGTYTANIYWSDEHV
QGSPFEIFVGQNDQEVDRWDRNKEELSKSQVNVY*
>TRINITY_DN250_c0_g1_i3.p1   type:3prime_partial   len:402   gc:universal
TRINITY_DN250_c0_g1_i3:131-1333(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLMGQIVSSITASLRFDGALNVDLTEFQTNLVPY
PRIHFPLATYSPVISAEKAYHEQLTVAEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKD
VNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARL
DHKFDLMYAK

>TRINITY_DN6390_c0_g1_i1.p1 type:3prime_partial len:1941 gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAQYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYCH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH

VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)
MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*
>TRINITY_DN36_c0_g1_i16.p1 type:complete len:224 gc:universal TRINITY_DN36_c0_g1_i16:829-
158(-)
MMIKTTIVAVVLAACVLQSFAGRCYVGYSAKGLPLAIGVRDVECGKGYDYCTTIKYRLGGIEVTQ
GNCARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTT
GLITKFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNI
DNCNKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN11248_c0_g1_i1.p1   type:3prime_partial   len:1700   gc:universal
TRINITY_DN11248_c0_g1_i1:111-5207(+)
MEIRSLFVAFIYIVHSINAQCSSPWKSYKDSCYLFTAVSTVSPGHTWEDSRFICQRYGGDLLKLDND
NETKYINSQFDDLKIKYNHYWIGLNDIKKEGDWRWADQAPLNVTTQWRVSRGEPNNWQGNED
CIETTYDGQWNDNECSRMFGYICERSKDAVIPVTPTLPPFPTATDKPTTCEAGWIPWGTSCYGIIRG
LAKNFQDAQADCLRRFGDLVVINDQAENDFISNEISRSVGGLWIGLSDTYKEGTFYWVDKSELNF
TSWRAGEPSNDYGNEDCVEIYGRWGPGQWNDNHCTALRDYICEKPGGVHNCPRDWVSYKNY

CYQINAHPGQKVTWEDARKNCLDFNKAWRKSVNVAQADLVSITNLEEQKMLQKEFSKVNIKN
DNGFYYWIGLTDKNSTGGFYWTDGSTYKYSNWIGSPQFASQCVRSNVIGYQGGSWSKGDCSEAY
NYVCKVGRGQDRCYNPLGIQSFAVPNKAMTSNSVLGPSTPALAGRLYMKAGNSLDGAWCAGN
NTKTPYLQIDFGKMQKLTYMGHQGKSNSDAMVTSYYIKYSQDGIVWDTYGYIPPAQYYKFKIYIG
WRTNYEKVMNLPLPAPFIARYVRVYPLEWNIAPCMRIDFYGCQEEVDNQRCGLGWREDKKTKN
CYKFHNQITTWDSAQELCSIQGANLATIATPDEREFLSEQLGEFKSLVSEFWIGLNDLDYEGVFKW
VDGTPYQLSNWYYGNPKVRNEKSNCVVVRTTDSAWVNTECTVFRKFICKRNYISPYTPKESYNG
YVYSKTDYFWPLDSATDFEGSLPLTLNGNVDRVPFPIDYDVGVSRYALNVSGSSGFFKIDVANDVC
IHHPDADSCPHGITVSFVFKMSKKSSSKRQVIIDTTEKNKPLGYKVYTEFGSIYVNLRGHQKSYSGS
TVYNAHIFNHMTFTWSSLKGLSLYMNGKSRVFDLLGSYAKDYPKVDYGKSLLIGISGDSQDPAEL
MIRSLGIFKQVLDAKSIEAIYLGEFGTCKSHQFAHGSYCYEYNSTEVSWSNALSTCRDNGGDLISIH
SPVEQAFFNLKIAQYNYQRTNWIGLNAKSKNSFFKWADSSRLEYSYWAPLEPNNNNGRREDCVE
TFANGGWNDALCYLRNPFVCKYSRALHIMGSENTDDKEYKVFFSPYQTLTFGCPLGRSIEILTASY
GSVKDGCVKDVKDKVSNACVKEHCVRVQASDFFFNKINPCKDKNRFALKRLKVTYKCNLATPE
FDSTGCSNGKDSENSYRVFDKSNICYKLYRKPKTFKEAQKVCKDDNGDLVRINSRETQVYLTSLLH
TMYQKTDIWIGMMYNSTTQNYEWLDGSHVYYTNWVNRQPDPRNGDYVKVGLEEGAKNFLFW
KNGEANETLPFFCQRVKVGKTTQAPPTTQPRTGTCPKGWFTYNKNCYYVNTNRLSFPDAQAEC
QKYGKSSHLASVLSYEENRAVFYDVVNATVDFAWFGLTNEAIVTGFRWVDDQPVSFVNWYTNEP
HKINRHLCVGMGSGGKWIDLACYLKYPSICKLPLGEVIPTTTPLPTIPPTQASGLCEPDWIHYNGS
CYNFANRTSYADFHNARVTCNKMGAHVATIHYQKENDFISAQLKRMYIPNAYIGLTDFSIEGQW
QWEDESVVSYINFGEGEPKNWHGMEDCVVVKSIGEWNDIPCNLKRSFVCKKNNGTVVKTVNTT
AAPDSGYCPSGWKLYGNKCYYFRYGE

>TRINITY_DN1676_c0_g1_i12.p1 type:complete len:1631 gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*

>TRINITY_DN691_c0_g1_i1.p1 type:complete len:1726 gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)

MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG
QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*
>TRINITY_DN4726_c0_g1_i1.p1   type:5prime_partial   len:670   gc:universal
TRINITY_DN4726_c0_g1_i1:2906-897(-)
DDGNETNRTIADDTTNNDKSNSLKRVQLPSLPAFSFTEAIDKVETMFKSSVQASPVATPQEKTKET
EKKKGTFSKLKTKARSIDNDKATSIKDGVTGAATGMIKFVKGIQAGKWTDIVQGSLDVIGSIAGM
LGPAGIMVSTVLSVLSTVIGLFGGPTGKKESQEGMMERVIKTALLDARNDELTSQVNGAKEIFNTIS
DTINIFREMEEKNLPDILSFYELSFEGIEIFGILEHYIKKWCAIGDVLSKAERDKLTDDAEKNKQSDK
RDMAARCLRITNLYCDLSIYRQILIADMAGVLSNANITTTSDAFLKLIEKERQKDGVILKFLWDPL
NFRDRRFVVSKYYSEIHNFPTITTYMNTVVKANKEFQEIVQNTKYGVGLMDKPNNEKFKKTLPM
ALECQKQELQGNCVQVPFSRIAFSHGTNPVYMYNSAGSIYVSDGFYLQVRINGTTNAEMKFYGPS
VYYIGIQKDNGNTFKYILTESSAKDFVRVCEHRNMAMNGKCLTLERRDYQFSELDRIGWNDKISS
LYVPEGIKLIAYEHSSFKAKVPIDYYGPATYNMISKEKTWSSIKMELTELRTTDMIKLCSNYKLGGIC
FYFEAKAGKFTKDDLISTKKDIHQIRSMEVPGNVTVIAYTDPMMQPKHFLAVYKGPKVVSETEQA
DPHLEIELKI*
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN1936_c0_g1_i3.p1   type:internal   len:1070   gc:universal
TRINITY_DN1936_c0_g1_i3:3208-2(-)
GEYKPTLGRCLSFWYHMYGSHVGELNVLVLQNKSRSAPIWNLKGNQGNVWRPSRVTIKSAVNH
NIIFEGRTGDGYMGDIAIDDVMMSEGPCTDYGNCDFERDLCGYTNKKNIDQFDWQLGSGGTSSV

TTGPSNDHSTQTALGQYMFVESSYPRLPHETAIIGSETIPVSGSGKCLQFWYHMYGEHIGSLEVNM
RVANDLSETIVWKLEGNQGNKWLQGQAPLLSRGQNMEVRFEGIRGTGYKGDIAIDDITVVDYSG
ACAITPKSAKPWGCNFELDFCKWQQSRADKFDWLRNQGATGSAGTGPKADHTTNTTQGYYAY
VETSFPRQPNDTAAIISPTIKGNGTKQTYCMWFAYHMYGPHVDTLKVYTRSQGSDKPVLWRRRGS
QGLNWNHAEVQVTVLYDTKVIIEAVRGKDYKGDIAIDDIDIWFGDCFSSGICTFEGADLCFWYVP
KNGQLYWQRASGATPSVKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYSPWYYNTGQKC
VQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNNVYFQIIVRGTKG
NGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGSTNSFLTGPSIDHT
TQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNLTIYLRKVSNTKT
LSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVVIEGVRGSSYDGDIGIDDIEFTSGSCSFLPKGA
WPSGRSTPAPTQASTTLGPTIGNKGFDCNFDKEFCKTWMRNSTRTNFQWKRHQGSTSSVGTGPH
HDHTTNTDQGYYVYIESSSPAQPNDTAYLIGKDIPNNNGFCLSYWYHMYGPHVGSFRVYVVNKT
NAEARFVRVGTQGDKWKHGQLYISPKAGNPITIRFEGVRGSSFMGDIALDDISVRYGNQCPAPRE
CTFEHDNNGGSSSTCGWTQEKQKDSFDWSIGSGDTPSVLTGPNFDHTLETKQGHYFYIETSYPRK
FGENATIISQSYQQTLGKCFSFWYHMYGSTIGNLTLFLRRD
>TRINITY_DN875_c0_g1_i1.p1 type:complete len:606 gc:universal TRINITY_DN875_c0_g1_i1:2207-390(-)

MLRLVLFAISASVVYGSCNPLKLGCFIHSGSDRNLLHSDNSEDIYTDFYSGTNIEWDKFSSYLQRAA
CRCDQAAANAGYRFFSLRDFGECHGIGKGASSFDALKLKKSMYCIAPNLGQCDISEHQHCTGAE
EGEFIYETKAQPAEKVIDGGYSSWSAWSVCSKECDQGLQERQRTCTNPEPKGKDAKDCSKLGKPS
ETRSCKIKDCPPSGETVIFCEHRGVKRIACENDQVVEILAANYGRTSTKHCVFGRTKVTNCRAAH
SMSIVKSQCDGFNYCDLNPHNDVFGNPCGFYTKYLEVKFRCVARKTSSRRAVLCEHRGSPPLSCP
NPDEVLSINKASYGRLSTHYCQYGHFKQTNCRALHSDALIKKTCNGLNSCSLNPSNTVYGNPCG
NVNKYISVEYTCKKTNAASRQAVFCEHQGGKTLKCANPDEVLSINKANYGRLSTDHCQFGHFK
QTNCRAEQSDALIKLACNGLNECSLNPSNDVYGNPCGNVRKYISVDYTCKKANAASLRAVFCE
HQGVKTLKCANPSQVLSITKAIYGRLSTDYCQLGLFKQTNCRAANSDGMIKKQCNGKNSCQLNP
SNAVYGDPCKYVRKYISVEYKCINK*
>TRINITY_DN2217_c0_g1_i2.p1 type:complete len:254 gc:universal TRINITY_DN2217_c0_g1_i2:884-123(-)

MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*
>TRINITY_DN941_c0_g1_i9.p1 type:complete len:3186 gc:universal TRINITY_DN941_c0_g1_i9:86-9643(+)

MADPAKIVDPIDDPTASDAEWKKIQQNTFTRWCNEHLKSSNIYIYNLETDLCDGLKLIALLQVLS
HKKIVRYNKKPTFRPQKIENIAIALKFIEKEQIKLVNIDASDILKGNLKLILGLIWTLILKYQISMSMV
ADDDDDPDQKTTPKQALMGWVKSKLPPELKCGNFNKDWNDGIALASLVDSTAPGLFPEWEDL
DPANKLDNAKEAMKRAEEWLGVPQVLTPEEITNPNVDELSVMTYVSYFPESKLKPGAPLKPKMN
NASKCSASGPGLQEHGVVVNKPAEFTVFTSGSSRGKLNVQVFGPGRKAIDCMVQDNHDNTYSC
QYTAPKTGVYDVHIRVGGHHIPKSPFRVNVASDLDTSKVTARGPGLEPHGLIVGRPASFEVIATDA
GSGELVIDVIDPKGNKKTELKVEARPDNVYFCTYMPVQVGRYVIVIKYGGKEVAKSPYHVSVTPA
ADRVKIYGPGLEPGLKTGKPASFTIDCSEAGEGGLDVKIVGPGKGDIKYEVKDNGDGTYTCTYKP
TRPGQYEITVKFDGGVVPKCPVKVSVGSTADPSKITAWGPGLERGVAGRPVEFYVNCKGAPVDNL
TVGVEGPGEAKVDMKTNSDGTVTVTYYPTKPGKYIIHVMYDEMDIKESPYSATISPRGDVTKVYA
EGPGLEAGNMAGKPAEFTVFTKGAGVKGNVQVTCVDENGKPCEVTVKDNGDGTFKVTYYPKTI
GKYVITISFMDEQIPKSPINVTIIPFSDPTKVKATGPGLQGGKTNKLAKFKIDASKAGEGGIGLTIEG
PNESEIKCDDNGDGTCNVEYMPTESGDYKINVLFADQHIPGSPFTAVIGDDFDASKVKADGPGLK
PGNKAGKPCDIAIDARKAGKAPLVVEVTDEVGNPVKVDLNEEEPGLFASSYHPEKEGPHTINITY
GGKHIPRSPFKVTVKPSSDASKVKVFGPGIKPTGVKSLEPTYFEVDAGEAGEGNVDIKIEPTAKGM
PPVKDIDVKPGKTPNSYIVTYIPPKDGEYNIVVTFAGVNVPKSPFKISVTPGSDASKCKASGPGLEE

PIVGKENVFQVETPPEAGLATLTCTIDTPSGRKLKADCKKNKDGNGYDVTWTPKEVGRHKVTVK
YGDKEVPESPFYVDVLGKPDPTKVKVYGPGLENAFVEKPAEFTIETRDAGPGNLGLTIEGPEEAKI
DCKDNGDGTCSVTYIPTKEGPHDINVLFDDQHVPGSPFKVAATEPIDASKVKCKGKGIGKSTPAS
YPAEFVVDATKAGKAPLEVDVVGPGDKKYPCDIVDNNDGTFNCAYVPEKKGRYEVTPKYGGTP
VPGAPFKVSGEPTGDASKVKCSGPGLDRPHIGHAAPFEVDTTKAGDGKLNVNAKGPDGKELPV
KMVEEEEGIFACEFVPEELGPHELEVLFGGQPVKGSTFKADATPAPELDKVRTPALEEILEASPCVD
QQFEAPVDCSEVPDNKGAKLSGKITTPAGKREKVDVTDNFDGTFALNYTPTEVGKYVLDVGYDG
IPIPGSPFEFEVTEGGPDKVKVFGKGIKKGVVAVPSRFTVDTKNAGPGDLSVAVEGPSKVDIECVDN
GDGTCEVTYVPVEPGEYDVIVNFDNQQVPGSPFKPQIVQDEPAIEVGRQSDLCLTPEGISAKDIPSL
KGVLQAPSGKEKPVDITEGPNDSFIASFVPDEPGKNLLHVKKRNKPIDGSPVPVMVREKPVIGEES
GIPMDLADCDLPKDLPKLNAVLTRPNGKEGPCGVEPGPDDTVAISFVPEEPGKHIIKVYKDGKQIE
DSPFVVMVEGSPDQYPKVGHPCDKDFYQPEPCRRGDISKMKGTLRRPSGKEEEVDVKLGPDGTIA
VSFVPTEAGEHLVSVKKDGRHVPNSPFSIMVIDEPTVPTVGSECSANFDIPELDLPKDLQYLKGTLT
RPNGVEEPLELSVGADNSLAINFVPKEPGKHLVSIKKRGKHVKDSPFEIMVEEGKPTDAPTGGPVV
GHDCGVNLDIPELSLPRDLKNLDAELTRPTGKKEPLKCDMGPEETLAVNFTPTEPGKHLIDVKKR
GRPVKGSPFEVMVGSTPVSEDQIPVSEEIMAQSAPDVESGLPGGLDSLDSGKDKPVTVGSPCDVNL
DIDGVDLPKDLDKLKAELTRPSGKKEPVKCEMADNGGLSLNFVPEETGKHLLEVKKNNRPVKGS
PFEIMVEESASPESKPTAGQKCDLDLDIPDIDLPRDLKDLKAQLTRPNGKQEPIECTCTPENTLGLE
FTPDEPGKHLIDVTKRGRPVKGSPFEVMVESPESKPTVGNNCGLDFDIPDIDLPKDLKVLKAELTR
PTGKKEPIECTATPENTLGLEFTPSEPGKHVIDVTKRGKPVQGSPFEVVVGEEEPASKVPTVGSECD
VNLEIPGLNLPRDFKYLDGTLKRPNKTSDEPLELTMNENGTIGVNFVPEAPGRHEISIKKHGKHVS
GSPFDVMVESAPSDQPEVGSPTTLGLDMVIPKEDLRLLKGTLVRPNGQEEPIEITLDDNGHPNVTF
TPQEVGNHVINIKKRGQHVPGSPINVMVGPAKKPTTCDVGFEIPGIKLPDDLKYLKGSVVSPSGTE
EPVELQAGQNNTIVVSFLPKEAGIHYIHIKKNGKPVGDSPYQVNVKPEDIAAGQPDASKVKCTGR
GLRHGLPGVKADFLVDTKDAGYGGLGLSVEGPSKVEINCVDNEDGTCAVDFTPAEAGQYLINVT
FADTHVPGSPFKCKVGGPGVEDDIVPMTDDGVECASSDMLAFPSSKARSPQDFVIKFSGSGDLKA
TVTRPSGVEDEAEVVETGPDTYTVRFVPRETGEHLVNVKSRRRHIPGSPFKVLVEAPAGGAASCKA
HGPGLEGGVAGQPCRFTVITRDAGPGGLAVAVEGPAKAEIQCHDNGDGSCDITWYPVESGEYML
HIRFADEAIPGSPFKAFVLPADEGKAMPMESFKDQVLRVGQQASFAVQMKGKKGKITASVQSPSG
VQIDCSAVELEEGNYAVRFVPRELGDHLVSVFLDGHHIPGSPFTVKVGGLDSDPSKVTAYGPGLKG
GVASQPAEFTVNALNAGSGALALSIDGPAKVKMHCVEQDDGTYKVIYNPTVPGVYEISIRFGGQH
IPGSAYKVRIVGSGDDAINIFGDASKCNASGPGLNQATIGQPATFKVDASNAGRGSIMVGVEGPVI
PAKEIIVKHTGNNVYSINYILEQSGDHILRVLWADNHIPGSPFHVNV*
>TRINITY_DN12627_c0_g1_i1.p1   type:5prime_partial   len:1061   gc:universal
TRINITY_DN12627_c0_g1_i1:3456-274(-)
YGENNRLKFNDARQYCQQWKDDQGDLVAIHSNYENSFIMSQLYDVNEPMYIGLTDSFSERTFLW
VDQSSVVYTNWYARQPSFVGNEDCVEMMPYFKTHGRWNDIGCSAERGFICQRTPSKTPLPTPEP
VKDSKPCPAGYRKFMKACYRVVHTPMTYDDAVKDCRTSVGGELGDLVSLHNQFEQSFVFSQFAK
FDFHSWIGLKKIKGEKEFKWSDETPYDYRYWLSLRYDNTVYNDDKCTTQEFSSKVDGKWKVTDC
TQKHPYMCKIERDFDQPHLTFIGNCTDGWTKFYDKCYKLQNYFSNWPAAREKCKGFGGNLVTIT
NSDIQKQMEYLARDAYRSVWIGLNDRAKEYVFEWSSGIPLLPDSYQNWGPNEPNDNSGTENCV
HMTTESSGGKWNDLSCSQRMPYICEHPLECNSALGMEDGSIPDTNINATSYVGTYFPKYARLNAK
SDNNRNTAWCTNITTGAESLTINLGEVMQITRISTQGLLDSSLGFSRGGYVVSYMLEYSNDGTTW
MTYISEDAYDQKPIALPGNIDASKIDGTTINLKAAYLRFIPKLYKNIICMRVELYGCKSVCSRALGM
TNFAISDKQLSVSSSQAGSEKAQLRPNIDGSWCAKDDDYSPFVRIDLPRLTKITRVTAISSSKVQYKI
AYSDDGELFTRFQTLTNEERVFSTVPSTHDLETAISAKHVKFDLLKKDQGKLCLKVELYGCLKDCD
AVLGMETKIIPDRLITASSAKPSNPARNARLSVGVYGDNSWCSSETDNAQYLQLDFVQEAHLTEIA
TQGFNGDSAKYVSKYNVQFSDDGDFWHQYSEELPGNSNGYSIQRNKLKEPIIARYIRINPTEWKN
GICMRVEFYGCPMKPFTAPKILTQKTYNGAIRILNEDFNENLLNANSIEYIELANKVETDITSLYLLE
ESFKDGFNSVTVNKFREGSVITEFTIKTHTSDASLDAAEPLRKAVQTGRVGTFDVDPNFFEIVTAST
DKSTATNDDSGGLSNGGKIALIVFFVILICIVLAGGVVYYLRSRRNGFRLQFQHRAFENPTHVDDL
QNDDMKVEFMNDDY*

>TRINITY_DN8597_c0_g1_i1.p1 type:internal len:124 gc:universal TRINITY_DN8597_c0_g1_i1:369-1(-)

TCDGGVLVQRRTERAFNKVETRNGNTPCNTQACGGSDADFSEERVRACSNVNQCGVNTGTQTV
YKVCNGNRCNFQGRDYQINEEVVIRVQSCSVVCDYSPWQDTQSCTKTCDGGVLIQSRTER

>TRINITY_DN113_c2_g1_i1.p1   type:5prime_partial   len:1207   gc:universal
TRINITY_DN113_c2_g1_i1:4425-805(-)

GPFGYKGEAGGPGVSGDAGESGKNGTKGYRGETGARGDIGDTGFPGPQGMVGPPGFVGKRGLP
GPDGKTGGIGPLGKQGNTGLPGSPGNSGLKGQTGNTGAIGPKGRVGLVGPVGLMGVKGASGEA
GLDGKPGMPGAEGPDGLSPRGEPGPVGDSGETGPGGDIGPDGLVGLKGDVGKPGIRGLPGLKG
MAGDTGLVGAKGAAGPDGDQGATGKAGPRGEPGLVGIRGYPGAAGEPGPNGQTGLKGNQGRI
GETGADGLKGSKGTRGMTGPNGETGMIGLVGKPGVAGVDGRNGAPGMNGRNGARGVSGTAG
ADGQPGVMGVPGIPGDPGDMGDTGLTGANGNNGTRGDPGRRGPNGAIGERGSQGSRGDMGQ
RGNSGPTGFQGPPGPRGVAGLDGMDGKQGIKGSRGKSGNPGLAGEMGLPGNAGVVGQLGKRG
ASGQKGNSGSNGDNGEVGYPGKVGNVGDDGRPGTPGLNGRKGVTGETGKPGMRGPKGPSGD
DGSEGAQGTDGLPGPPGLTGSRGVAGLDGKPGDNGSPGAPGKMGAEGKPGAPGLVGQPGLRGP
VGAQGTRGVKGPTGDRGVSGDVGLEGFAGEMGQNGLRGAVGIIGQIGEIGTPGKPGPRGMMGA
QGLTGPSGPTGSTGIAGSPGRDGNKGPNGDQGDFGKVGKAGQSGSPGKDGLPGIPGKPGLQGEK
GFGGPLGQQGPEGEQGSRGTTGMQGMKGKLGPKGLSGLNGSPGKDGLRGPRGSRGTAGGIGPL
GVDGKPGTPGTNGTDGLPGDTGPKGTAGLRGEVGDFGAPGDVGENGATGPDGIIGAAGPRGRN
GDVGAPGSRGGAGDMGAEGPRGASGDDGRDGLKGLKGTMGRMGIPGPSGDLGEKGDNGPDG
RPGYTGPQGRYGDVGTDGDTGVQGMKGETGVSGPDGNKGPDGTSGDHGTPGTAGAPGPPGPP
GPPGDYSSFMSGGYMDFLRAGGFSKGPRYYSGKYKKSLNQESNTIEKVFQAKYQLFKEFDSVWN
QVVNDKITRKTSGSSKNPAVTCADLFKNNHHIGSGDYWVDPNEGSPDDALLVYCNAENNETCIY
PKSPSFDKYSTYMGEVDYTWVYSSRILTDEEYITYAADMVQLNMIRLMSDRVRQNITYHCKNSLS
DLQLKTDDDKTMHLDNLRRITVTMQNNCVVKDGTWRKSVFELNSKYLEQFPLQDIAYKIINSSD
EDFAIDIGPVCFS*

>TRINITY_DN113_c0_g1_i1.p1   type:complete   len:1417   gc:universal
TRINITY_DN113_c0_g1_i1:4413-163(-)

MANWSLLYAALLFLYSVSAQEEERPITFIKGEPGPKGSRGMPGDDGSVGSTGRQGNEGRQGPRGD
TGPKGFKGEPGLIGPAGGASGGETKGPDPLAARVGVKGGTYGVNTVFDYQLGPPGPPGVPGNTG
GYGFKGDVGPVGVKGVPGLPGPPGSYGERGEPGEAGLDGVKGDRGDAGQTGPPGKKGVAGAV
GFPGLQGPFGYKGERGGAGPVGDEGVSGRKGEKGYAGEKGSRGDQGDAGFQGVQGPTGPIGPL
GNVGPRGPDGQRGIAGAIGAEGLKGAPGTRGPQGPKGQLGEPGQRGVKGVVGDKGPTGQQGS
QGPTGNPGDPGQPGKTGDKGSIGDVGLIGLTGPQGMQGERGTVGPRGPAGGAGKKGERGQAG
PIGATGEKGNVGDVGLDGARGAPGKSGIEGKVGQPGPQGEPGAVGLQGAQGPRGTDGQAGQA
GPKGNTGEGGFPGAAGGKGSKGLKGRGGDRGMQGEPGSAGKPGARGRDGKRGAAGEDGKNG
NPGQRGPQGSQGLTGAMGLVGAPGAPGDMGVAGLPGQQGRKGTRGLAGPTGQRGLRGEGGL
PGERGEQGAAGPQGTQGTQGSPGPQGRTGLDGKDGSPGDKGERGSMGTRGKQGEPGADGKQG
SRGTPGQQGIRGDSGDQGSPGLLGERGLAGQKGVAGRDGAPGMPGRTGRQGTIGATGAVGLRG
AKGGRGKDGETGEQGPQGQEGPTGPRGPRGASGEDGAPGQNGLPGLTGPMGEEGQPGRPGQP
GKQGPRGSQGEAGPVGPKGPLGARGDQGEQGPVGIEGVVGALGAVGSEGTKGPVGAMGSMGP
TGPTGPQGATGETGPIGPLGAQGRPGIAGNAGGKGPNGDPGNPGRPGSSGDQGPPGKDGSNGE
PGSPGKEGARGLIGRPGAEGIRGEAGTSGSTGRLGRKGELGPKGFPGKRGKDGTNGKRGEMGVS
GADGIRGSKGNSGKDGSAGIAGEDGVEGQIGEAGYQGSRGVRGDTGAPGDSGQPGDNGPNGA
KGSKGSSGRAGAQGVDGRLGARGDQGAEGARGKEGAAGAEGERGEKGKMGAPGIYGPAGDP
GFKGDEGEPGPVGPVGPHGPRGSPGEDGPSGKKGASGITGTNGRKGNRGQSGANGDTGTPGIPG
VPGSPGRPGPPGEIAGMSGAFARFFSAGGMGMKGPGNYYNNYYGQYRYYKAGNEKIRNQIKPH
LSTFKQYYELLKDVDDMMKATGTKSKPARSCKDLFTDYPNKITNDYWIDPNGGSTDDAVKVFCD
KMKNETCIFPKSYRAELENHYTGKDKFRFMYEDIKEDGEIEYAADITQTKILHLMSSKVRQEFSYN
CKNSLAVMKNNKDRYEYALKLKLDNEDIISMNMNTRSLDINILNDECWKKDNTVRTATYELISH
KPIKHQLPLLDVASFDIGGPNEEYGLTMGPVCFS*

>TRINITY_DN199_c0_g1_i1.p1 type:complete len:229 gc:universal TRINITY_DN199_c0_g1_i1:207-893(+)

MVQGSMTIVKYLMFFFNFIFWLSGLALIVIGAVIRDKYGDYFSYADSRFTNVAVFLIVVGVIVFIIGFL
GCCGAIKENYCMVTTFAVILGIIFILEIVAGAIGFAYKGQVEEKADKALVRASKNYNNDDEPGAKK
LLDWAQQRFECCEVASATGNGTCADKSPKSCHPDNDCNKTKYSQKCKEGFVEFMKDNLVTVGA
VALAIAFIQILGIVFACCLMKAIKGEYEVV*

>TRINITY_DN55094_c0_g1_i1.p1   type:internal   len:107   gc:universal
TRINITY_DN55094_c0_g1_i1:319-2(-)

LTLDMLAQKPMNVIALIDEESRFPKGSDETMLNKLIRQHSKNPAFITVKSHAEKKFGIKHFAGSVY
YNTVGMLDKNRDTFSADLNHVIAQSRCKFLLHLFDKELKM

>TRINITY_DN8008_c0_g1_i2.p1   type:5prime_partial   len:1298   gc:universal
TRINITY_DN8008_c0_g1_i2:4205-312(-)

IMSPKERTCPLTQYLFTPIYTGSCKISDAEQRANDRQVKSAVQMAGSAIGTVVGTIFGGGIGGAIGG
FIGGAIGSLIGGIIGLFSSCDKSYEVVTRSWVVEERKCILLEPDVRSITRPYSECFDAKIKANTGFKVPY
TCNCKVNDCIVKSPSPDCLLQNQQCERKRKDFLERTKTVPPTFSKLYKSLKQCQDSVGASILKVQS
AKKTVQFYEKEHTRIKNMLLALEEENKFSKQALSDATSILQDDLCVSNAFMNNKNINELIDIKNV
QFDTLLPLVNNIRINAHVKVKGNDVLVPFVHELSNDNKVSLNAFGRKIIMNTICKKIRKRRSLDL
NEDEKNDLAFVPWINNVNGTATVADLSCVSLDKTLEFIRHTVKTLNKKSSYANDLLMQLQYSTN
KLNPSLYTAFTAYSGITTEKNDIIKANEALLMSANNELNKIQDQVSVSNVLDIWGNEAEIVTGFNN
VSVCLNYKDCIISAIDTLKNLPTMFRNSREAYMKEVMELEKELTKIYEEKNLIGLSAKAQSVERIVS
RIKYMSFHCSKRPIVTLKEVKDMDVEKGKNITLRCIVRSARAIKYYWQFNDDILDEENSHSLTIPVS
NETSGIYRCIAKNLVGNGTSNQIRITTYTKPSFIEEPKDQIYILPSHPQSNLVLTCNVTNNYDTTIAW
YYRSFTIGKRPNIINGQTSILLDLDGTKQENSGYYFCQAFNKHGRIKSREARVNILNSNIARLEVNIS
LDILQTDEISSNSFKKISGDMLSEIKDLGRTLTTTVIKSKTKTRVTFNLKVKPITDNVKSLSESFNISSR
MRQNLGSAAAVLLGKLSENSFKLPINDGEFAKVDNDTMTYGMKLNICQEGYKLHKNGFLCVQC
PFGTAGKDCKKCPLNTYADAPGLGICKKCETSKITEQIGSTSKSQCIGTTERKVDIIFAVDVSKRFLE
QINGLQKIRELLSKFIKTYSGTKYNTRFALLTYYKYVDVYLSLTEYYHSDDILGLLEILGEGSRMPDT
KLALVEIETMFDEESSSDRKKVAVFITNGGTSDSYYLMELFKYKRQAITLQNKGVHIISVGLGTVDH
RGLRALASYPKLENAIFPSSNSVAVQKMIYSIGNELKDNCYTPAVDFGIIYHPNHKESLVQITKEQF
LRNANWLSKLLLPIYRMFKQQSYYFMYKHSVPSNSFGSFSETGFQERIVSYLQQQTSGFDIYKKIST
AINVDMTEIYRSFSKVKVLIIITEEPLDEAVLKQYEISVHGEKIDIYNFVKDASSIEKFEGPFSDKPRA
HRLVYGIDEVNFLVNAINCNRTKICG*

>TRINITY_DN1535_c0_g1_i1.p1 type:complete len:779 gc:universal TRINITY_DN1535_c0_g1_i1:86-2422(+)

MMKYFMLIVFTICLKNIHAQDKNLCTSAETCGKCLLKGGDCFWCIEEDFKFNRTRCNTEANLAA
QGCTDYGMGRGKKTNDADLDFTSVRQVKPQKVTLEIRPEEEQSFRIQVKSAKDYPVDLYYLMDL
SKSMENDLDKLQTLGTNIAAEIGNITKNYRLAFGSFVDKTVIPFVENDDANYKPCAECEPTFSFKH
VFDFSNDAKSFEKAVSEQKISGNLDTPEGGFDALMQVAVCEKEIGWNPKDKCRKIVVFVTDASPH
IAGDGRIGGIIRPNDGQCYLTEDGDIKMYTEATKMDYPSIGFLRSKLKDNAVIPLFAVTKNVTEVYK
SIAAELKDLQAVTGILEGDSSNIVEVIRDKVREISRTVTLTDDSSPDITVTYRVQNDPTKPNVCPSPV
APNRCEDVEIEQTVDFDVYKASAKNCETKEKQDTFTVNIPAFGKVEVNVKMICDCDCAKTSE
PDSPKCDGQGTFECASCKCNEGRYGDRCICDGNENKDMSLCKPNNVTDKICSGFGNCVCGVCQ
CNIRENPEERIDGNYCQCNNFNCPRHQNIVCGGPERGSCECGTCVCREGYLGENCGKTDCRIGV
KKCLDAKGQNCSLNGICECDRCLCDKGYEGKQCQTCVSCPGKCSEYKTCVLCKAFGETGEQCD
GCELIQHVLNRTNEECVVPVDENCFVIYRFEIDPVSMNETLYIQRDKRCIIIVKTKPPILAIVLGTIG
GIVLLGLLLLLLWKLLITAYDNREFQKFEKDRMKSKWENDENPIYRPSKQQFQNPAYAGAN*

>TRINITY_DN1613_c1_g1_i2.p1   type:internal   len:1068   gc:universal
TRINITY_DN1613_c1_g1_i2:3201-1(-)

TKSCGGGIQESTRSCSNPSPAHGGKPCSGELSKTRACNEHECPVDGGYTPWSAYGKCSKVCGTGV
QFSTRTCTDPKPKFGGEPCTGLTKKSRNCNTHPCPVNGNWGAFGSFTTCTRTCGGGIQKRYRKC
DSPAAAHGGKKCPGLSFQFKACNTVHCPVDGGYTQWSSFGSCTATCGGGSQTSTRTCTNPSPKY
GGEGCVGPSEKTRTCGTKPCPVNGGYTEWGEYSKCSEECGGGIKTKSRSCTNPAPAHGGKGCQG

PSSESDVCNEQPCPVDGNWSAFGPLSVCSRTCGGGTSLSKRTCTSPSPKYGGKSCSGSRYRIVACN
TRICPIHGGFTAWSNYGVCSEKCGGGVQTATRSCTNPRPLFGGKACVGSSRKSRICNSQPCPVNG
GFSDWSAYGKCSKSCGSGIQVSSRTCTNPAPAHGGKSCAGPLQQSRVCNTLPCPVNGNWGSFGR
FEECSVSCGGGVQKRFRPCNNPSPAHGGKACRGLSFEIQACNTKHCPIDGKYGSWSSYSKCSVTC
GGGTQVKTRKCNSPAPAYGGKNCVGVASHIQACSTHHCPVNGGLTSWSSFDECSEECGGGIQER
SRSCTNPAPAHGGKSCVGALVDSRKCNTHKCPVDGGFTKWSSYGSCSKSCGGGSQTSTRSCTLPK
PAYGGDACVGPTIKTRGCNSQACPVNGNWGGFGVYGTCSKSCGGGTQKRYRRCNNPAAAHGG
KQCSGLSYQIKACNTHHCPVNGNWGSWGSFATCSKPCGKGVQKRVRKCNNPSAAYNGKACPG
LDYQLQACNTHHCPVNGNWGAFGPYEACSKSCGGGTQKRHRRCNSPSPAYRGKTCSGSSYQQR
SCNTQHCPVHGKWGTWGSYGACSARCGGGIQKRYRSCNKPSAAYGGKACPGASYNIKSCNTQ
HCPVNGNWGSWGSYTTCTKSCGGGTQKKSRSCNNPAAKYGGKACSGSNYYLKTCNTHHCPVN
GNWGSWGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHHCPVNGNWGS
WGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHH
>TRINITY_DN2113_c0_g1_i2.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i2:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN5500_c0_g1_i2.p1   type:3prime_partial   len:1183   gc:universal
TRINITY_DN5500_c0_g1_i2:3546-1(-)
MEIKNFLILLSLLSLTSQLKAGLVFNETGVDQPVDLFFVIDGSGSVGYELFDGQLQFVTELTDQLGG
VSPFNVHVAIAVITTSPYQAIGLTQYQVNSEFKQAVSEIFYPRGATRIDKALLAVERELLPTSRAGVP
KVLVILTDGIQARWPGVYNTHVIIERLFNAGVSPVVVGIGSDYRDLDRLNKLAIKENHHLNEPIEK
LFLTTDDMEVGSPALVQKAASTVKKILSNVARFGYEVRSDFAFLLDGSTYAEDQLKLMEGLASYFQ
INRELSRFAVASSQGGGRTYIEFNEAQLSRDFKAMLMKLNVDSESIDIGIAAKYAYEEIFRIEEGERYS
TPRTLVIFSGNAEAKDSTLFGKYYSLLKKANVNLVMIAVGGGKGRSNLRNFPVDYYLPDFNDEVS
FTEECNIIAREMHNYIIRFASDTQRSKKCLHDGDLFFSIDVSGSAGAYYQENLNIIEKIIASFEISNED
SRVGFAIDRDGNTQVTPLDKHNSLESLMRDFDSLPYYPRGRSDMVAKLKAAYNQFLTSSRIHFQDI

LFIFTDGYLNRKSESESKELIDKLKAFGVEVFVVSLGYDVNFPFLMTLSSDKGHFFHVNQLPKDSDS
FVNSIINKVCDYTETFQDKYEIPINVALVLDGSHCSEKFHEAQKTFSNVIIDGLDNSPLAKNYLFSYS
SGVQQLDSNSSLAINFGSDGNRLDLALNEVVKLFQSISSNEVNMAIFVTNAGLESEFNATMSQAR
KLRSLGVITMVICIGDNFNYDVIRTLASSRQLIYMIPSPSQLTDTKFLRHIISAAFEMAESMPPPRLEA
GKSWYPAFFGNWVDSNSLEGEVPDAPLKAYHFGPTVLWSKPIQQKNYIIESTIIPAGSESGRFGTCG
HIFKHKVGATKKEKYISKSWGYFLWSNSFLYITTDGTETSPRIEFDYSSRDKLNLKTIVDGSKVKIYI
DGVFIRSIELEGTEADSQSHMFVGVWCHRLSAVTVEDFKVSALSNPCTVNNGGCSQICSADPYEF
KCSCIPGYRLVEDESTCVAESTCPELITTTVITTTLSSSPPTTNQSKFISTTTKPDELIDTTATIISTRESDI
TTTLILSTKSTEKPIEKIEKTTTSAIGDILEQTTVAPIKTSTVFVPTTKEEVILTTKEMAETTLTVPTTASP
VEETTTVAPVSTAAKTEATTQAVITTLAATTK

>TRINITY_DN4040_c0_g1_i1.p1   type:complete   len:402   gc:universal
TRINITY_DN4040_c0_g1_i1:1386-181(-)
MNIIICFIILLSLGSFATPHPYHMCKKRWEKVGCYHDPVAPNRPYPFQLVNHRDPTSNKWDGNLI
NWNRFSQSLHRLACICANRTRAEGYKYFGLQFYGECWSGPSLNFNKYGPSKECVGNLSQPCNNE
DTLRECVGKGHTNYIYKLLDEKPPIHGKWSEWGDWGACSKSCECGIKHRERKCNAPKPQNGGR
ECKGLSKEYSECNNGDCPKVCDKQVEIGILLDFSGSVRQVNWNATIDFVIRYSKGFMISPAKVHFG
VLSFSHFHRIDFKISNEKYWNRAAFEKKVKTLSYRFGYTNTDIALKAAKKEFFCDSCGNRKGALK
YLLVFTDGKSNGVTTELKVLSDSIKKMGVEIISVGTGYQINHEELEEIATDDSHVFYVKNYAYLMDS
MNAITKLTCGK*

>TRINITY_DN1320_c0_g2_i1.p1 type:complete len:260 gc:universal TRINITY_DN1320_c0_g2_i1:97-
876(+)
MRCLSMIFAILLVYLFDQVSSRACRDYVNYQCRKYLCHVPKYHRFVNMYCKATCGLCPVIHGLQ
MSTMSTPTTTATTTTTTTTTTKTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATIVLLSGGKTISGTPEDAS
GPAVRCTGDVTTLCITTQAIDAYFQVDLGSQKKVSRMEIKNYFHYENQLELKFLVSNDVTFATST
ICDTWDVRSVNEGDVQDKKRDCNSNVSSQTFRYARVQTVNNANEPEHLRVGEFEVYGVA*

>TRINITY_DN413_c0_g1_i3.p1 type:complete len:350 gc:universal TRINITY_DN413_c0_g1_i3:1286-
237(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCG*

>TRINITY_DN278_c0_g1_i1.p1 type:complete len:470 gc:universal TRINITY_DN278_c0_g1_i1:3091-
1682(-)
MAPSFNKTNGHMEENGGMIHANGKSSEKPINLGEQTYSYMTFKKMGLIMITLPLVFLLLVGLPSY
LYPVLVLLFFIPVFAGYIGLNNVIYCLYERHNQVSKIDNYIEFLDEDLKKKFTGRFIPIRDLYELYAEG
KLNFKGDVLQCLERRNEYVSYKLQLWHLKFFLSKLLPELLHARSQDKEQVCDHYDRGNDFYNA
YLGPLMVYTSGIRYSESDTLEDMQMNKLKAVCEKVQLKEGDRHLDIGCGWGTLVNYAAENYNS
QSEGVTLAKEQVCWAEEKAKSKEIMDRVNYLCMDYRDIPKKKYDKITCLEMSEHVGIKRYHHFL
KDVRNMLEDDGIFFLQIAGLRRAYQWEDFLWGFFMDTYIFPGADASLPLQFPIAELEAAGFEVES
VKTVGIHYSDTIKYWYHNWVKSDSHDKMIQKYGRRMVRVWDIFLAWSTIIARQGNSTCYQIVAH
KNFNHYPRRRFIQPKN*

>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI

SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*

>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)

MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK

>TRINITY_DN165490_c0_g1_i1.p1   type:internal   len:171   gc:universal
TRINITY_DN165490_c0_g1_i1:2-511(+)

LKHDEKCFLAGWEGAIAAKHIGWWNKGRTLAKKAMQSLPPGPQHRAQRETASTLFLLLAEEEQ
EEKSRKVREMTRAKEAAPAPIDPKEHDWARSIAGQLNDALKCEDFRRPHHQLWKLVGPGLLKQ
DADAIFSEIRQLIWEKWNSVAWQQGYRTTWDIKARQKLCARLVN

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-
559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN1936_c0_g2_i1.p1   type:3prime_partial   len:1894   gc:universal
TRINITY_DN1936_c0_g2_i1:5680-2(-)

MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKKVSNNMTKL
WSLTGTQGNRWISANVTFNGGSQFQMAIEAIRGVEYKGDIAIDDITVDDGSCNADNGQKGNVTS
YGKCTFEKDKCGFKDGNTSTLTWTRHKGTPSKGTGPLVDHTFGTGLAYYMYVEASNNPMQSA
RLYTTYTNLDSTGSCLSFWYHMFGPRTGELKVYINPPEIGKEIPSFSVGGEQGNLWIRGEVTVNTTT
ALVVFEGTTKYSYLGDLAIDDVSMERGKCEDPDSCSFQKDLCAWYNLPKSSGLDDFDWIVGAGV
TPSRFTGPTSDHNGDIAGKYLFMESSSPVKMGDKTWLSSELFNSTGKGKCFVFFYHMYGRDVGSL
NIYVNTSSGVELVWTQSRSKGKQWQNGQVDVERPGTYKVLVEGVVGKGYLGDIAIDDFKFKPGK
CQIVPSNASPKKPQTTMRPTTKRPTQPPTPILDCDFEFGVCSDWRQDYKNDTDNWKVGKGTTST
AGTGPSFDHTKGTIYGKYIYLEASYGRLNETARLISTSIPATGDTGGKCLTFWYHMYGPHINRLNIY
VMIGGHTGKPIWSRVGTQGNKWNKGQVTLVGRQPFQAVIEAVKGAKYQGDIAVDDVSLSSKKC
PQPGATTCTFENSQCGYIDDTSSDVQFQWTWQSQATSSLNTGPKFDHTLQSVSGFYMYTEASNA
KQGDKARLISPVNPGTSGSCLKFWYHMYGAGMGTLSVRLLVNNKLQSVPLWSETGNKGNEWK
VATTTIKTKDAYQVVFQGVIGTTYASDMAIDDVKLSDGECQSPGFCNFEDGLCTYANSKTDDFDW

LVGSSNTPSSFTGPKVDHTFGNASGSYLFLEVSKPIKAGDVAVLESQQFNAVGGKTRCLNFWYHM
YGSDIGTLQVIYKVFSGSQQERVLWKLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSG
YAGDIAIDDIQFTTLACRVEPSIANPTPTTPKPPTTFPKTAPPTAAPTPFSCNFEKDFCSLTSDSTAVF
NWTRSQGYTASQNTGPSTDHTYGRGFVKTYGPGSIRHAAGMCIHISMGGHTKPKDETALVLYNG
CGQDRTEFKYDNGLIKSTQYNMCFKLKGASTSAGTKVVISDTCTNKWKMLANGAFQDAKTNLC
LAPSGKLAYPQNNSPLIVSKDCKAKGVIFTFSPTMGFYALIEASAPQKPNDTARLISPVLNKPKCLS
FWYHMYGANINQLNVYTKSPNGVYGNPVWSKFGSHGDKWRPAHVYMNPKSSSYAYAIEGVRG
NGYEGDIAIDDVSVSDKCPAPVECTFEETNPVACGWTNLKTDDFDWSIGQGATSSQNTGPSNDH
TYNDQRGKYLYIETSSNLKAGAKALIQSPVYRGNGRQQGQCFQFWYHMYGASIGRLSLHLDQVG
STTKNRAWIQESDQGNRWSIGQITIKSQAAFQLTFEGIRGKSFTGDIALDDFRMFDGPCNNIATCD
FENEKCTWKNSYHKDDFDWIIGQGTTLSLNTGPVTDHSTNSGDGHYIFIDASRKKQGAKARLYSE
IIPRGFFTFIPYCIYFWYHMSGPDIGTLNLIAKHGKGKALEKVIWSLSGNQGSKWLQGTAPVTSSVD
FHLVFEAIVGDGYKGDITLDDIVYKLGLCSISPKAADPKLISTTSAPTPIPTTAVPAMYDCNFEKNSL
CQWKQDLTDQFNWTLVQGQTPTLGSGPSVDHTTGNKTGYYLFIETSNPRKAGDKARILSPSMDS
DKDHGHPHCLKFWFHMYGPHV
>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-
44(-)
MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-
2869(+)
MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVNQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN495_c0_g1_i2.p1 type:complete len:655 gc:universal TRINITY_DN495_c0_g1_i2:152-
2116(+)
MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPSNSVFGDPCVGTVKYLNIEYFCVKR
TPPTINTPTLTPVTLVIPVQSSYQGDFGKSLTLKWNLGLTEKDRIIAVYLYDDIKPCKTKIIFSSTGFNT
PMLQESYAQLIFGNRISATISKSSYQLTIKGLKASDARSFTLEMFVSGPGRSSCKPILSVIKISKINNINS
DKVDGGYTGWSVYGPCSKACGGGVQERNRSCTNPAPANGGKACDGVPSETRACNTNQCPEAS
MSYASTKYPASNCIDGDINTRCHSKKGVNPWLKVDFHKKVLFKSVELIKYFKYVCCDAVIKISAIQ
SDGTKKLCATDDQAEKGVQDLEIELSDNCVGHSIELQLDTHGKKSALRLFEIKFNAE*
>TRINITY_DN10485_c0_g1_i1.p1   type:5prime_partial   len:604   gc:universal
TRINITY_DN10485_c0_g1_i1:2-1813(+)

NYSRLKSYFVAMKRTTKRIALAAAAVFLLVVIVVVVVAVVVTRDDDEDEILTAKHEPVEAREYSK
ASVAADRLECSNIGRDMLKRNGSAIDAAVASLFCIGLLNMHSCGIGGGGFINFYKRSEKKAYIYDF
RETAPLSASENMYVNKSQERLSTVGGMSIAVPGNVKGLHYVWQKHGKLPWGDLLDPTIKIATDG
FKISKAVGDKIERESTNKLYLNEGFKEFLQKDDKTWYKTGEMLKATLLADTLKRIKANPHDFYNG
TMADEIVLDINEAGGSFSKKDLEDYKVTEREPVTTNVKGYTIYSMPPPGSGAVIEMTMNILEGFN
MSEANIKDNAELIKTTHKIIEALKFAFARRPLLGDPSFVADVSKVLTAMLNKTFAEELRHKIKDTPY
PNQTFYGGFYSQHQDPYGTSHLSILSEDGDAVGATDTINYGFGSGVRSTRNGIIYNNEMDDFSTPG
LQNLWGYLPAKSNFIKPGKRPLSSMSPTIVTNSDGDVVMVVGASGGSRIITATALTLIRTLYLNEEL
GRAVSEPRVHTHLLPYEVYINDPYTVSEELQDGLKDLGHKLVMSKYWAAIQAIYRKDISSPILAKC
DPRKGGLPAGY*
>TRINITY_DN585_c0_g1_i10.p1   type:3prime_partial   len:236   gc:universal
TRINITY_DN585_c0_g1_i10:705-1(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKES
TLHLVLRLRGGMQIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRG
GMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN12632_c1_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN12632_c1_g1_i1:165-1676(+)
MGNCLRKPKKQRQKEEKKLDATSLEPSLVEPNPQPPNSFPAPAPLGNSNGVQGATVFVALYDYD
ARINEDLSFRKGERLQIINTADGDWWYAKSLQTGREGYIPSTYVAPEKSYEAEDWYFGDIKRAEAE
KRLMMRSLPTGTFLVRKAESAPGNFSLSVRDGDSVKHYRIRKLDSGGYFITARAPFSSLHELVQHY
SRDADGLVCALNIPCPNNDKPLTMGVAKDVWEIPRESLRLTKKLGAGQFGEVWAGVWNNTTQV
AVKTLKEGTMSPAGFLEEASVMKNLRHKHLVQLYAICSDCEPIYIVTEFMCHGSLLDYLSKGEGQ
NLQLPTLIDMSAQVAAGMAFLEAQGYIHRDLAARNILVGENYVCKVADFGLARLIEDTEYTAHE
GAKFPIKWTAPEAALYNKFTIKSDVWSFGILMTEIVAKGRIPYPGMTNAETIHQVDRGYRMPQPP
GCPEPLYQILLNCWNKDPEARPTFEYLQLTLEDYFVSTEPGYRDLNQTDS*
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG

EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*
>TRINITY_DN65215_c0_g1_i1.p1   type:5prime_partial   len:383   gc:universal
TRINITY_DN65215_c0_g1_i1:1336-188(-)
HYRKKTTMAAYDDDENFGTSDSYGNVGSFPKEFGYAEEQEELNNYSEEQKPKILLMGRRRSGKSS
ILKVVFHKMSPNETLFLESTNKIVKDDISNSSFVQFRIWDFPGQIDFFGHDFDSEQIFSGCGSLVFVI
DAQDDYLDALTKLHQTVTRAYKVNPNIKFEVFIHKVDGLTDDHKIETQRDIHQRATGELEDAGL
ENVQLSFYLTSIYDHSVFEAFSKVVQKLIIQLPTLENLLDILIQHSGIEKAFLFDVVSKIYIATDSAPVD
MQSYELCCDMIDVVIDISCIYGLKENGDANAFDTHSASIIRLNNSTVLYLREVNRYLALVCILREDN
FAKHGLIDYNFHCFRQAIQEVFEIRQQARDALLPKNGTILSKGESVVV*
>TRINITY_DN165536_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)
MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*
>TRINITY_DN165469_c0_g1_i1.p1   type:complete   len:2668   gc:universal
TRINITY_DN165469_c0_g1_i1:41-8044(+)
MVEEDLNRSKELDIPKTLAYCFHNVTTVSLNRKQDIFRLLTQCIESQGCQDGHLKAVCKIISLTVM
RYRDSKSRQLVLKFVQKFLDIHELQAVKCLLTEIHILAKQLIKCGASLFSASCGLALLSWCSSISKKK
VQEASILKILYEVEAMCYSVICTCDSFRVKRLLKRAYLYLQDGKDAEQLENCLGVIISNSNCQLESIC
LVGFIFQYLTTKKEIQRVDEVKKRSLIDIIIKNYIQTKVKADYHYLKHAVPFLKYITHDDFKEILPAIE
KGLLRNPETVLQGVGYLLEGLSIDSSNYIEELSKCIAVHLISKNASLQADAVFAVSVIAKQCSDFSAI
NHLLKQLIKVLNESEGKLVFPEQKNAVLQAIKSVDCTSVTGSDHKENLATTLHDGLFPFILLEGHE
GVLTQALNVMKTWCKYFKNNLPKTFVDNIKKGLSLKVSTTVIQAHYLLVVSEALKGNTVSQASG
LLETLLQVIEKVKGQSHLINNVFLCISSSMVLLKMFLSDDVQVNAAKEDSFWNVILDPVKKNLVSE
KFLLSHQKEYFYHLSQCMNTMFLNYSSRFSQKLLEPWYRAFNVLMVYGDWKTKKSVKILLSKMF
DSGNYDTDEFQSRLFADLDSLLDQEMSKSSKIEDTEDILVVNHVVDAYLFLCIWNKKDINEDEVLA
VLRKCLIYVHHDTIYQHDSSLFSKIGSVLKKDVAKEFVEKYKDDLLKYFINLESLSKADNHSLKTLL
SLYPEALLDTLVDEIIKYFTKPDLINVTSQEYEIMKTPDGVAYDQSVFESAKAANQKSGNLKRESKA
YSYKDQKAEMELRKELEKKKGKSDKIELNKKQKEQLEVILTQEKAIRDKLKSLEQGVMKHASILSL
LLDMDSDLLCYHYLDLMNLLLCLCQSHIAAPHVIPIYTKLSEKLFEGDLKHLGQLVANVILRLKKP
VCELPMGWSVENLPEQAKRALNTLHTFVNERNVYLMMTYTRKKTFSVLVFSYCLPLLKSILKDQ
GALVKGSEEFRMKALQLIHIHAKLRSPMDMGSEKNDPELLPRKEMLQILSDVIVSCEGHNKEAKV
QQQATLAFDEVCKCASGRLGCAVATEEEINILLSNILSQCSILRRVSLKGLLEFVDILPTENVVIMTQ
LTRSVLIGRFDIVDENATLAKRLWDEADICIEPSMIQHLVENVTHPLDDVRLAASLALEFSLNERKE

VDIIPQLLDIYFEKLKIPPPIIDNLGRVVSQQFVDSWEARQGVGLALEKIAETVGEDKLGDLFSFFVP
KALGDRNESVRKQMLNASLQYVNLYGQNMDMLLGVFQDFLDSAPDSKELDTIRQSVIILTGSIA
KHFDKTDPQIKSIFSKLMAALSTPSQSVQQAVANCLPPLCGAMKSEAPELFKNLLEQLLESESYGE
RRGAAFGLGGLVKGLGILSLKQQNVIPTLNDAIQNKKIWKHREGALFAFETLCTMLGRLFEPYVV
HLLPHLLLCFGDGNQYVREAADDTAKAVMKNLSNHGVKLVLPSLLKALEEDAWRTKTGSAELL
GAMSFCAPKQLSSCLPSIVPRLTEILADSHLKVQKAGQQALRQIGGVVRNPEIQEICPIILDALSDP
NKHTVACLQALLSTSFVHFIDAPSLALIMPTLEKALGQRPTETKKMAAQILGNMYALTDPKDLQP
YLQAVVPGLKKSLLDPSPEVRAVSARALGAIVKGMGEVDDLMPWLLETLTSEASSVDRSGAAQG
LSEVLFALGKDKLDKLMPDVIATSMKTELSPNIRDGYLMLYVYLPATFEDQFLDYIGLIIPAVLKGL
ADESEFVRDTSLKAGQRMINMYADSAIELLLPQLEAGLFDDHWRIRLSSVQLLGDLLFKLSGVTG
KQTTVSEEDDNFGTAYSSQVILETLGFDRRNRLFAGLYMGRSDVALGVRQAALHVWKVIVQNTA
KTLREILPVLFELLLGCLASQSYDKRQVAARALGDLVRKLGERILPEIIPILEAGLDHEDGDKRQGV
CIGLSEIMDSTSREMISMFEDSLINTIRKALVDELPNVREAAASSFENLHNTIGHRALEGVLPTVFQ
KLDDPQLSNYALDGLKQVMTVKSKSVLPFLVPKLTTPPVNTKALAILSSVAGEALIKHIEKILPAMI
QAIQVSQGTGLDGDSEFESTRTLILSVYDEVGVRTIVDELTTSSKSQMPGIRKVAASLLMVFCKETR
GDHVPYIQSLFRTIIQLMNDVDQDVVASAWGALDALVKRLDPSEQLQHLSSLRQAVRFIKDDIRN
EQLPGFCILKKGITPVLSIFREGILNGPQEIKEQAANGLGEIIKLTSPEALRPSVVHITGPLIRILGDRF
NSSVKVAILDTLGLLLQKVGALLKPFLPQLQTTFIKSLNDSALGVRQKAAWTLGLLTVLHTRVDSL
FTELKNGIKNNEDSAICETILGALRSITLKAGSKMSEGIRNTLYETLVELISSNEDGIRLKAAAALGA
MCQILPQDQIEQLLNDNLLDINQMLDWSICHGRAVALSYALYHAPSQVFDAVDEDDIVEAVVKY
STYDRVPICTYGVHSLGHLLMFSKDNADVAPQIVVSSIKKTLLNSSVDIRLASLSTIKHVSRNTPEV
MTFERIRYLIPEFISLLRDRNTSVRSSAEITLAFTLQMDKNDILFDECVNTISEASHFLEEFKKNTFSK
LNDSLATDKDDYFFAT*
>TRINITY_DN2003_c0_g1_i1.p1 type:complete len:370 gc:universal TRINITY_DN2003_c0_g1_i1:89-
1198(+)
MGVINTLVVLTLALALEAADHMTPHEYEFWIKTATSCTQEIYEGDTSHSTYSDLKTKLEDGIKAAY
TNNTKYFSARVKSMQCTTKPHYVAAKIMLIMTGHFTFDEALADLKNEIMDNVLDGSALNLTDN
MLRASMDEGAKPKEKVTLKFSFTNELFCENMATLKVNLAKRVILSDGMKRIESNRIVIYEHECNE
EANKYKKAVMKFYIYDDNDFLTADAALTNLAYQVVDQLQYDGTAWKLGVIFHKHINDVDYESE
SEDEDFTEIEKTYIGFGAVVGLLLLIVIIVLFVSCICPNACGKQEDPYLIEDRPSRFTNVNTHRDAYSN
QVYSKEEYANGYEREVEMDTVLPHEEQTVFHGNQPNEGMKESV*
>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN11377_c0_g1_i1.p1   type:complete   len:804   gc:universal
TRINITY_DN11377_c0_g1_i1:3179-768(-)
MKQNWYNYFLLVTFAVCIIQYTNGQEERDSNPCVQATTCEACMQANPDCYWCRDVNYTEGEN
FSRDRCNLLIEFNDGCANLTSISSAFEPGQNSNFSDTVQVQPQTVTLDLRPGQPAVFNISVKPAPDF
PVDIYFLFDASFSMKDDLEKLEQLGAAIAQSINNITKNYRLGFGTFVDKKAVPFVEGPLFPTFPCSR
QVKVDNCAPVFPFRHTFSFSKNTTLFQQAVADQPLSGDLDRPEGSFDGLMQVVVCDQKIGWQPR
GKARRIVLLATDALPKIAGDGRLIGDLLQNDETCHLSPLNSDRSVLEYSESLTMDYPSISQLREAM
KKYEITPIIAVTEDVQDVYKDIANSWESLLAAFGVLNNDSSNIVDLVRENYKKISSTVRLLETKNEY
LDFEYKQLSPECQETLTSPNECEKVAIGQQVDFQVSVTLKKCPPEEENAANRGDIDIPGFGQVKIN
LNYLCTCPCSNNAIPNSVLCNTTGSLDCGICKCNQGFFGSKCECDETTVSRNDTLKCQSDQNDPS
FICSNQGICLCGVCDCFRVAAPRIISGKYCECKNFGCPKSRGQECGGDERGTCVCGQCKCKKEYA
GVDCGNFNCTEIEGPRCTKDGVQCSNRGFCDCTLGGCNCNQGYQGKYCEKCVTKNCKCNDLR

NCVLCKAYDRDDLNCTGCEYLDLQRVNDTQKTCTVQFNETCSAYYHYEIDPTQNQTQTQNVTV
YLEDDFFCVVPIVAGEPNSLWIILGIIAGIVLIGLLLLLIWKLLLILQGRREYNKFETSRTGSQWEQDQ
NPIYAPPDQKFDNPVFGGEF*

>TRINITY_DN2472_c0_g1_i1.p1   type:complete   len:344   gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)

MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*

>TRINITY_DN123121_c0_g1_i1.p1   type:internal   len:127   gc:universal
TRINITY_DN123121_c0_g1_i1:3-380(+)

LNQKLCAQQVIHLEITDANDNFPVFSQSRLSLNVSEYTEVGQVIATVRANDLDERSQGNLLFSILK
DEDFFGILSNGDNGVIFLKQSLDAERRLTHQIEVTVSDREGKSSLQNMEIIVFVEDENDN

>TRINITY_DN26392_c0_g1_i1.p1 type:internal len:469 gc:universal TRINITY_DN26392_c0_g1_i1:2-
1405(+)

PDILIGASNSDKAYLFRSRPIITISDRLELNVTSVPLKKNCDNGDGRNYFCAVLKVYLSFQGISVSNK
FDLELSLTLDDDQVEKRAFIKTVKKNDTSLNSQFKRVLNNITVNTPVTEDFMVYFLVKADLDIQKP
IPIVSKYKKIEKSGGCGANPCPIFNIYGSIGSSIQVPYLRECGDDKKCTIDLVTTGSIELPGKEKEFEILY
GVTDEVYLNITVENLGEAAYLAYMKINASSDLDVISVNVNGGPNILWKSSNIDAETMQVEFSIAN
PIDKGGKYHILAKFSVGKQPRPSTPIYEFGMEAFALGEDKNMDNNRKTLTIGTKVETCIEVIGYSSV
PQVIYHSTAKQPPDVNATVNDIGDEILYQFLVQNKGNKPVDTLTVDIDIGAEKEKTTLMYISDLTV
DSVRCEEEKLNPKKFLIPDDISRTLNEESTKSSLKRKRRDVANDDGTEDKKGYKYSPLNCRTASC

>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)

MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGQQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA
QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP
PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA
DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*

>TRINITY_DN4494_c1_g1_i10.p1   type:5prime_partial   len:462   gc:universal
TRINITY_DN4494_c1_g1_i10:2120-735(-)

RIDKALRLTQKELFNTRYGGRVGVPKLLILLTDGSQTQDAGAEDPAKIAAELRADGINLLIIGIGKG
INQTELSNIAGGADNVFSAASFDELIGTDFIGAIKNGSCEGAKNPPNPLLKSVIDVAFLLDSSDNA
NDIFINEKEFLKRLASSLQIKSNGTRAGVVSFANQNNIDIKLNDYFDIAKFHPAVDQIQLLGSARDI
AKVLRFSQKSLFTETNGARIGMPKVLVLFTGEQQVADFKNDTLKTLAYQLRLQGMTILVIGIGNIK
EGDLVSVAGEKNNVFIAAKTDDLMGFKFLNATVARLDKIAQKKPEPKCEAKVDVGFILDSSGSLR
NEYGKEKDFLKTLASTFGVSSNGSRAGVITFSYYSEHSIKLNDHSDISSFNQAVDNIPLMGATTRID
KALRLTQKELFNTRYGGRVGVPKLLILLTDGSQTQDAGAEDPDTRCWCRRPCKNSYRTSSRWY*
>TRINITY_DN3347_c0_g1_i1.p1   type:5prime_partial   len:924   gc:universal
TRINITY_DN3347_c0_g1_i1:2-2773(+)
YGDGSDDDMDSIDEDEDEDEDDDDDEYSDDDDMSWKVRRASAKCLSAILGSRMDLLSEFYINVA
PKLIARFKEREENVKSDIFQAYISLLRQTKPVAMNDALEDKPDSPLSMLKQQVPLVVKALHKQLM
EKNIKTRQGCFNLFTELVGVLPSGLTEHIDKIMPGIHFCITDRNSTSNMKIDTLSFLGCILQHIKAEV
FYPHIHQFLPAVVECIHDPFYKITSEALTVAQNTIKVMRPTGTENYFDFKPYINDLYQSILHRLRATD
IDQEVKEKSITCMGQLLRNMGDNLSKQLPECLPIFLDRLRNEITRLTTVKSLTTIASSPLHIDLSILLL
DGIPLMATFLRKNHRGLKLHTLTCLDLLMQNYGNVMSTKHFEAVLDELSNLISETDLHVSQLSLN
LLTTMISKQQLLLKKVSSTVLSHIVILTRSPLLQGHALNSMVSFLTTLVRYSSSGLGYTDLLQMLTEV
IYGSTTENIHKSAYHSIARCASALTIACPSEAEAVVTKFIKDIKNSGTNDSIRLFSLLTIGEIGAHLDLS
SKAELKNVIVNSFSADSEDIKTAASFSLGHITIGNMDAYLPFILKEIESNAKRQYLLLHSLKEIIVCQS
TDPSSVKSLEQYVPSIWSLLLTHCENKEEGTRNVVAECLGKLTMVEPQKLLPELKSYLSSDLYSAQ
MRSTVLTAFKFTITDQPQSIDILLKDHLQAFLQPITDNDLNVRRVALTTFNSAAHNKPGLIRDLLTK
ILPHLYNETKVKKELIREVEMGPFKHTVDDGLDIRKAAFECMYTLLDSCLDRLDIFEFLNHVENGL
KDHYDIKMLTYLMLVRLSKLSPNAVFQHLERIIDPLRTTIQAKVKANSVKQEYEKQDELKRSALRA
VCALQKIPDAESHPILSDFVSQIRSNSDTKVMFESVQRDPSSTSLDKMDTAS*
>TRINITY_DN59572_c0_g1_i1.p1 type:internal len:725 gc:universal TRINITY_DN59572_c0_g1_i1:3-
2174(+)
FSSVLEYNIEDFELVNQYMFVTKNSSSHPGTKDLLVSYYRGDFQNTSFPMKNNGTSYIIADAHENE
TMVAVNHNGTANLYISNPEGTKYSLSLGNILYYNKDEGQKSYFEHSFVDLHRIKGISGIYIATSLTTG
AVGTRHLQSYITFNKGGYWSLLKAPEDTKNCSIWRGCSLHISQEFGYHNPLLNFSPITSKESAPGFL
IGTGNVGDSLKTKPNVYLSRDAGLSWRKVLQGHYYYNMLDHGGIIVAVEKFGLTETFTYSYDEGK
TWHSEVFSKERVRVYGLLTEPGEKSLIVTIYASYNKAHAWEVFEIDMTKVLGRKCSIDRDYNLWAV
ADQRNDTERCVLGKKQIFERRKAKSRCYNGYNYDRPINVSACLCTREDYQCDYGFKEKMILWFR
WDCVHDSDFEDYSKKPPSWCKPGLTYNISSGYVKAPGDACYGGEESKYVSTRKMCPIPKVDDYL
LYATRKSFFGYDFESKKSIEFKLDGYSNIVALEVAYDDGVLFFADKDRDSIVKIDTNNGNISTLLGFD
ESSTHIESMSYDWLSGNLYYCDSGNSTIGIINLAGKHKKEIMKFADADKPRAMMVHPTKGYLFWT
DWGAKPRIGRATMNGKNIKTIIDTEIYWPNGLTIDYDADLLYFADANKDRIEACGMDGENRRVIL
STGVYHPYAITIYNDRLYWDDWNQHSIFSIDLQGSGRETVVSYLAYAMDIKAFSKKRQKKGTNGG
T
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT

CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*

>TRINITY_DN11635_c0_g1_i1.p1   type:complete   len:705   gc:universal
TRINITY_DN11635_c0_g1_i1:2148-34(-)
MREAYLKRFAVVLSLLLLLQESHALIESKILDDGVPEIIPETKTSSLQSLDKDQQREKRFIFTTILIVTT
VISIGAEIYKQARGCKDFTPDLEPTANKGKRLEAEIKKLQADVESAWKPVQTLQSYADKLDKNLV
KIREKINTYKILIKEILHILDRKALDEMNRVLRTLENDIDRGKEESVGSMEDFQAMVGSPLSFALSM
TAKTVTLGVAAHSLIAKSSAKVATETGATWAAKNPGRVSSMISKFAQAKGSVARWSASKIASFKSV
LSAKFAGNIGLKLAKFKSVFAKLGKTTIGKALGKAMSVTGKALVKTGAAIAAVILFAYDVWQFVK
FAQECHKKLREAREAVRTMEQSRIELTTIRLRITILAIQVTTAYNQMKASISSNDFKDFLREVIELGE
GAQVQTTDIKWAVNTLKVYIQYISYNNLYLTNWLNGYLLQAFDKINYKLGCLKSKLNIRMSVVN
NCEDGVDSFINLYNQAKNLERQTVTNDCIAGQYMSESEIRGMVQVAMEERGAQQICIRNNDDK
KKMACNNLQNQQSNSQNANSLGVSVADIVYFITQCETKDLKRTQQLSICSKKSEGNTIAQVKGSF
HSYYHSQVQKVYDDCDLADSQKISVCSLKENGYDINHVQNKYNLYPSLKVQAVYDGCQKRNYL
TPNEENQICVFQAAGMSPTNPLYAGFWKLFYTKVEKSVVDNRYNQPCP*

>TRINITY_DN48767_c0_g1_i1.p1   type:complete   len:533   gc:universal
TRINITY_DN48767_c0_g1_i1:2135-537(-)
MEQQELIGSASRENENPQNVEENRCNCSKRFWIGAIALLLLLIGITGVTVTCFVLEQKVLQYSHHY
GVVFDAGSGHTDITVYQWPSDQKDHGTAHTEQITFEKCSDTGISSYQTEPEQAGVMIRKCVEQVA
FKHLPHKDVKKTAVYVGATAGMRLLCERDKDSCDKILEAIRRVLNGFKFRQLKNRVRVLTGSEEG
TFGWITANLVNNALNLKVPAENNPKLIGALDMGGGSTQISFIPEHYNFPNKEDMSNLKLYGVNY
TVYTHSYLCYGFREAQRKLMAHLVEASNYSSKAIHPCWQKGYNETIPASWIWLSPCSKRPQASIFP
LKNSTMYKFVGNGTSDACENRIKGLFNKTNCEAPNCTFNGVYQPPLRGHFMAHSGFGHIGTFL
NITKGDMVEDFKTKGEKLCQEDWNKVVREHEDVKKKYLRNYCFEALYSYMFLTYGLNFPPNSN
DVHVTKTINGTEVGWSLGFMVNATNTIPIEAPSYRLTQQELITLLVVCFLIALVGLSMLIVCCVKRK
IERNLKYKYTLVN*

>TRINITY_DN3016_c0_g1_i5.p1   type:complete   len:406   gc:universal
TRINITY_DN3016_c0_g1_i5:2713-1496(-)
MAPPNLKKMIQVKIKPRQDSYSDQFSRILMVKMLMLTAAFTGITWMKDKVKCIVPKNHDADGG
FVSKSCWINGFYVFKGLKEKDTSYYYGIPKDVLSDGYDKYGALCSTKNQQGRLNQGCTPLEKTFF
LQYQWFPLVIAAIAFLYYLPYLMFRIVNTDLQEIKDIIKGRNANDVDAKAIVKRFFVRKNNSTSRL
KARVLLNVVVKVLYVVVNVLGMIFVDSSTNSEFMQYGANWSSWTALKNEDMHDYTNREHEKA
GHRLLPSFGLCQVYTTAQDIKTKVANDHTYICELSQHVIYQYILIVMWYMFVFGIIISIIGLIQHMVL
KTMAILSMNAEGDSVRKIYSDLTVREKEYLDFIRRKNLPVFTKVLDEISQLKGVSRSYATSESDRSSF
GATAPEKENMMME*

>TRINITY_DN79126_c0_g1_i1.p1   type:complete   len:115   gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)
MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS

>TRINITY_DN11522_c0_g1_i3.p1   type:5prime_partial   len:855   gc:universal
TRINITY_DN11522_c0_g1_i3:2878-314(-)
FSAQLFKGSSKSILGGIPNIQLNRGRIGLGNIRDPSISLTRGSKIDYNGYMGFSATSGYFGNDKHIHF
AGGSPRSNALKGRVIMYKDSAGYEISQYLDDPSDQIGTYFGSAMASADINGDGLADLVVGAPYYT
GTVSNEGIAYVYLNKNGIVELVQTLRQPEGKDVKENGMFGISIGSVGDLNNDGFADIAIGAPWGG
EDGKGIVFVYYGQRDPAQLKLMQTIKPSDLSGIDVDGFGYSFAEFYPYSGGPDQYGFIENDPDYNI
YPDLAVGAFKSNHAIVFKSRPVYTIVGRLSLGGVKRLDLVNKENLCPNGMKCLDKVQACLMFKE
EESEGEVDYTLEVDSGRDSPKRAYLLDSDGKQVTKINKQTTVSKDEECDDYTIYVKNTTDVLSDLV
IKLSWKFVVPTTCDGVCPVANELCQFVDTKSIIFVKGCSDDGNDTCSSDLKIEKKEFPPKLVGNNR
LVGTEEIISAGATDGIILTFNIKNLGENAFDNSLKLEYPGKGDMKLVNIDDAKVISDYYGTPIWDSD

VTREKDVTTLSVMLSSPIVKGKPEQVQVKMSLNPIPKGTKFLKFKVYLETDSEETDTSNDFQEITIP
VELVSNLLVSGQSIPEILTWRKDVKDVQDKGAEITYNFLFQNQGPSNVDTSEAIILIPEKFKGSYFLN
IYNYDVKGSKSGSDPGSCRIEGELNPLKLDYYGRRIGNNTRKRRDTRGVPALECGADTTCREIICN
FNIENRNSATVTVKATLVDANFDSVIGAGREIHVTAEFSSDAVTPPSGLEFPVKSMVTTTVNSPYLT
KTEGGESIPWWIILLCILAAIIIIGVIIFIMYKKGFFKRKKMADEDEALRNGDPEMDDD*
>TRINITY_DN1194_c0_g1_i1.p1   type:complete   len:555   gc:universal
TRINITY_DN1194_c0_g1_i1:101-1765(+)
MAARLGGGMMQPQIILLKEGTDSSQGIPQLISNINACEVVAEAIRTTLGPRGMDKLIVDKNGKSTI
SNDGATIVNLLDIVHPAARTLVDIAKSQDAEVGDGTTSVILLAVEFLHQIKSLVEENVHPQILIKGY
RKATKMALEKIKEINVQIKKDDQEEMRKLLQRCAETALSSKLVAGHKEFFGKMVCEAVMHLDEL
LPLNMIGIKKVKGGALEESQLITGVAFKKTFSYAGFEMQPKKYKDPKIALLNVELELKAEKENAEV
RVDNVEEYQKIVNAEWNILYEKLEKIVASGAKVVLSKLPIGDVATQYFADRDVFCAGRVVEEDLL
RTMKACGGSIQTSIHNLVDNVLGTCEDFEEVQIGCERYNLFQGCPRSKTVTLILRGGAEQFIEETER
SLHDAIMIVRRALKNDAVVAGGGAIEMELSKHLREHSRSIAGKEQLIIAAFAKALEIIPRQLCDNA
GFDSTTVLNKLRQKHAQGGKWFGVDILKEDIADNFEAFVWEPAIVRINALTAASEAACLVLSIDE
TVQNPKSDMSGDDNPITGKRGRMPQMGR*
>TRINITY_DN1783_c0_g1_i1.p2   type:5prime_partial   len:473   gc:universal
TRINITY_DN1783_c0_g1_i1:1460-42(-)
NDFGPSAWQLVTAGTYQFLGSLARVAFFYEMGKPKALVIGGQFSGTFTARDLKSKFHVTVVDCKE
YFEYTPGVLRAYVKPCHLDALTFTLQPVLERSMGVKFIWGEVKQLDGEKKCAAIKPMFADTTDIIS
FDYCVICSGCNFGPFKPMGESLWFPTVHEEERKISDWKHIDERFIEGRRRHVLEEFHKLKDLNTKK
AQILIVGAGFIGVEWATEIEYFFPDIKLTIIDALPRCLGPLPDSAAEYCSEYMHAAGIKEFYDCKYDA
KSPDFWKKVELPDGADVEYVCIGVKASNYFMPKETLSDKGPGGGGWIHFNKYMQVTKKDGTV
WGDGSVFAVGDCNYGCIGAPPNWEMPPVPKISYPGEEQALHAVVNIKKMYKGKTALQPTWWP
WGAGMFATSLGPHDACFVLAANENKGSGYMINWWIPAALQKEIIESTKINECKNGCIGILIWHF
VHHTPFNFWGRGPWMPSTH*
>TRINITY_DN38399_c0_g1_i1.p1   type:internal   len:876   gc:universal
TRINITY_DN38399_c0_g1_i1:2625-1(-)
GDGSNFYESPGLLDWMNVTNVHIRFSGLYRKFDYIDTRWHHYVVSEVSLIARCDCNGHGDGISC
PLNVVTGTRKCTCHDNTCGSHCERCCPAFNQYPWKRGTRSSWFSDNTTACERCNCLGHSDVCQ
YDQHAADNNLSLNINGEYKGGGVCMDCKHNTDGINCEKCKPYYYRPANVDPRSKDACPSCGC
SIAGTRAASSNIKFLECIKDDKTAKFYPGMKVGDCFCKQNVIGSKCDLCKDEFYRLEASNSLGCRR
CRCFLSGTVQRLNICHKDFFGQCPCKSNVKQRDCSICKDGYYDLRNDDESGCKWCDCDVGASIS
PYICDKITGVCTCRAHIHSRRCKKVDEGYYYPDMHYIFGERNIYLRANSRLTTKIDIPRDAMYQLF
VQFELRTRLSPMLQLELKLDGTTKFLLRSNNNLPYALIKVCDTGCFSYFRHDSTQNFFLNAGLYEV
RVVSTIANSKFLLYKFIAIPVEFITAAILVGELKESFLHSCDVTKNDMRLGTANETICLAGAFSMTVK
FEDGALPCNCNLIGSTSTSCNKYGGQCACKPGIGGRDCSYCKPEFYDYSRNGCKECGCKGRNKV
CDPVTGDCVCPPNSQGRVCDPCECNGNSKRCNRQGICFRCGFNTEGDHCERCKVGFYGNALKS
QCIECACHPLGSFNQSCDAVTGQCYCRPGVVGRTCSKCASNHYGLSVKGCKACNCNEFGSKSLQ
CSAIGQCTCLVAAGREKCDKCDPGFYGLPKMACKECSCNTTGSVLNTCKNDEFGQCTCKNGV
EGRACNRCMKQHADFGNNGCRQCPLCTRKLQCHADEVARKLINVKTHLNLTEILIALQTNLIYT
QDTFQQIQVDAALFEHRLKQGKKDYTYLYDQKLMPWNK
>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ
>TRINITY_DN5584_c0_g1_i3.p1   type:complete   len:962   gc:universal
TRINITY_DN5584_c0_g1_i3:2920-35(-)
MASEMSSPFDEEETLLDEKRSKSNDYEGGFCKKNWPVVITGFGVVVLICLGVVIGTAFKSDINSSN
SRLAREEKFPYKNIRLPGNVIPIKYRIYLHPNISDNEFGFSGNVRILVNVLNKTNSVLLHSKDLNILK

VKIFSNSAAFNQKSESLATEIPTQEFLHSKKLEMLHIALNENEYLDAGEYVIYISFKGSLSGGLEGFY
KSSYTTRSGEKRYLATSHFEPTAARAAFPCFDEPAMKANFIIIIVRDPQHVALSNMPIERNVTRRDG
KVTVHFQESVKMSTYLVAFVVCDFAYVSAKTKKNNIEVRVWAPKELIAQAEFAIQVAPNILNYYEE
FFKVDFPLPKQDLIAIPDFGAGAMENWGLITYRLTSLLYDENESSSANKQWVAVVIAHELAHQWF
GNLVTMEWWNDLWLNEGFAAFVEYIGSDYHDKSWRMMDQFIIDDVQNSLALDSHANSHPISVP
VHDPAQINEIFDSISYDKGASIIRMMKNFIGSDAFHTGLTNYLTKYKFKNAKSDDLWACLTDAAK
DKDIDVKRVMDTWTLQMGYPVLNVKRDGEKVTLTQTHFLKDQDKPAKSIYNYKWDVPVTYFT
NGENTTQFDWFYKDNKSIVIKIDENADWFKINRDEIGFYRVNYDKDTWAALKAQLLNDHMKLS
ASDRSNLMDDAFELARAGQLDQIEALNMTEYLHKEKEYVPWITALSGIAFCGKMLQGREGYKYY
EKYIVQQVKPLVDELGWEDKGTHLQKYLRGSVLRSAVDHNYTKAKNQALEIFKDFKENNKAIKP
NIRSAVYLAGIKYGTKDDWDFMYNRYKTSQFPSEQRKIMFALTDTEDKNILKKYLSWTLDNDKIR
SQDSCGVIEHISMNPKGTEMAFKFVKKNWPEIYKRYGTSSFDMSSLIKTIIGTRKTKSGKEEAKEFL
DTHKLGSGRLAGKQALASVQNHINWLEKNEKKVVEWLKNNINNKKITK*
>TRINITY_DN941_c0_g1_i3.p1 type:internal len:363 gc:universal TRINITY_DN941_c0_g1_i3:3-1088(+)
LPDDLKYLKGSVVSPSGTEEPVELKPGQNNTILVSFFPKEAGIHYIHIKKNGKPVGDSPYQVTVKPE
DVAAAQPDASKVKCSGRDKPVTIGSPCDVNLDIDDIELPKDLDKLKADLTRPSGKKEPVKCEMA
DNGGLSLNFVPEETGKHLLEVKKNNRPVKGSPFEIMVEESASPESKPTAGQKCDLDLDIPDIDLPR
DLKDLKAQLTRPNGKQEPIECTCTPENTLGLEFTPDEPGKHLIDVTKRGRPVKGSPFEVMVESPES
KPTVGNNCGLDFDIPDIDLPKDLKVLKAELTRPTGKKEPIECTATPDNTLGLEFTPTETGKHIIDVT
KRGKPVKGSPFEVVVGSPESKPSVGSKCDLVV
>TRINITY_DN106_c0_g1_i2.p1   type:3prime_partial   len:1309   gc:universal
TRINITY_DN106_c0_g1_i2:137-4060(+)
MPSNSKLAVLLLILGIGITLSKAQDLDDEFLDRPGQCPVPPIEPNCDRERSPDESVQGCLMDMDCA
TGQKCCSDGCNLFCTSVNIPQPPQIVKGLPGDPGEPGIPGTSGADGDDGIDGVAGPIGNKGATGG
RGKKGRRGRPGPPGPPAPVDGSSLPEVGPIAGGDNKGPGPNAGAIGEEGMGADGFVTPKEGPAG
PAGPVGRLGPRGPYGERGDPGLPGPDGDMGPKGPDGPPGSVGENGRDGLNGDRGDPGQVGAI
GAQGVQGDQGPTGANGAAGYKGLKGDRGASGEKGAFGPDGEKGETGDNGLDGEVGPSGPQG
LQGSPGPRGPDGAVGPIGPIGARGLPGPPGLSGLPGAPGVEGAVGAVGEKGSLGPRGERGEQGER
GPTGDAGAKGETGAMGLVGRDGTAGKKGALGSPGPQGLRGEAGPPGIQGLPGSDGAIGATGAR
GEPGEQGFDGAPGFKGTNGDSGPPGKPGEAGPQGKKGRSGRDGPAGPAGRDGDRGLQGIPGAP
GIPGRPGSKGSRGDRGTLGKQGTKGTAGAPGSPGETGPQGSRGAPGGIGKSGRPGKQGARGASG
KDGRPGAPGQQGLRGKAGQLGLQGPKGAQGPSGGNGEPGIPGSKGQQGADGQKGSVGQPGSP
GASGATGERGTPGPPGDNGKTGPAGPIGEAGAPGRDGEPGKAGQRGDDGKAGDPGIRGPPGVK
GPNGLRGSPGLPGERGEQGSDGVPGNKGPVGPNGQPGPSGKPGSPGASGTKGPDGAKGKHGAR
GAKGYSGDNGKDGNRGKDGLAGLAGPAGATGSKGESGRPGANGLPGKRGDPGLQGNRGPAG
MPGDMGAQGVQGGDGQKGGRGPRGTKGEPGPTGPSGDDGMSGPGGLEGSLGNKGSRGLSGPS
GGQGRPGLEGMRGRRGPPGNRGSVGPLGPSGRGGQKGSLGTIGIPGKPGKNGAPGLPGKDGKN
GNPGDDGNPGMQGLMGPQGTVGLRGKPGHVGMPGFPGMQGNAGEKGAAGLPGINGSKGRT
GTTGPQGLTGPIGLPGQAGKDGVKGIDGTPGANGVRGPKGELKAGFTGAVGITGMPGNPGAA
GAKGGRGDGGEPGIAGEGGNAGSPGQRGPNGNRGRKGYKGNKGNSGAKGDKGWRGMTGPT
GLPGPIGTQGDVGVDGPKGRGGPVGPPGPRGRSGREGAPGDEGMQGTDGLKGSVGNRGRDGD
DGINGPPGPPGPPGLPGGFGGGAGAINMFPPMGNVEKGPSYYGYQYYKSQDGKDFKTAQEEAK
NTVFAYTNKLDEVLQGLDKPDGSEVYPAKTCADLKLCHPDIKSGNYVLDPNLG
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK

KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*

>TRINITY_DN6428_c0_g1_i2.p1   type:3prime_partial   len:303   gc:universal
TRINITY_DN6428_c0_g1_i2:906-1(-)

MLSSLKLERNKNLRYYRYRYSCCNIRVPSTSQKILNPFTLVVGGNAIYLDRQNVQCPGSAVITQLLL
RRYKSTIRYTYSCSTIPRKMECQNMKTPLNFDGKGDARYLDRHPVSCPNDYGLNKMRLQRGSNL
KTYAYHYRCCKPLYSVQFQENKVDGGFTNWSKYGTCTKSCGGGIQERSRSCENPKPLNGGKQCI
GVSVETRSCNTDPCPVDGGFSNWSNYGTCTKSCGGGIQERSRTCTNPKPMNGGKQCVGVSVETR
SCNTNTCLGPKQCKLKFTAYNKDGKGQVFYLDRHNVACKPDEM

>TRINITY_DN2390_c0_g1_i2.p1 type:complete len:467 gc:universal TRINITY_DN2390_c0_g1_i2:82-1482(+)

MSNVGIQNSDYAVYKDDVSYAEDNSKGIILSRLDGKLVEIRSYHINWESYHQGEMISNADYQFISH
YDRQNNDGKENLFGEDPEQCIMTLLSLINHVVKEHVIQYTLVLLDDIINRNKERVKKIHETVLKN
KFNIWPPFMSLLNRDDAVIMHMGSRLIAKLATYSRVRCPDSDLIYYLNWLKVQLCVPSNEYLQSV
AECLQWMMRIDDYRMPFVKADGINSVVSVLLSNLGFQLQYQLIFSIWMLSFQPKIANKIGENNVI
PVLADILRNSQKEKVTRIIIATFRNLLEKPSDCKMACVSLIQSKLVPVFNVLSSKTWGDEDIKEDIEY
IGEKLSTSLQDLSTWDEYVAEVKSGRLEWSPVHKQEKFWRENAIKIAENNYELLKILNKLLQYSN
DPLIQAVACHDLGEFIRHYPRGRPAFDALGCKEQIMIRMTHDDPQVKYEALLAVQKLLVHNWEF
LGKQIKIE*

>TRINITY_DN1071_c0_g1_i2.p1   type:internal   len:339   gc:universal
TRINITY_DN1071_c0_g1_i2:1016-3(-)

DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTPATTTESTTTTLPTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTTQATTTTTKATTTTP
ATTTTKATTTTEATTTPTTKPCECKVLQPVGVSDGRIPDNQMTANSVLVNVSGPTFTGASQARLN
NKPSKDGVGAWEPAQQEEIYLEVHFNKIEDVREIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDED
LYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVSVGDPKVAMRVEFYVCPPCGVTTPAITTTEQTTMP
T

>TRINITY_DN4815_c0_g1_i2.p1 type:complete len:638 gc:universal TRINITY_DN4815_c0_g1_i2:79-1992(+)

MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI
DGIAIVEKCENVKCNVNTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEETCQAFTCNLNAECSNTENGPDCKCESGYKAINGTS
GKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGTRGRDTICEDINECAIKNICGGL
KVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSCSKTCGAGDQKQTRSCSNPSRE
APHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKTGEEPKKDFSSFNGLSITDGETS
RRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKKYSSTKMEMQDIIDCNANIDIE
KNLWDVYDVLAEHSICNYQVQKDLEMKADRIQAEITRCNNRGWYSTILDAII*

>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN187147_c0_g1_i1.p1   type:complete   len:1223   gc:universal
TRINITY_DN187147_c0_g1_i1:3708-40(-)

MLTKFETKSARVKGLTFHSKRPWVLASLHNGVIQLWDYRMCTLLERFDEHDGPVRGIDFHENQP
LFVSGGDDYKIKVWNYKQKKCIFTLLGHLDYIRTSFFHKEHPWIISCSDDQTIRIWNWQSRNCISV
LTGHNHYVMCAQFHAVEDYIVSASLDQTVRVWDISGLRKKYCAPGAKPKEDITAPKTPGQMDLF

GHSDAIVKHVLEGHDRGVNWVTFHPTMPLIVSAADDRQVKLWRMNDSKAWEVDTCRGHYNN
VSSVIFHPRLELILSNSEDKSIRVWDMSKRTGVQTFRREHDRFWILGAHPTLNLFAAGHDSGMIVF
KLQKERPAYAVHQNTLYYIKERYLRMYELGTSKDIPIMQLRKSSGRSTPLKLIFNPAERCILITYNND
TSAGESQVYELHTLPKDIRSTDPEQSEGRRAAGTAAVWVARNRFAVLDKQQNVVIKNLKNEVTK
KVQTPACDMLFYAGTGSLLLRDAEQVMLFDVQQKRVMATVKIAKAKNVIWSSDMSYAAILAKH
SIAICNRKMENLCTVHESVKVKSGGWDDSGVFVYTTSNHIKYTLTNGDAGIIRTLDLPIYITRVKGS
NVYCLDRECKTKVLNIDPTEFKFKLALVNHRYDEVLYMVRNAKLVGQSIISYLQKKGYPEVALHF
VKDEKTRFGLALECGNLEIALEAAKTLDDKACWEKLSEMALLQGNHQIVEMCYQRTKNFDRLS
FLYLTTGNSDKLRKMLKISEIRKDVSGHLHNALYCGDVEERIKVLKQVGQGSLAYLTAATHGLVEE
CEEIKATFDLNPEKLPPINPNAKLLRPAVPILKNEGNWPLLSVSKTLFEGAAAMKDAGTSNMAAA
VDMDDEGEGWGDSDLVLEEDAGFVDPEEKLDIDEEGGGWDVDDDDLELPPDLDVGPVSSGGED
YYVPPTRGNSQAQVWCTNSQIPVDHLVAGSFDSAARLLNEQLGVVSFEPYKQLFMLAYARGRVA
APGLPSTPPLFYYPHRNWKEAGAKAGLPAVAIKLNDLVQRLQTAYQLTTGGKFADAVERLHQILL
SVTLLSVESRQDVTEAQQLLGICREYILGLQMELNRKELPKQNAQQQKRICEMAAYFTHCNLQPV
HLVLTLRTALNLAFKIKNYKLASSFARRLLELGPKPEVSQQTRKILLACEKNPTNAVQFDYDELNP
FSICAVSYTPIYRGKPEEKCPLCQASYKPEYKGTICKICRVAEVGRPGSGLKISMGR*
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN286_c0_g1_i2.p1   type:3prime_partial   len:106   gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)
MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN
>TRINITY_DN4900_c0_g1_i1.p1   type:complete   len:246   gc:universal
TRINITY_DN4900_c0_g1_i1:153-890(+)
MAELTCGMKCLKMLLFAFNFIFWVCGIVVLGVGIWSRIESKDWDSLLGDDGTIVNAANIMIAAGI
FVMIIGFLGCCGAMRENKVLLMLYAILLILIFVLEIAAGIFAYTKKDTVIEKFEENITKGVKNSYGKT
DKASEAMTKAVDWFQENAECCGVDGPNDWKASDWGKSKNTTKIPGSCCEKVDADTCDIKDSY
KKGCSEAGPQYIKDHMWQIGGVGVGIAFVQLFGIVSAICLCRAVNAETTA*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*
>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-
372(+)
MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*
>TRINITY_DN6920_c0_g1_i2.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i2:2147-915(-)
CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN
GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT

PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*

>TRINITY_DN4781_c0_g1_i3.p1   type:5prime_partial   len:1859   gc:universal
TRINITY_DN4781_c0_g1_i3:8547-2971(-)

QCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWIQFRNDDFDFDIQSGKTSSSGT
GPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASGDCSLRFWYHMYGSTIGNLTL
FLRRDNKDTLLWAKSKPEGNQWRPALVTVNSWYKPFQLIFVGTVGKSYFGDIAIDDLMMTDEKC
PSPGDCDFEDFDKCTYTQDLVEDDFDWIRGHGGTGSWRTGPSLDNTKKDNSGHYYFIEASAPRT
QGDRARLVSELFDPTSSTRGRCLQFYRHMYGTAVGTLNVYVKTGPGNSSDAESLVWTNAGNQG
NSWIQGQVPIYSSKPFRLVFEAVRGNGYAGDIAIDDINFNNNFAPCSFLPSNAAPPTLPPTTITPEDS
NCTFDKGLCRWKQMKSNDQFDWTLVSGSTGSVGTGPLGDHTSGKGSYIYIEASYPRKENDSAILQ
SPPIRPSLGSVCFKFAYHMHGAHVNALYIYKNVKGKRTMVWKRVGTQGNQWRNGQVNIRGVS
GIFNIEMKGIRGVDYQGDISLDDFVVTNGQCPTPSHCDFENNQCGWFNIGRGDDFNWKRSNGG
TPSLGTGPGTDHTTGVALGSYMFIETSYPRKYRDVANLYSPYYPGSKTGYCFNFWYHMYGSHIGSL
NLYQDTVKSTPIWNKTDNQGNMWKHGRVTVNSRAKFRLIFVGTVGKSFLGDIALDDVWVDDFP
CPAPGACDFESKSFCTWSQVPNKFNTSNYDDFDWELGNGPTPSFQTGPAVDHTKGTSVGTYAYV
EVSGLIKRGQKAQLMSEKFPPTNGKCMSFWYHMYGSGVGDLNIYLKYLGVKKSHLVKSISGQQG
NKWIQGEVGLHSQKDFNVIIEAVKGSSYAGDISLDDISILDGNCVGLCSSVQPVARVACGPQSVTS
ASCVVSYGCCYDNSVPNVPACFQHPSSCKAVPIIARQQCGYYSISKYFCARRGCCFDDSGAGGPP
CYHSLSKPTDFPTTRAPPTTQPPSKFDCNFEKNQCQYTNLRNDQFNWARHKGDTASFGTGPKFD
HTLRNQNGHYMFVETSFNKENDTANLGTPTIDFPTGGDDVCVRFWYHMYGQHVGAFKVYHKL
TTRVPTKPIWERIGSMVNKWVYAQLIVPRRPAFQIVFQGVRGKGYQGDIAVDDVGFVNGPCPPSL
QCDYQNGDLCGWAQDADDEFDWSVGNGKTMSTQTGPKADHTYETDFGKYLFIEGSSPRQPGD
KARIESFSHRPTKGMCLEFFYHMKGEGIGSLNVWIRRGKTMDSKPIWTISGAQEDKWFRKKVSVIE
DTQNWSVIIEGIRGSSWASDIAIDDVVFHKGVCAPQGDCDFETDDLYSCGYRNWRRNKVDWLIY
SGSTPSFNTGPSFDHTFGTKQGHYLYMEASSPAKQGDYGLFYSELFRVNPNYKWCLDFYYHMYG
DGVGSLQVNKMYWPSYLKKRRPYFTTLFTKDGNHDDVWQHAQVNITTRNDFQIVFRGEIGGGT
SDKGDISIDDITVRQGLCAAPMPPPKPNPCAIKCKDGTCVPSNKVCDFYPDCAQTSDNTDDTDEK
GCDGCDFEKGTCNWNDTSKGLFDWNRQNGGTSSYNTGPSVDHTKKNALGYYVYVEASKGQSS
DLATLSSPVLNQASSTCKMTFWYHMYGTSIGTLNVYLVNGYRLTLHWTLSGNQGNLWKQGTVY
VNRQLKPYSVRFVAERSFSYRGDIAIDDIKFEGCELPRPAGFCNSRYQHRCAVTRACISYTRLCDYT
DDCGDGTDELNCRWTQYPYRCNFEYDLCYWRNLKDDDFDFTRQKGQTDSANTGPLFDHTTGT
SSGYYIFVETSWPRKTGDKARIGSGYLGPITRTYCILRFYYHMYGDHIGIIGQQKLMQLSMI*

>TRINITY_DN923_c0_g1_i1.p1 type:complete len:442 gc:universal TRINITY_DN923_c0_g1_i1:53-
1378(+)

MAEKYDLTYKVGAYLDRHMVFPLLEFLSSKEIYDDTELLRGRLELLQGTNMLDFVKDEYQRLHQT
DEVPDELANKRQEVIRQMRELEAATESITAAFEDPDFQKEASSARDGAQLFKYLNETFGIRSENLD
TLYQYAKFQYECGNYNGASQYLYFYRVLVHDDDKNASAAIWGKLACEILTQNWDPALEEINRLK
EVIDGDHFSHPLQLLQQRTWLIHWSLFVFFNHAKGRDLLIDMFLYSPNYLNAIQTSCPHVLRYLTT
AVITNKRRKQILKDLVRVIQQESYTYRDPITEFLECLYVNFDFDGAQKKLLECETVLLNDFFLVACL
EDFIENARLFIFETFCRIHQCISIQMLAEKLNMTPEEAERWIVNLIRNARLDAKIDSKQGHVVMGT
QAAAVHQQVIERTRSIMFKTQAITTNIDKKLASLQKQPYTEPFGLAW*

>TRINITY_DN10094_c0_g1_i2.p1   type:complete   len:264   gc:universal
TRINITY_DN10094_c0_g1_i2:1210-419(-)

MRHILKVFAVAFVLHCIDRTLSLPVSPVPPLLNKLLKDQNVTLGFILKGLQGPPGRDGAPGSSGLP
GPPGPPGWKGDPGTPGMNGAPGFMGNPGSPGAPGNDGLPGPPGLPGAPGWPGGSGMQGPPG
MPGLPGLPGSSGPSPIRYNGTVKCEEDTAWLRCNEYKHISIMSAFWGRRNFGLCTEHTGNLITNK
YCPTTPLFLTKVKDACEGTTMCEIRCTKFFFHDQSCLDVYKYLEVYYKCIEVINGHEVVNEDNLL
MANFLG*

>TRINITY_DN79_c0_g1_i1.p1   type:5prime_partial   len:478   gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)

VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN
EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*
>TRINITY_DN118327_c0_g1_i1.p1   type:5prime_partial   len:702   gc:universal
TRINITY_DN118327_c0_g1_i1:3-2108(+)
LFILMKSKMTEIYLKKFAVLFSILLIFQECNGFLKSQLANDHIVNDDDGKSTAVAVFRQKRGIFGAA
LIAISVASAGIDIYKQVAGCKHVTSDLVKKINQAKKMQRDLIAKRDRINLAWVPAQSKESYTQRLA
SDLIILKGSISLFDSLQVDLLKLLDQNLLDSINLLKRQLENDIEANKDLGIGSFEELEAKFYTKTQFA
LSLTFKLLPLGFLAGSYLLPKIAAKLAKTSAFRWSESNPGKIQKMYNKYADKKGQIKGWGKTKIQS
FKNGLRARWSALKAKFPRTRAAFNRLGNSRLGRFFSRNMGRIKTGVVRFAKGAVLGLFIGLEVW
SLVKFIKGCKDKLKKINEAIASLKNGEKKLNVVQSKINDLQNTADKYYGWMKNNLTSPDYLNYV
REIADLGDNAKDQTSEIVKATKEIKRYTNEIENADLQKTDKLNKMVISAFGKINYKLDCLRSKLAII
SDLVYSCSNGYGKFDDLYRRALDKQNKITSECIEGKYMDKKEVHELMKSAMQLKNKQTICIRNN
PTKKQFVCEKWYNDASNENILKSIPGLTLNDVNFFISVCPPADVTQKIKREICMEKNQNFITLKEIS
KKLSKYHQQNVVIAYNQCQLSTSSLKEICNAKKDGQDLDYVHKKYIVFPKNIVAKAYDGCKKET
NITPFDRQMICVIKSLGAGLDSNNFATFRKKYEFSAIKSVYDKC*
>TRINITY_DN3156_c0_g1_i1.p1 type:complete len:501 gc:universal TRINITY_DN3156_c0_g1_i1:39-
1541(+)
MILKYLLCICLIIQTVRCGKPSLSDPLGLNDQYGSTSQSNFHFGAQGENYVLGSIWPKPQQETRED
VYFALDATKFEFKIVDKTSDVLEEAVIRYHDLVFPEKGARADENLDMITNLEIHVKNDIEPLSVESD
ESYTLVINAPTASLSSYTPWGALRGLETFSQAIHQNETGHYLAQKNKIVDYPRFHHRGFLIDTSRH
FVHLDVIYKFLDALAYSKFNVFHWHIVDDQSFPFVSQVFPSLHGQGAFNNKTHIYTPDDVNNVID
YARYRGIRVVPEFDTPGHTQSWYSIPGLLTPCYSGDKPNGNYGPIDPTVEKNYEFLREFFREVTMVF
PDKYLHMGGDEVSFSCWQSNPNIAKWMQDHDMGKNYSMLEQYYEQRLLDIVGDLNRGYVIW
QEVVDNQVKYYNCDPQAFNGTTEQKEMVIGGTACMWGEWVDGTNLLSRTWARGLSVGERLW
SAENVKDLNDATKRIWEHRCRYLRRGIPAENVVQSKYCVHEWRLINN*
>TRINITY_DN1936_c0_g1_i1.p1   type:3prime_partial   len:1224   gc:universal
TRINITY_DN1936_c0_g1_i1:3669-1(-)
MVCPAVITIFLFSVLGSSSSQNCDFEDVKSCKWTQYAADKFDWSRASGSTGSTGTGPVNDHTTLV
KTLKVNTTGGNANGASCVFPFIYQSKKYFKCLQYYNTEWCATVPNYDKQAKWGYCVPTGFYMF
IEASNPRKKGDNAILVSPFVPKGPKCLKFWYHMYGPHINRLNIYVMIGGHTGKPIWSRIGTQGNK
WNKGQVTLVGRQPFQVVVEALSGISYKGDIAVDDISVSSTKCTQPSSTTCSFEDSQCGYIDDTSSDV
QFQWTRSSLSTSSSGTGPKTDHTMQSETGFYMYTEATRKKTGSKARLMSPVNKATSGSCLQFWYH
MFGADMGTLSIYLKVNNKLQSTPLWSEQGDKGNEWKVATATITTQDSYQIVFEGKIGRGYRSDM
AVDDIKLTDGNCPPPGFCDFETGYCTYFNSKNDKFDWLIGSSRTPSRFTGPNFDHTYGNANGSYL
FLEVSQPIKAGDIAILESQQFNAVGGKTRCLNFWYHMFGSDIGSLQVVYKVFSGSQQERVLWNLT
GQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSGYKGDIAIDDVQFTSLACTIDPPEANPNG
KTTMKPPTTYPRTAPSTPVPTEFSCNFEKDLCKLTQDSKGTFNWTRIQGYTGSPGTGPSTDHTYGR
GFVPKYGPGSLRHAGGKCVHVLNGGFNKPKEGNPLVLYQGCGQTRLEFVFKYGYLKLTRLNMC
ATLEGSSTSSGTKVVLSNTCMNKWKMLDNNTIQDVKTGLCLSPFKGSDYPSNNSPLVVDKDCKP
KSRIFTFSPTMGHYAYIETSPPRQPNDTARLISPILKTPRCLNFWYHMYGAHVNMLNVYVKTSNGP
YVSPAWAKYGSHGDTWKAAYIYMNMTGPYVYAFEGVRGIGWQGDIAIDDITLSESCPAPVECSFE
ETSPIMCGWTNLKNDDFDWSIGQGKTASTKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYS
PWYYNTGQKCVQFFYHMYGQQIGQLEVYIRYSNSRYLRQFIRSGNQNNTWHMGQVTVKRNN
VYFQIIVRGTKGNGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGST
NSFLTGPSIDHTTQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNL
TIYLRKVSNTKTLSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVRFIYLRLFHCKICLPCY

>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)

MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN195348_c0_g1_i1.p1   type:internal   len:311   gc:universal
TRINITY_DN195348_c0_g1_i1:1-930(+)

SGCNSIDLGLLVDFSSSKDYDSKQLTKFVREFIDKITNVFAFSATKSHLAYLPFSSRINENITGQWFD
NKYMKTIGDWDYQELTQYLDRVIVPYTPVTGYETGKANAHEAFQATNDKMFNALYGMRYNMT
KVLIVISDGNEDFKEKQNLVDRAIDQLKAKGVIIYTVSIGNNVNWDRVFRYASRESSIINGANFDD
VFNRFFDFAKMLCEDSKVPIPATRTTASTTTVSINTTKLTTTTTTELVPVTISTTTTMSTTLRPIQACY
EDIDLGFVVDFSKMNANDMKERQTANDIVKVIKKIASSFNIAANK

>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)

MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*

>TRINITY_DN5987_c0_g1_i4.p1   type:complete   len:336   gc:universal
TRINITY_DN5987_c0_g1_i4:136-1143(+)

MAKKNKVATVTDRETNTKPIVDQMKDTRNSTNSSKAKDNSKKNGGGGISWFNLFTFFIATSSLAV
NVALIRGLVPLPGCVGPQGKQGEQGLTGATGPAGKEGPQGVPGADGPRGFPGNDGMPGPEGKQ
GETGEQGPPGPQGVAGSKGDPGPQGKPGKQGEAGEQGPAGLQGAPGSKGEPGEIGEQGKQGPV

GPVGPKGERGNDGEQGLPGPVGPEGEPGPPGEQGPPGPAGLTGERGNQGEQGPAGPVGPKGDT
GKQGEQGPAGTDGQKGEIGNQGAQGPAGAVGPKGEIGNQGAQGPAGAVGPKGEIGNQGAQG
PAGVVGPKGNQGEQGAAGAS*
>TRINITY_DN360_c0_g1_i1.p1   type:5prime_partial   len:476   gc:universal
TRINITY_DN360_c0_g1_i1:2237-810(-)
FQELLNCKNSKQQTIRLPANRENLTMALPYSSAEDFYQSVVKRTPNEVEFHQAVKEVAFALWDFL
VKNPEYAKEGVLQRLTEPERTIMFRVPWVDDTGNIQVNRGYRCEFNSAIGPYKGGLRFHPTVNLG
ILKFLGFEQIFKNSLTSLPMGGGKGGSDFDPKGKSDAEVMRFCQSFMTELSRHIGPDTDVPAGDIG
VGGREIGYMFGQYKRLRNEFTGVLTGKGYNWGGSLIRPEATGYGCVYFTKEMLETKGHSFKDKIV
VISGSGNVSLFACEKCTELGAKVVTVSDSSGYVYDKDGIDKEKLAFLMDLKFTRRGRVIEYTQKYP
SATFHAGERPWGVKCDIALPSATQNEISGEEAATLANNGVLAVAEGANMPSTPEAIEVFLKHKVL
YGPGKAANAGGVAVSGLEMSQNSTRFQWSREEVDSKLHTIMVNIHKTCQKYGTDESGFTNYVIG
ANVGGFVKIADAMIAQGIV*
>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-
2618(+)
MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*
>TRINITY_DN25375_c0_g1_i7.p1   type:complete   len:811   gc:universal
TRINITY_DN25375_c0_g1_i7:112-2544(+)
MNVNEKMNIYFCIGTLLFQSLLVLKVEGIFNDCQTKGSCGKCISSSPECAWCEDIIYKRSLNSKSYY
KKCDVLDNHKRQGCQNITNPPSSSTIDKDAELKGDTRVSPQEITVKLRPGQATTVDITVKTPKNFP
IDLYYLMDLSLSMKDDLEQIKDLGDILGEEMKNVTTNFRLGFGGFVDKPINPYTTIKPDEIEAYIRD
EDAQYTFTYKNYQPLDEDPSLFSKTLEQVNISFNIDGPESSLEALMQVIVCRNDIKWKDKRKARRI
VIITTDADFHYSGDGLLGGQVIPNDAQCYLSKGNYTAWNQFDYPSLSQIRSVMIENQIVPIFAITGN
FELYKKVAEFFGAGSGAVADRLSKNSDNVVPLIKEAYEKIAKIVNINSDAPKGIDMKYTAICGTGK
NVEAREGTDFCDDVEIGETVVFKVEMTAKDCELVGEDLKFKIKTNFDDVNVAVKLLCECPCEQD
KSKIVIDSEHCNSRGNLTCGQCQCDLDFYRGRFCQCTVEEAKNQTLCRLPGEVGPVCSDQGFCEC
GECICDEPKLNRFGEIEYIYGDQCQCSNTSCGRTTNENLLCGGPSHGRCDCGECTCFSDWQGPTC
EVECVKSSAACIDEEGIECSGKGKCVCNRCVCDPGYIGDLCQECVSNCPDPCQDYRECVKCRVFK
MSDLSDEECKSECLKHNITSHIVTDKVPEDKRCIARDEDDCSFVFTFVKSNITDEVQLIVQQEKICP
AEPDILAIILGVIAGIVGIGLALLLIWKLLATIQDRREFAQFQKDRQDPKWDSGVNPIYQQATSTFQ
NPLYGNKGEETEKILDSQ*
>TRINITY_DN141338_c2_g1_i1.p1   type:complete   len:720   gc:universal
TRINITY_DN141338_c2_g1_i1:2850-691(-)
MSEADETETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYQSLTDSGVLESNKDMKIE
IIANKDEKTLTLFDTGIGMTKADLVNNLGTIAKSGTKAFMEALTAGADISMIGQFGVGFYSAYLVA
DKVEVVTKNNDDEQYIWCSSAGGSFTVKRDTINEPIGRGTKLVLYMKEDQLDFLDEKKLKDIIKK
HSQFIGYPIYLETQKTRDKEVSDDEADEEESTDKKEDEENEDKEDDGPKIEDVGDEEKEKEKKKKT
IKENYTEMEQINKTKPLWTRNPDDISTEEYAEFYKSLTNDWEEHLAVKHFSVEGQLEFRAILFVPK
RAPFDLFENKKQKNSIKLYVRRVFIMDNCEELMPEWLNFVKGVVDSEDLPLNISRETLQQSKILKV
IRKNLVKKCLELFAEISEDKDNYKKFYEQFSKNVKLGIHEDTQNRNKVAELLRYSSSASGDELTSFK

DYVSRMKENQKDIYYITGESKEIVAASAFVERVKKKGFEVLYLVDPIDEYAVQQLKEYDGKKLVCV
TKEGLELPEDEDEKKRQEELKAQFEDLCKVIKDILEKKVEKVVVSNRLVDSPCCIVTSTYGWSAN
MERIMKAQALRDTSTMGYMAAKKHLEINPEHQIMIALKKKIEADKNDKSIKDLIILLYETSLLSSG
FSLEDPQNHSSRIHRMIKLGLGVDDDGDVEEIETDDLPPLEGEGDDDEDKARMEEVD*
>TRINITY_DN11096_c0_g1_i1.p1 type:complete len:557 gc:universal
TRINITY_DN11096_c0_g1_i1:1858-188(-)
MLGDTEHFIELIRSMPSSVCILIVIPLVLLSAPTYSSHDFPVFRMQQYDLHGIKYGSRGAAVNLEARS
LTAKNLIRKCAIIKVTEFSMEVLQKALDNGLSALLIVLPPSLENLSDEQVKLLQNVEGDLMNAELII
PVYFAHETKRLRTLYEEITSAINGDAASSALKAMATVASANSFHFVTDCSESKAITDFPIVSFQGILS
GQGLEDQLPTVAVVAHYDSYGVVPTLAKGLDSSGSGVIALMEIARVFSMLYEKLASQPKYNILFLL
AGGGKFNFQGTKKWIEDSVESAEISLLAEADYVLCIDSIGNGNNLNLHVSKPPKEGAQAYTLVEH
LKEVSSKLYPDSSFNVIHKKVNLADEMLAWEHERFSLRRLPAGSLSYLDKPENTNRGSIFDRNININ
SLERNIKIVAEGLARHIFNVSSNNYGERFEIFTGEFSLDINHMKSWMDHLIQEPRSQQLISKDHKILS
GFEEVLSGYLKDVKRVVARAEKKDPEFVFYDVFNAKMNVYSVKPALFDLFLAIGIASYLALVYLVI
ENFNQFTEMLPKPVMNGKGVH*
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN15151_c0_g1_i3.p1 type:internal len:560 gc:universal TRINITY_DN15151_c0_g1_i3:1-
1677(+)
LDGAERPRILAAMLSTLRRAPRLAARAPLAAPAAARAFAAAKDIRHGSEARALMLEGCNRLAD
AVAVTMGPKGRNVVIEQPFGAPKVTKDGVTVAKSIDLKAAPMINVGAQLVKQVASKTNDVAGD
GTTTATVLARAIFREGCKAVAAGMNPMDIKRGMDAAAKVVLEDLAAQATTIESPTSIRNVATIAA
NGDAQIGEMITDAFEKVGKDGTITVQDGKTLEHELEVVEGMKLDRGFISPYFITNVKAQKVELEN
PLVLLYEKKISSVQAILPVLEQVAKVQKPLLLIAEDIDGEALAMLIVNKLRGGLKVAAVKAPGFGD
NRKEILKDLAVLTGAELLSDELGDKLEDLQITQLGTVGSATITKDDTVLLDGSGNKSAIDERCEAIR
DAIELSTSEYEKDKLKERLAKLSGGVAVIKVGGASEVEVNEVKDRLNDALCATKAALEEGIVPGG
GTALLYSAQKLEALTLDSLDQQVGVDAIKAALSQPCVQIAQNAGEEGAVVVRALLQEGNAARGF
NAATGQYVDMVEAGIIDPTKVVRTALADAVSVASLMTTTEA
>TRINITY_DN7102_c0_g1_i1.p1 type:5prime_partial len:1263 gc:universal
TRINITY_DN7102_c0_g1_i1:3-3791(+)
DKNELEEKVLPAVSVGTLFQYATGLDWFFMILGTFAAIGNGVAQPISFIVFGELINKFIISDSGEAIDL
EEEMTKFALYYVYIAIATIVLGYIQNTVWLLSSIRQAFEIRTKCFNSVLRQDIGWFDVIDAGEISTRM
TDDITKIQNGIGDKVGSLIQGISMLLGGFIIGFIFSYKLTLVIVAMTPLILITGFLTGKVVALITSDEQLS
YAKAGAIAEEVISSIRTVVAFGGEEKEIARYRTNLVDAEKSGVKKGISTGFAFGMFNAVIFGCCALG
FWYGGYLVAEDEITGGDLLIVFFSVLIGAAQLGQVGPNFEAFAVARGSARFIYDVIERVPAIDSMSD
SGLKPEIIGNVIFEDCEFEYPSRQEVKILKGLNLTVNCGQTVALVGESGCGKSTTIKLVQRFYDVSKG
KVLIDNTDIKEINVRHLRRHIGVVSQEPVLFDTTIADNIRMGNDEATLEMIEKAAVNANAHDFIKS
LPKGYETYVGEGGTQLSGGQKQRIAIARALVRNPKILLLDEATSALDTESEGIVQSALDKASEGRTT
IVIAHRLSTVKKADKIAVVVEGKIAEIGTHEELMEKHGEYFKLVMLQTFEEQEEDEGGDDTSLLSES
DREGLLRKQVLRTLSRMSSHDAEEDKKIEEKITKEFRRRSTFRKSAKDIRSLERQKSKINEEETDEDV
NIPSMWRILKLNLKEWPYMFVGFIFSALTGAVPVVFAVIMSEVLESFILTEQPQKMKDTSAFWSIMF
MVLGNVVGVSYFVAQYMFATAGEALTTRLREMAFRSLLRQEIGYFDLPQHNTGALTSRLASDASA
VQGATSTRLNTLTQVLVMGLSSLIIAFVFSWKLTLVILAFVPFLAFGGAVQTKLNTSFATDEQKKMG
EAGSIATESIMQIRTVASLGKEDYFYQRFLKLLLKPSQESRRSAHLFGLSFGFSMAIMFFNNAAAFR

MGGYLNVNDGLSLADMIKVIISIQFGSMTAGQIASFAPDYAKAKVAAGRILDLFDRVPPIDSYSQE
GIKDSLEGHVEFKDVKFHYPNRPSVPVLQGLDINIKKGQMLALVGSSGCGKSTSVSLLERFYDIYE
GALTLDGKAIKSFNVRHLRSELGIVQQEPTLFDCSIRDNILYGVDTSVRKVSQEEIENVCKSSNIHH
FITTLPQGYDTNVGDKGALISGGQKQRIAIARALIRNPKILLLDEATSALDSESEKVVQDALDVAM
KGRTAIVIAHRLSTIQQADLIAVIQSGKVVEMGTHQELLSKKGAYHILNQAQL*
>TRINITY_DN34481_c0_g1_i1.p1   type:complete   len:802   gc:universal
TRINITY_DN34481_c0_g1_i1:2487-82(-)
MTTPHMSPQEEQEKLLEEALQIVKNQAFQMKRCLDKAKIMDALKHASNMLGELRTSLLSPKSYY
ELYMGVSDELRHLETFLLDEFDKGRKVNDLFELVQYAGNIVPRLYLLITVGIVYIKVGDVPKKDIIK
DLVEMCRGVQHPLRGLFLRNYLLQSTRGQLPDSETEESEGTIKDSIDFILLNFAEMNKLWVRMQH
QGHSKYKEKRERERQELRILVGTNLVRLSQLEGIDVETYKKDVLPGILEQCICCRDPIAQEYLMECII
QVFPDEFHLQTLNAFLKACAELHQDVNVKNIIIALIDRLAMFAHRGDGPGIPNDIRLFEIFSQQVA
HVIQSRSDMPTEDVVALQVSLINLALKCYPDRVDYVDKVLEYTEEIFSKLNLAYIDKNNAVSKELM
RLLRIPVDIYNNVLTILKLHFAPLFDYFDYATRKEMAMYVINNALDNETLIPSQEEVDSVLQLAA
PLIMDQDDQPTEPEDPEDFAEEQGLMGRFVQLLYSDNPDQQYLILTTARKHFGNGGEQRIKLTLP
PLVFAAFRLAFIYRDAQEQDDKWDKKCQKIFQFCHQTICALSKAEYADLSLRLFLQGALAADQQ
KFTNAETVAYEFMSQAFAIYEDEISDSKAQLAAITLIIGTFEKTSCFTEENHEPLRTQCALAASKLLK
KPDQCRGVSVCSHLFWSGRVNEGESEEKDAASNECRDGKRVMECLKKSLRIANQCMDPTVQVQ
LFVEILNRYLYYFERGNEAVNSTILNQLIDKIREDLPSLEVNDEMEQINKHFQNTLSHIQSKKDSAD
ENEAAIYKDFIL*
>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)
MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*
>TRINITY_DN3271_c0_g1_i1.p1   type:complete   len:399   gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)
MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR
AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*
>TRINITY_DN1043_c0_g1_i2.p1   type:complete   len:700   gc:universal
TRINITY_DN1043_c0_g1_i2:2410-311(-)
MKESYLKRFALLFSVLILFQEGGALLRENLIVNHRLRRNVYSEEKVTAVDLPQSREKRFVGTALIIIS
AASAGLDIYKQVRGCKDITPDLDDKIAEGKALQQSLLNLRDQVNLAWVPAESREEYTRRLASNM
IIIREQVSTFDSLQADLVKLLDQKLLDKLNNVTKHLENQIDRNNETEIGSFEDLEGKYMDTTTFALT
LTAKLLPVGFLLGTKFLLPKITARFSKGVAKAFAADNPSRVQKMLSSFAEKQGKLANWKAEKINSF
KVSLNSKWNTFKLKFPRITAAMNRMSNSKIGKALGKAMGKVKGIAVGVGKGAVVAFFIAFEVW
NFVQFHGACTEKRNKAIEGIATMNANKKNMTDLLTEIHDMKAKADEYYNLMKSNVTNDEFLN
FLEDIADLGENAKEQTKVIVDATNQIKQYKAEIKNADDSRTDALNTMLVTAFSNINFKLDCLRSK
LAIIKGVVDDCGIGLGVYDDIYARALAKQKKITETCIEGSYMDKNEIKGLMVAAMDLDKKQSICV
RNNPTKKQLVCEKWYDDVSDADILAANPDLTKDDVTYFISTCPPAPVNDQTKTTICVKKNNELA

TLQSIQQTYQKYDQTAINSAYEECQLSSISVTTICTAKKEGQTVVYAQQKFPVFPASMVTNVYNSC
KKETNITPADKMMICLLKKNGFALDSPVMANYVKNYDYATLEAFYNQCS*

>TRINITY_DN31399_c0_g1_i2.p1   type:complete   len:819   gc:universal
TRINITY_DN31399_c0_g1_i2:85-2541(+)
MAVNVSHVYTCPSDYLCSKAEQGTLLIPLINESEWGRGFRIFLYTLALLWCFMGIAIAADLFMCAI
EIITSKTKKIKVATEGDDKMGYEEIEIRVWNDTVANLTLMALGSSAPEILLSIIEIVGNNFESGELGPG
TIVGSAAFNLLVITACCVMAIPGGESKRINAFNVFLTTSFFAVFAYIWMFIVLTVSSKGILEVWEAAV
TLLLFGILVILAYIADKDLCVSVFTRKRRKKDIELDNFDLLNENVLKKHHPDLIEYMKEITANPSISE
QEAAKLIAIKIEASKRKNYGYYRVGALRSIGGGRKVVPAVTPKLQGIIDGGSTLNVNAETNVNDSV
PDNKATIEFTATAVSVMENNKVVQLGVERSGNMSSQVSVNFETIDGTAEAGSDYIAAKDTLVFEID
EIRKSIEIVIIDDYEWEPDETFFVKLHVPEGANDRVQIGHHSICEVTIINDDEPGTFSFNKPSNIVKES
CGQAELEVERVNGADGKVEVVWKTKDQSALHGKDFIGGEGTLVFEHGETLKSISIEIIDDHMFEK
DETFMVELLEVKNEGAKFGRLKRTVVTIVSDDEYQHMFDRVVNMAHMNLHQFQLGSSTWGQQ
FREAMNVNGGDLESASFMDYVMHFITFFWKILFALVPPCTWYGGWLSFFIILGMIGCLTAVVGDIA
TIFGCLVGLRKDVTAITFVALGTSLPDLFASRNAAMNEKYADASIGNVTGSNGVNVFLGLGIPWLI
ASIYHEAKGKVFKTPTGSLATSVVTYSVCAIACILLLIIRRFVPFFGGGELGGPKGPMYASGIFMISL
WFIYVLISALVSYGHIAAL*

>TRINITY_DN33065_c0_g2_i1.p1   type:3prime_partial   len:804   gc:universal
TRINITY_DN33065_c0_g2_i1:2409-1(-)
MWQFVWLAVAITSQINGNVHHKHTKPRHQNLIDDIVPNDDFDLDYSHNIFIPFDAYDNYEKFLE
YAERSDLAKRGGVTSLPAIQSLPGDGSHTYAAPGVNCQVQLLNKKVEGTDKRVIERTSCAEGWTL
KNALGFFFAGVGHDLATKSAGLVHMNQLRFKMLIFEAEGYTFVADTDNEVYSNLQSKLSLKNAE
CRLTISNSYTFENSEIVLTGNHEVIEKITNAKKTLEVTFEKGKDTSSFDVKMKVPSMPLETFATIFLES
ETEFITADMGDTSYEINIDPIKAVIIESTSNSVTGVFDGSDGKFQLTGKFLSNDQNAFMGQATDIYLT
VNRKSLGSRTTYNLMLGFAKEVKVMDIIPKYVGKTEIQDEFDDNFLKTTIEKWHLLFTSKRIIVAD
GAEYKKTFANIFDADEYQEFKQGVGIKATVDLQKTLTACSSGSTVPDSLKSVKIKGLLGRRGLSMV
FPPGTSVPLIPLIKCKLRQIQDDLGFELPISLKGYEQKSKFKLEEIAYSSDSGAFKMSLLYENTITIYKD
VLEITNPQLTIEREGKDEPWQFTIAADVSIFQVDASVMISYSKTGYTVEVSSGNVPLTNLLRAFSFSD
KPAITFEIHDFKMQIEVKDKEEEEENEEEGEDEGNKNQLAIKRQDNKEEKKRDLKFSIAGKPVFN
GFDKVSIEALVWTSQTPAGVAVAVIMENIRLDEVLEKILDVPEVPMAWFSDMTLTMVISNVDAEG
CDNPAQSEDDCEEADEEEEEEEEGEGEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRG
PGGGRPRRG

>TRINITY_DN984_c0_g1_i1.p1   type:complete   len:1485   gc:universal
TRINITY_DN984_c0_g1_i1:4558-104(-)
MVKSSWQQLLLLLILFCGFQSFEIDGEDKPGSCPPPLETLECNEVEPGELSCLTDSECSGTDKCCSD
GCNLICAAALPEIKGEMGAKGEPGPPGRNGTTGPQGPKGGAGIKGKKGKQGKQGNKGRRGRP
GPPGPPANDTEPGPDPLTEDDHGKPGPGGILEDDLAEGGVAPGVLTTQDAPEGEKGARGRAGP
RGPYGERGNAGPIGDAGEVGDKGEQGPKGQPGPPGDDGQDGDRGAPGPIGEPGERGERGEIGK
QGRPGIGGYKGDKGHPGLAGPKGVGGEEGLKGDTGESGPVGEGGPAGPRGMPGKTGNQGPPG
PTGPTGMSGPQGLPGSAGLTGAPGSPGDQGPQGPKGDMGPVGQRGERGEQGERGLTGDNGPK
GERGLTGTAGRPGRDGAQGQTGTEGRPGLIGKRGPIGQPGSQGSEGPIGLPGKRGESGDIGLQGP
DGDKGQIGDSGAPGQTGGAGLPGRRGIPGREGPTGPQGETGRRGPPGLLGTPGSPGEMGSKGLR
GERGAPGVIGGKGATGAPGSAGETGAPGDRGLQGLQGKTGRPGKTGSSGIPGKDGRPGSAGPQ
GLRGVRGAVGLQGIKGSAGSNGLVGENGALGKKGDTGDPGLKGSPGAVGAPGKDGNVGERGV
PGAAGERGAQGPIGPIGQAGPPGKDGEPGKTGERGSDGKLGPQGLRGAPGLRGPNGNPGVAGQ
VGERGEIGADGAAGSKGPNGMLGTIGNPGAPGLAGSFGQKGPDGQKGAVGERGPKGFRGEDG
RDGERGGDGIAGPSGPQGVSGVKGEMGRTGANGIDGKRGLPGLMGPPGSTGPPGDEGAQGQD
GAKGIKGAMGPRGDKGPAGSIGEPGIDGGAGPIGSLGGSGPKGGRGSIGPSGEQGAQGLPGPTGR
RGVQGNRGSIGPVGLEGREGVKGSSGEPGMPGRTGENGVPGMPGKDGRNGDPGEDGIPGPMG
KPGMEGARGPRGQLGPGGLPGMPGLQGIQGVKGEPGLDGGDGLKGRKGSTGMQGVMGSSGLP
GKPGDDGAAGEDGIPGTPGDRGAKGDIGDVGFLGPIGPPGSPGFSGDIGEKGMIGAPGEQGNDG
EPGNPGEPGYRGLIGNPGAKGNKGGKGEVGDRGHKGYRGMRGARGPTGNVGDQGDDGLDGL

KGAKGPPGLPGPRGRTGREGPSGPIGDPGINGTKGFVGIRGNPGEDGSPGPAGPPGPTGNPGFPG
GLFGGALNYYPDQQQAEKGPLYGYHYGYNYRYYKSRREEDTDKEEIKAKNKKANRNVFRYAEE
LKMRMEAEIKPDGSEEFPAKTCKDIQMCFPDAKSGSYWLDTNGGSKTDAYVATCNFTDDVTETCI
APTVSSFDRKRWVTTGGKSQFTWFMKDLLEIDEGLTYTASVTQLKSLRLASTKMRQNVTYHCKNS
YAHHDQLENTAKTFVKLMSDDEDELHALGGRKERLDVLSDKCILKDDVWRKAVFEFSTKRTSKL
PIRDIAVFDVYDENQEFGIDIGPICFM*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN22240_c0_g1_i1.p1   type:complete   len:513   gc:universal
TRINITY_DN22240_c0_g1_i1:155-1693(+)
MFRYKEKDDNKILQAYIKYLADVVLTLDHTKMTSKEIFSLANETFQFERELYKIHIPPEKLTTIDQTY
HKATLSYLQELVPSVDWVPYINHKLKRANKSVNKDEPILIDTLEYFKKLDEVLKKTPKRIMKNYLL
FRTADFYSVLLSDEFIKLKDPLYLAKFGVYKEPPRWKRCLYATEAKMGMALSSLYVKKKFTSGSYEE
ANKMVKAIREAFVSGFPDLKWMDKKTLEVAQEKANFIEQKIGYPKYILDSVKLDEKYKGLEFDG
GFFDNDFKGDEFIVANRYKHLHEPVNRDEWELTPMTVNAYYNPSENQIVFTAAIMQPPFFKFDYP
KSVNYGSMGAIIGHEITHGFDDNGRQYDKNGNFVSWWTDKSVKGFKELSKCFVEEYSKFTEAGL
HIKGNVTFGENLADTGGLKAAYKAYKRWVEENGEESLLPGLDKSNDEIFFISYSQSWCTEELDSRII
TQINTDVHSPAIERVRGALYNNEDFARIFKCPVGSPMNPKTTCSIWTDNSH*

>TRINITY_DN123_c0_g1_i1.p1   type:5prime_partial   len:1231   gc:universal
TRINITY_DN123_c0_g1_i1:2-3694(+)
RGGFRPFGTGLMGSPMLGPYAFGPARSGALGGFGIAPLVRPPTRGGAAGANRGSRSNSNRGGKK
TTPVKNNKSTPEAKKDNNINAKNDKKEDKKDEKKDDKKDEKKDDKKDDKKGGKTPTGKEIKV
EPKDDMKNIKKNFFKDPKVEPKNEKKPDTKAVTVKPEIKKESGPQNVTLDKFNSELHLSIDADGL
SAGNMKGEGFQYMWGGVRGTHGVKKGKVCYEVYLLENIKVHCPGENNPHVLRVGWSVDNSD
YQLGEDKLSWGYGGTAKSSYDSKFLDYGKKYTVGDTITCYIDFESNPKAIFFMLNGEYLGVAFRFG
NELGDKAVFPHITSKNMRFRVNFGKEKPKHHVTNGFRMMQDIPVDQLVLPSPSPKTPKEAEIIM
MVGLPACGKSFWCEKYAKENPDKKYYILGTNNIIERMKVSGLTRKRNYHGRWEMLIKRASLVLN
KLFTVAKNNPRNYVLDQTNVYFTARRRKMESFAGYKKIAAVIINKPDVLASRTEKQQKIEGKMVP
EGAVMEMKFNFTLPEKGPSFNEVWYLEETLPKAQELAANYRREGSNFKTKSKRKPESSPSQPESSP
SSEKKPKLDPKIISRGFDKPFSKPNTNSPQQSTFKAPSPAQNNANKTPNQDRFSKNEKSTSKVETNS
DNSRSKAGNFNKGHDGNKSNERPFFSNTPDRGNASNRGNDSNRGNSSDRGNAPNKGNSSDRG
NAPNKGNFADKGNAPNKGNSSDRGNAPNKGNASDSANKNSKNEKPKEESKKTPKRAIRGTLD
QLNSIINSEARKTENNSGNIRDSAQSGKNEKMGSLMDIDRTPQRESDSYQNLQSRNRDALSNQG
GKNKESQSAGLMDIRNVPQGNQDYRGKAGILDSSRNTSQDYRGKPGILDSSRNTPQDYRGKPGIL
DSSRNTARRNEYESPVGRGNNSYSDSPARGVSTPRGRASFNDSPARGARGGRGQSDISRSGSLAKS
QGSGGNRGGRGRGRSKHLGDVNKYDPVGNMGGYYSALKALPSVKDLIGNRSSFSSYSTRIDEPSR
FDQLYSSYEPYSFGRTQNANDSRSLNYSFGQTDSYSSLERDGGYRDSQNSKDFLGSYQQRKDSSYS
DNRGSQGGQRGYQDSSYNADGLDAKDQYQNDDYQESYSSQKDKSSYDQNTQSSRSYNQETSYE
ESSDYGRSRNQEQDEYARSGTYERGDTSYGTDDANRSSRRYEDDLQESEPMDGNYSTQDYGRSSQ
SSQRARIW*

>TRINITY_DN2357_c1_g1_i1.p1   type:complete   len:1733   gc:universal
TRINITY_DN2357_c1_g1_i1:5452-254(-)
MLKLFLFLIGAGHLSLAFAAICSETNGEGNKKNLKEPCFFNQLIDVKQWNMKRFMDQTDRFFDF
GVMRCSSYEVEGSGKMKLTCYHTKLFYIMKNIMSFGTTERTEFIFKFSPLTENDYKSTDVEISGKLS
QALRNTFIRATKPEGFQDFSLSTSAVFPQIDMETFIDQRKPDGFKTLTNNDKLENFPPKVAVNAEM
SGMFSALVTDTDKQAYEFLISFLGPMKEQQFYIFQSLTENINDELVIAFYKENPSNAGTTVRDIMDS
LRGVKWRGNKANEFVVSKDFAPIFEVQSSAMSISDGEIVNINSEALRNIAIKYVSPSSEAFILEGALI
YWHVDDSSSLKMSADQVPGVENPPTPTNETSTVPQENKIKRHTKPKTMKPLKREKHPATNKLTL
NAHIIHQNKIEIRSPDYLKGTYEKQLSTFLPYHYFKHDSIKNTLYPVKMIFDKITIGFKRKELRLYCNI
TQKYDLVQNFIEGEGIAVYAKAKLTMRKDADGDSEEIRFKDIGMSGTIEVLQGLVNVNLQYAKDG
TLYVVGLFDIANMTQFINATGMKHYLPENLRKTYPRLTNFAITRLKIKSKLNENVLRIIGRCLIFSEP
KTDDNLEAEKRDGIEDESPASLLYESKLRVVLTNTSGDLKYSVGIIGEDIPLQVAMRELFNATITGTS
WVKFKFFVMVMSNNNEINVAQAIDERLFNSFNSETGLQIKTVLLPPVEEDCKMSRKEKLDPLNKE
ALVKNEANGKETVEIHRSPFIVDYTCMFVKDQELLMENFEYATATVTPTSYEIKSLTQERFFDFQSD
PVVSVGNFGYTIKSVKGWDSIFFIEGEFRFMVKNDRLIFKGLITFDDMKGKLVLQLKQLHSGRQNF
GDAALINSGYSVIGKDDTFSKFHFDAFLYVGTVKTKLVNFRKNVEVIYDLRTDDIFMKGARNNNG
NIGATNKKRNSLLELFDAFGTDASSHVLLKELHAISLTWLIYQQNEEVVKTKHGIRRIQPGLNFYG
TLAGKGDRDLLFNMHYNKGMGALIADIELPNYKLPLRKDAKYHPFELQRSTKKQDLGGILFVKA
STTFTSAQAQGYLRVVGLEYDVEFPIMADGQFHMDLPYSNEIAKLFNEAEVRYRVSQDIGVTDFN
LVDPKIKIDLAPSLEKISRAIRHAIEAMIANVDEYLVNSGSFINFVTIVDGEISTMKEVINEIRRGMGK
LQSTLKQLVQQISSDCAEQCKDSKVFIYGYDFQGGKFVGNEDAHDVANVTCIAECEMIKPVKND
ERRSLLSSLKEALVQFKREKKRASIMQIMLDEHYNSLSKMNDAMHKNARAASLILSKTGNLKNP
KISVASLVLENQISVINFKGAGSKCLSGFKMAFSYNDVVGETDIDLCFNGEFDQFAAYAFVLSYYGE
DKYNQFGDLLDDAAELKQSLKTKTKIVTKLFKKIANARTTVELEEVQNEVEETILDYMDGLKKSQ
IPKHKIKAKKTKEAIGYITYGGKNVTLPGIDTEVLEALEIDQDYTIKNPKSKRVFMYSSPWAALNVL
HLHQNKSMESLPMITSIDNAGYCKRLTRLSSVLNSVRGSLSSYAASYVNAKKNFENVETNMKSGL
VELKKMHGSSIMHDDDKGNLQYWLTQYEKGVNRFSKLSNMKLHDHNNHGLARWKNEMDNS
LQHSGLGSIENVIEMLKKRSSSKRSNIDHDRWIRNASLMGKEISNLMKNSNKMRMADAELTVRS
MSQKFDNFFEALTKSCKASFKQF*
>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)
MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN
>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)
SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHRR
>TRINITY_DN30613_c0_g1_i1.p1   type:complete   len:975   gc:universal
TRINITY_DN30613_c0_g1_i1:154-3078(+)
MPVFHTKTIEAILEPVAQQVSQLVVLHEEGEGGNAIPDLSGPVNAVSAAVSNLALVAKQTAASSK
DEILRKEMPPAYSKVEESSNQLVEASSLLKDDPFSSAGRKSLINGARGILNATSALLLAFDDGEVRKI
LNVCRQVLDYIQVAEVVEVLPDCVTFLKNLSPGLLSMAQKVDNRIPDLTHQTHCELLQKHIKSTK
ANAPLLINAMKAFIVANNKGVGRAEAQENRNFVISKLCDDIIEIMRVLQLKVDDEYDLEDPCNL
MRKNRHKIMEKMKMAKDWLGNPEADPNGTGERALKDMIKQARHVGALSNDPQIKNLCDELD
GMLDRLSQLRAQGLGNSPEAIQLAADIDKKLETLAKLVDDAIAREAAAGTRLPAVTTEGQYDQA
MRWIDDPRHDPSSVGKRAVDALLADGRRLAEQLMGPEKQELVGTINNVEKLSRQLQDLKAQGK

GNTPEAQRIAAQLKKELEKLKGLLQSGATKSVLDAFLDTSTPIKQLEKAAKAPEDAPNREQEFEE
KAGAFEYHTSKMIDAAEQTSIHGKNVSKQLVDNIQAAAKDLAELTPQVSHAGKLLLLNPRDKAV
ENHFNDLKQGWINKAEEVTALVDTATDTLDFVKASEESMKKEQAGALDGIDQMNLAMVVGKG
GNMARMANRVVQVAKGEADNSEDPEFKQAVSVAATELDKGIQPLVLSTKAVAMNPKMPPVRVE
FKATSDGLIGRVVDVRKAIEPEEVPPPLPPPPQLEEEPLPPPPPEDAFAKLQLKAKSKVAPEVPPPRP
PPPIVEGLIAADESRELHSMLRAPEADNRIAVAAHQLHVEASKWEEEGNKLIQAARKMAILFAK
MSKFISDEEYCETHSKRELIDTAKMITAAANELNKHARDIAVKCPDKRMKHDLLVTIDRIPTIATQ
LKILATVKATMFGANDPQADIEATEMLVGCAENLMGSARSVVKDCEAASIKIRTGQGQVMQWK
RETDYDYYS*

>TRINITY_DN4066_c0_g1_i1.p1   type:complete   len:726   gc:universal
TRINITY_DN4066_c0_g1_i1:143-2320(+)
MNTKFIFQIFIFLTLFFGQILTLLREPLNSFIRHHEKLNYDLENVHKRTRRALEISPFANVAIKFDAFG
NNLTLHLQRNHDIFAPDYEIVDGHGKRIDYDHSRFFQGEVEGFDKRSHCLGKIHDGRFEGTILLG
KEEYHVEPSERFFPKELIKGFHSVIYRMSDVEHSAKIAQPILPPRPTTLKDTKKHKETESFEDGKIRY
RRGTKNRHKNTCNLKLVADHMFMRKFVRRETAIDQMVMHYQAVEYIFRNQTFNTTDQFDSTFA
PEGIGFRIKEIHVLLEDTVPEPMKPDHISIYHLLELFSRDNHSSVCLSYLFTDRSFDNGVLGLAFIGYP
YGQAGGICDPYADFGGVKKTYNTGVLSFQLFNREAPRALTEITFAHELGHSFGAQHDPNTKECQ
PGDSKGGNYIMYDKGTPGFLEHNREFSKCSIAKMIPVIHAKGLEVTEGCFTQRYWAICGNGAHEE
GEICDCGTVETCVERCCTPYGAKTGTPCTLQNPAYECSPSRGPCCLNETCTIAREFLKCYDGTECM
ESRVCNGLREECPLAKLKANLTLCDKDRSVCINGFCQGSLCLRYGLEGCLCETKEDRCKVCCQYN
GQCTSSYDIPEMPNTTKTRGTPCNYYKGYCDAIGQCEAIDMEGPLRMLYITLFTEEGIKIWFSRYW
FVLLLGSFLILCMLAAFVYYCQHFTPSNNPVLQNKKPHKPLRRKRKTVSGGYTTGGRPLMAQSYA
*

>TRINITY_DN22492_c0_g1_i2.p1   type:complete   len:1026   gc:universal
TRINITY_DN22492_c0_g1_i2:39-3116(+)
MLQKTLIYTLLGCWITLLSHAAIVRKSGGDDFSLKVGKPQKPIGQPKLKDAKKEVKEEPTSDVIPQ
QDENNDTTDRQKHKEQVSPDAVESGMPPRYPLKAMSAEVSAHDNEIGGCRDHPRASRVCKNC
GNRNFAAEHESYTYSYCRKSCRHCDPELSSFHTFWRLRAASQFDPTWMVKEIEFYPKPTEYDNLA
TDPQRAYASSSYPGFKPSYAFDGNNKTSWYPSGWGLHDNNDDWIGFEFPVAVRVHAIRMVLDE
MHRTAAPQRIFVEASDKKDGPFTTKWKISNPTYEVDNVYKLLQCPVLWRKFESDEGSWCFRLIAK
FETWEVARNECTVEGGDLATIATEEEKRFLTDELNLGGFAWIGLNHKDQAYYWQDRANSSYKN
WKAGWSYSEVQKQNLNCVATDQDGFWYNFHCTNKYYFVCKKKLEPQAAPREDLILKAWPYEP
EIPPMIFLYPNITVPVINTKNLEPGVFPDENGKVPEEEEEETTADDLFYEQTVEHLKEKGLKPSEEIS
NDVDKEETDYTQQLNKIALKTQSRDDFRNETESDKLKFNSTEAVKQAKDLEEQKSVNLDQNFN
QYNSTDGVKQQSQPVVAAPSDGPSGNSGDNNTLPRIVNGKPVESPSVNPNNVGKPNTPVASPES
PENTDFAQPGDTTFTTPTPTVQSGDPSNAEKTNPQKATNNQQSGGQQPNQESGSNANQSQVQQ
QSQQQQPQQQQQQQAQNNNNNQNGQQNASNQQNNNNNNNNQNNNNNQQQNNQQQN
NQNNQQQNNQNNQQQNNQNNQQQNGNNNGGNNNDLPNGLPPVMGGPAPQKIPEPPAPKE
GTKDNDSEKSVGGQADVMPDDAPSNDNDGGDETTTGNEENNDESNNNNNNNNNMNNVNN
NNDNNQSRTLDKPLPNQGKNSSETVDKATNVGGTNKQENNDFMKLQKAKPGIRTHKIGHKKS
AGLKKTHMKNVVSPLKKVKTEKKINKQVKTVKKIKAVKVKHHKKALKKEVVIHKSEDDEEEGS
GSGDEGDQEDVDDILESITNGLW*

>TRINITY_DN61_c0_g1_i1.p1 type:complete len:625 gc:universal TRINITY_DN61_c0_g1_i1:2929-
1055(-)
MRAVILLCIAMCTMVYADVYFHNIRGSNNRLKGQNRNRDNAYRMFDSQNNDRGGYNVGPTPM
YFYTGSILTLEWTNQHQCGGPNANCDLILQYMCSENLRDGLEERTIPERNKDCKDDDCNTDIRY
GMHEDYDYYMNCKNRQRNPGLFLADQELEGTSAKYTRQNPDGDRYGYECPEERDHYPYWLPT
PWIDIAIMTRDLRRCNYYRENSQNNNAKYYCKPPQKYLDELKKRDPPSNLRPIPISQDDCERFHY
PANDKTDRGVWTRHDSWNVDPPECIAAPPSRDNHNGNGEDGYFNSYNFTIPNAPHKNCAIRM
RYNISTSDYDVNLDADGNGDPARAININIHDLVGIDTKKEATERGYVFKDYPKVYPMKGEIGKKLGL
ALAINTAQYFRTFEDRSHRTSFKARTPELEGVEIRNLNVKGKRGNIVQVYPAVEYGFVPDRMLAE
VGDMIHIQWTGSDRNPRNNDGEGPAGEDRSNIAELDQPRVAQVVADYNEYGDLTRSYPAHLDN

182

ATFLGLSRDELISLALAKGDCEFDRQGARSRTPYFDMGPVALTKKGIYNYLCTINNNFTNRSQKGT
AIITEKSKAGGGSKATASASKSASFRSVNGKDQEKRKYHAYNYFEQYKKK*
>TRINITY_DN3036_c0_g1_i2.p2   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i2:1643-3(-)
AFAGAARASPARQGSVARRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN
NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
ASPARQGSVARRALDQSSRYADLSLTEEDLIR
>TRINITY_DN99404_c0_g1_i1.p1 type:internal len:112 gc:universal TRINITY_DN99404_c0_g1_i1:2-
334(+)
SNLEAITKSLEKQHKFYQSKLFKLQTDIHGVALEITKLKTSLHRTQISSSERRSSLLYINLRILKNKTDI
AIKGGLDVKEEAMTMLNTVQNFMSVATNAQNAANQALKKYY
>TRINITY_DN1366_c0_g1_i1.p1   type:3prime_partial   len:4702   gc:universal
TRINITY_DN1366_c0_g1_i1:236-14338(+)
MMEQDRQRPSRQEYNNRSLSRERIGSRDGSRDRNLSRDRDLSQTRDLSHTRDGSRDRSNLRTRDG
SQDRSFANRSDLYSSPYSSNSQAMPQTSATVEIENLELQATVSSQEELINQLAEDLRNVRKARDFSA
EVEILQKEQQCMDFKEQLEGKEMTIQHLKTELVQSQTVTEEVYKKYESIRSNRDAKDKSIRRYQQE
LHQVHDLLETAQKDKLACVDKMRQIQNEKSALEFDYQWLFDKIKNYEEHGEVFDMSSVSKSTTT
IKRTTTVYEDGQKIRVEDYQSDDSIMPLQNKFQQAQKGYRKAIGMQDDQLMRDKENLMNEFRS
MQSQMHDLKRIHENFMRESKEKDTLIERLKEAKMALDQELDHLTRENENLRQTNDKLENENSD
LRTELNSARNQVSKIEVQYDNCMKQRNYMKEQMEIITQNSAKGRDDYNSIEATMRDSQRKMDS
MQRDLTNKENLNKQLKNKIKILEEDFEQCRQDYNQCMVSRESLQQQKLDVERELKERHDRMDE
VETSYEDIQRRKADLQQELASLKKNLTRFINEEDSSNQMKSHLQNEVLAANKRISRLEAAYEASQ
QEKLELQQELAPATQRLSMMRAAYETLQQKKEQIQTDLIASQKRCAEYQAMNERLKQDRGEILN
EIQACKRRAAQADVDLDEAAKQYAILKGKLEDANRRAQSASEDLVTRQRTIEELRHKLEVSGRET
IQRESYYERIKQERRSLEDELRGCVTDLERVQNEARDVQRDNEKLRQDLGTAQQRLHETEAYWQ
KTKMENAKLQRDYANMERTVQELRDLSHKLQQDKEDCEKILYSTHKKYANLDKENERLGRENT
DLERELQSSKNKQSKLDAVIQDLKRKEAQLKAQLDDALKNRDELNRVKIVMNDLQKRLDGVTK
DGEQKDNLIAQLRNEKDNYKRDCDKFGRDYEGCRTMLETANREKDRLGKELNAANRRIADSD
VLVKRLQDENMRVRKDANSFEARIPILEDALQKSKANESKWALEANTYKTNVIRIEKELLVFKEE
HHSLVSHVSQNEDKNDGLAKKLDDALRKIFELEATNEMVSRENDELKRDIDNKTRQLEEQLTTV
ERANNDLKNQLNELRGRNKKQQDDYNRMQIDYNEFQSKWDGLSSDGQGKDRLIEQLRSELQN
STHEINQQHTDNENKKAYIERLTEEKQDLLNDVNTVNQRIYELEGLYKSSEDDKEGLQKEITELNR
KLNDVESDYDTLQRESDKEIRALKSKLGKVESQVDMILKDRDYIQDQLDAERLLSQKYKDEFERV
QREFLEHQKICERYADQILERDRIIDDLKNQMYKMETEIDTLKEQLRKAQTDQKVAEQQRDKAVE
KLNQAEMKIKDLENENDYLRKRLAELEREISVLEMKLNDAETENKNLRNKIKDLEDLIKTLRAKL
SNTETELQSIRHIISDRDVMIERLQKELDDANDQAHQLRRQVSELESQIELGDQERDDLRSRLANS
ERTIIELRKNLDKVIHDGQDLEAELAALKQKLIKMEPQMKQAQKQRDDYKTAYDNLKGKYQDL
KDELLANRQLTDAKRAAEQYKKELRHKDHLLEEARGKILALAGQLQSARDELVKKQQENEQL
LDEKRLIQEELLRLRQKLGDLESANQILAMEKERLNEELISFNSKYTELRIKLEKSEQDRLESQRQA
MAYEQRLAKLEPQLQQILRENSELHLQVDRLADELRNALDENRHLKNDVEELQRIRDMQLKELY
EKDTIIEQLKAKLSNLENTVNHLQQENDKLHNLNDALEQEKHSLAHRLDNANSRIKELDDLYEQ
ERQKRDQLQNDLHDLQKKFVTLENAYKKSQERERDLKKKIDDLLGRIKDLEDQLAAEKKKNSDL
EAENDRLKDLIHDLEGVIDDLRRKLTEQENENDRLRAENDDLKQQIMNLQRRIDELEGVIAGLEQ
EKNFLEEELNSLRQTVNKLEAEIDNLTKQRDGLQGQLEDLRREIMRLKEVIMKLEGTNRELQRTID
ALKQEIYRKDRIIETLEAKRKQYELEIDNLKNEIIKRDVIIDSGDESKRDLEIQIKNYEGRIAIMDGRI
DKITLEKTEIERNYHNAVNRAKGLESQVLILNREKAELKGDIDQHFGKIRDDNEVVNKTQGELRE

KVRIIETYKKEIIEKTTIIERLTVIRQTVESERDQLKKDNATLKITVNQYKDNDKGMNDEIQKFTFKIT
TLEKDIINMKNERDEFKVKADNATSKLVEVETQLKRSIERETRLRGELDTLHNKYQNLETIYNELL
REKNDVDRKYKDLLQKHRELDSKYNKLLANFNDLKDQLQQANNKIADLKAKLDKEIYENRDL
RDQLDNLKNQYNKLRDDNQRLEQELADYKYKYEDAMKELAEKNDLIDELKAKIANQDRQINA
LKGTVNQLRADYERSMREQARLQDEIVKLQAVVADLEGKLHRLELENEKLRKENNELQAKIPAL
ENEIENLKDKLENLIKENRDLRNDNMNLKQENVQLEKEVDDLKDDIEKLKDEIRNKDNIIADLR
KVRQELEEEIDQLRHDVKQKEKEIDDLFNRIRDYESTIQILNTKLAEIEPAFEACKDRLRHQENQIQ
ELRNKITDLESALKQSQENEAELGNKLALTESKLNKITQLLDDIKRKNMELENENGHLKDELNKL
KDQNKKLENDNDRLSNELNECKAVIQRIEPMLDHLQKHKNQLEKELEDALNKLANLRNEHEA
HLREMKEKLHVIEVITRQLDEKDDLIEKLKQEKAALEKENESLNDALNKLHQTLDAVQRRKEEV
EKDFFEAKKRIAELENLLNALKEDKDDLERMLRDAKEKNADLDHALRNSQHNEAKLKGELDEA
RGRIQRQRNELAKLQIIVGDLRAANERLLRDNTEKQNVIDGLHSQIRGLESQNGSLKKENQKLRD
ALDKLQRELHNLEQENQQLKAKVFSLQLLNDSLREEKDRLYDNFQELEKDYNDLKDKYNQAVR
ENDRLKDELAFANKRIDELENMNNQLNNEIENLKNIIAGLKRQINDLQGVIDQLRRDKSDLEQTI
NIHSETTINQRPVFDESDYVPRSEYDELKALLEAANSTKEGAERDRDQYHQEHLELHKRISKFEAE
LEGATGKRDEYKRLLQEAERRIRELEGVNGRLEDREKELQKELLNALNEVSGLQQQIISLKVKLGK
FEADRVNYEDKISKLNNEINDLHQRLSQVLASIEEKDHIIEDMRQELADTQRRHAELDSQNQILR
DEIEKLHGIINDNERKIDDLEVKLQDQRNQNSQLKNQINELNARNNKLKDEINDLQRKVSDLER
DLDQAKRDNQEKQNVIDRLNQLKNQLENDLEALRQENAGMKSDLDRLRLDNRQLLQEKHDLE
MKIMGLESDKGTLEDNVERLLNEIENLRNKIQKLKDENDRLIIENKRISHELYKYNKKSGPSDYDS
LKDQRDKLQREIADLTKELRNYKTNITVLQNEKDDLYNRLKELERDLADRDHVIEELEREKDRLE
RELESARNRADKFELSNGQLENEKNRVQEELMDLHRKLTKLEGDYELACDKRDDLQKELDSAIA
RNKTLEDNYKRSQERENKLHQDLLAAQKKITILEHELQSLKDRVNSLERANKVLDDKKNELKDD
LIAAQKRISELEIMLEGADDRNKDLQNELDAMKRKNDELRETLRLTEHGKEDLINEIQNLTAKLS
KVENKLTQAENEKRYLEQQLEDAKQRTQKDRDEIMNLQKTIYELTRKCDSLTKDNANKQALIDD
LRAKKTTLEGEIESLKRDLQNNQYEIERVENDKKNLYDELENMKNKFNVQEQEYLVLQEEKEKLR
QDMIASHQSVCRLKENYENSLGDKGKLREELATFHRKIAELTTAYDSCRSEMNRYKGDCDNYKD
AYDDIKAKYDASQNEISKSRNDYEVCLQKYQKGEQAFTKSEADRERLQKEMLDVHRKSSEIAVLF
QTTKEEKRVLENQLSMLQDDLERYREGYETFNDKTNALQDEILVSHKNYTKIEHAYNRAVEREEK
LEKDCEEAKEIVANMEKDLDNARGKANELENELRKLQDKLRREQDEYEQNSEHAGKLQMTLRD
YESKLSQLRNVEDENKTLRDEINNLKSSINKVEMDYRSNHNDLTQVQDQYESSRNNINKLNNEIN
ELQRDIRQVTSENEKLQNDLQNAAQDKEQEGERLKSTIRMLEREIDSLKTQFGQTTEQLDIVSKDR
NVMHQEIQVILKKCVSIEMTYITKTEDSRFQTSGGDEYEKSINELKNHLDKSEREFDDREKKYKYL
EDQYVREKKDKSQLEKEIDEIQRRYDNMQHEIRVIEEDKKRLSDEYQDMFNKYNDLDRDFKNTQ
TKITTYETEINTYQTTINDMQYKFTNNEDQNKKNSQVYRDLQQKLDNATKENTTLKGELNDEKA
SYRNVKKDFERQVRELQRSSESYGKASHEKDTIIEDLKSKRQALESDIDQLRRDLNHGKDEYKRLQ
REFTQHKSDYQDQQRVITDLQQKVEEHKHSKITIEEEYKITVEKYIKEIRETHIKLSKVESELQTTRE
AQNLDSDERYKRLQNELQQERETTRKDIYGKNQEIEQFKSQISNQDQEIRRLRREIEELDKQLKEA
GSNYSSTILIQKQDAPKYSSTQVTESRISSSSAPRYSTEQEVLIDASDKDTEDEKKRYQSSFYRSTATIK
PGQSDYGSVDVVLQGSQDQGQDDKDYDYNRRATGLDTNAVNRSQ
>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)
MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*
>TRINITY_DN36217_c0_g1_i1.p1   type:5prime_partial   len:605   gc:universal
TRINITY_DN36217_c0_g1_i1:2-1816(+)
YLTFIESLRLRKKIKTINKFWKKKMNDVAYSKDNEAIEIDNFASTERLADDDTDAKPRGQWGNKT
EFLLACIGYAVGLGNVWRFPYICQKNGGGAFLLPYFIMLIVEGIPLFYLELSLGQRLRLGPIPLWKK
VSPWANGVGYGMCIASFLSGCFYNVIIAWCLYYFFNSFQSPLPWNSCNSPVNSTEWMKCEEIGAT

QYYWYYEALQISPTINDLGGFAWKITLCLLTGWILVALGMWKGIQTTGKVVYFTATFPYIVLFIFIG
QGFTLEGYAEGLKFFFIPQWEKLADPTVWMEAAAQIFFSLSLAFGGLIAYASYNDEKNNTLQDALI
ISFTNCGTSVLAGISIFSILGYRATRKSKFCISELGGNISPIPRNCTVQHFLEQGSGGTGLAFIAFTEAIS
TLPVPTLFSLLFFLMLITLGMGSMFGSLEGLVTSLRDTPFFQKIRKELIIVIVAVPGFFAGFGFTQYSGE
YMVQLFNKFSIDIPILLIGFCELIFIPWVYGMDRFSADIEYMTGRKPPYAFIIMWKFVSPVALLVVLLL
SLYNMMVVTPLYEQWNGELARVSMTQYPGWALGVGMMVFTVSFLFVPAGIIFNIIRRKRKNYLL*
>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*
>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)
MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*
>TRINITY_DN1378_c0_g1_i1.p1   type:complete   len:443   gc:universal
TRINITY_DN1378_c0_g1_i1:2151-823(-)
MLRFAVLVVVASIGVSALYDSSDDVVELTQSNFNNHVIGSDDIWLVEFYAPWCGHCRNLAPAWK
QAATALKGIVKVGAVDMDQHQSVGGPYNVRGFPTIKVFGANKMSPSDYNGARSAQAIVDEAM
KVVQRVVSDRLGGRSSGGGGRRSGGSSGGSGNKDDVIELTDSNFEKEVLNTKDMVLVEFFAPWC
GHCQRLAPEWAKAATELKGKVKLAALDATVHGQTASRFQVQGYPTIKFFPAGDKDFSSAQDYQ
GGRTASDIVAWALAKHAENVDPPEILEITSNSVLTENCNEKPLCVISFLPDILDSMAAGRNGYISTL
KELGDKYKSKMWGWLWTAPGLHSNLEQALGVGGFGYPAMAVVNIRKKVYVLLRGSFGIDGIDE
LLKSIAVGRGRTEKLTQGLPTLKDVEAWDGKDGQLPEEEDIDLSDVELDDLDDEPKQEL*
>TRINITY_DN540_c0_g1_i1.p1 type:complete len:480 gc:universal TRINITY_DN540_c0_g1_i1:1503-
64(-)
MATDKLEGLIARLEKVTGKLESVSVRGGSGGGAAVEDDPAWYDEYIAIHEGQWESFLKATKENG
DNDMVTLEQKLRAAFNAHKDLLTIAARNGKPSPKDLPELVKPLSAAIGEVQSFREKSRTSKKFNH
LSAVSEGVAFLGWVVSPSKPGQHVIDMKDSAEFYTNKILKEFKETDKVQVEWARGLRKMLMDFA
DHLKHCHPVHLLWNPDKPAATASTKASGGSGGPPPPPPPAAAPPPPPPPVAAPSSAPSGGSEDSRA
ALFSALNQGSGVTAGLKKVSDDMKTHKNPALRNAQPVPGKTSSLNPRPYAPPQLKKFNAPVAEK
PPVFELQMKKWIIEHQKNNQSLVIDETNDKQTIYMYKCNNSVLQVKGKVNSITLDGCTKCGVVF
EDLISTCEFVNCQSIKAQANGKVPTISIDKTDGTQIYLNDKSLDTQIITAKSSEMNVCITKPDGDLN
EFPVPEQYKTVWNGTKFVTTIMDLNL*
>TRINITY_DN109148_c0_g1_i1.p2   type:internal   len:131   gc:universal
TRINITY_DN109148_c0_g1_i1:391-2(-)
PRVPAGVLRRDRRVPEAVRQGVDPGHLRPGRTLRDLPARHGLHPRAHFPGLLPRQPRGDQTGVP
QGAHLLGVLRQAVLGGHLVRQNPPRVAQALRRGGGGHPERGQHLRRGFRRPLHPPLALLLRVL
RGR
>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-
550(+)
LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-
289(-)

MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSMRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*
>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)
MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN775_c0_g1_i1.p1 type:complete len:635 gc:universal TRINITY_DN775_c0_g1_i1:1927-
23(-)
MKQMIFLLAVSLAILNFDGHVVDAITCKSNSVWSWECQNSRCVKVLASSNSDAIELNTCKLTCGK
YSMLFPKPSGEIQLGKKTVPFIPTQARLRSVKVKKSNPKATWLVQNAYSLFLNTLEHSYKRYSGSTS
RLYNNMCAQEAQKRVLVMDVILEDGDTKITLDTDESYDLTILADDKEITVSINAQNFFGARHAME
TVSQLAAFSESYNAMQIVSSAQVKDDKPSYAYRGLLLDTSRNYFSVDSILRLIRAMSYNKMNTLH
WHITDTHSFPIEIKSLPEMLRYGAYSSKRIYTHDDVRKIVSYASINGIRVLPEFDEPAHCGEGWQWG
PKAGLGNLAVCVNRQPWQKYCVEPPCGQLNPTNDNVYDVLGKIYKEYFQLFDPDIFHAGGDEI
NFNCWNTTTEITNWLKQNYGGVSEKNFMDMWGMFLDKSSSKIYEANNNKELPMILWTSKMTS
EEYLTQYMDPKKHIVQIWTASKDKELSNVIESGFRTILSTYDTLYLDCGYGNWLVEGNNWCSPYK
DWKLLYDNDPVKILESFNVTVTDKIRSTILGQEAAMWSEQVDEFSSEGKIWPRTAALAERLWTNP
NHNWRDAEYRLIYHRERMVERGVQADALQPLWCLQNAGNCYYDPAIKGEH*
>TRINITY_DN71243_c0_g1_i1.p1   type:internal   len:422   gc:universal
TRINITY_DN71243_c0_g1_i1:1265-3(-)
PFVGIRIDSNTGSVFLAQHLDYETAQQHNVSIFAVEKDPPTRYVSSYFLINVLNVNEHSPQFQNNE
TLVITVNEDIQPGVIGSSPATDKDAGVFGNIDYKIIRFDDQLFDVTASGEIRLIGKLDYEKKRVHQFL
VEALDGGQPRRKSLRPVSVIVGDMNDNVPLFSQDVYNVSISDLTAIGSSLIKLSASDADDGLNGEII
YDISNGNFGTTFIIDKSTGVISLSRKQLLSELRKFTLKVSTRDKSPISPRNGETATVHVNFIEASANEP
FFSTTFQKLNVLENQAAGIKIGQSKVINSKMEAVYLIVSGSKTRITDYFGINYRTGEITAKQSFDRES
RDHYTFVVSARFIDDNSLTGYQTVDVSIIDENDNRPMFLGNISQTVSISSSFDGSRPVALLNAFDKD
LVSLDKIEMQLLNSQE
>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-
2(-)
GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE
>TRINITY_DN564_c0_g1_i1.p1 type:complete len:563 gc:universal TRINITY_DN564_c0_g1_i1:2018-
330(-)

MKLLLFCAATLLVAGCVLADGVATQKKCEDFLPVDTCNQLRVIAQKFNEKAGAVNKAITDAFNK
HKTKAGEVLSYVKEYLVANAKNFSCASVLSTQQCQQLKDFAKLMHAKAGEASIAVREAIVNGA
KNSKVQFQKAMEFLKNDVSCEKILGLEQCEKLLESAKTLKENIKTVHQALVAALQKHLSKTKDIL
KSVRETLVEKAKNFNCTDVLTLEQCNRIKNIGQRLKLKSSEVQKAVKEAIANGAEKAKQIFSNAM
DFLLIDARNMTCEDLIKAETCQKIKDFAKKVHARASDVALAVREAIVQGAQSTQDTLKKAIEFLK
AEISCKDVFSIDTCDKIRKLADSFHVSLKTVNEAMREAIANGVTKVSDLYKAAVKYITEKWGGIFG
DEPQIEKRSVDEKLTNIGELLKQKITKMAMDLLDMLKVTNEKIREKVKELIENGKIKITNIKEKVN
DLLALVNSNDEDTMNDVNMIYKRSTEDSLVDLLKSIKGKSQEFIEKLLKLSKDKLEQIKEWIKQLK
QTDDSIPSDEMEDDLDLVHDVLKDGVNMAFADIVEDTIKNIE*
>TRINITY_DN14015_c0_g1_i3.p1   type:5prime_partial   len:2566   gc:universal
TRINITY_DN14015_c0_g1_i3:2-7699(+)
PNEGVTIVFSNGDYELKKDYYAMIEAKSNGTLYKGKTVVHVTLTDKNDNPPRHQNLQVDIAISES
TKPGTIVTILYADDADDKQNGEIFFMLESASSDFSISSFNNTGVIRLSKELDNEQETSYKLMILLKDF
GSPSSKFSNMATVNIDVIDENDNTPLSEKTFDTIQVSRLKANGVIYQVKFTDADSGLNGQIEYDIEP
FKSFDDYFTINKTTGEVSLIKSLETTTEDNFWLFIIATDKGNPRRKGSFTLQVNVNEPSSLNPIFNPD
TYDIEIYENRLPNSLVARINVLNVDPNKDSLTFKIVSGNDGDRFLITNKGDLVLKQNVDFEQQNLY
NLVLSVRKNQNSVESVNQATVKIKVLDVNDNNPLFEKTDYTFIVTENTPINTFIGGVSAVDQDFGE
NSKVSYTIFDTTKTFIIDSSTGRITVVGQLNSFVENEYNFVVYAFDNGNPRRASSANVKVIVEDINE
APQFSPPSYNLNVSELLHPGDHIITPKVIDNDIGINSQVRLTLDASGNIDDTFLLENGKLKLNKQLD
FETRSTYDLTLVATDSGRLPLSTNAKVKINVMNVNEHRPIFNINPYMTEINEDQFSTPIFQVKASDK
DALSKVRYVIEDGLDYSLFSINQITGEITNSRLNANFKKEYSIQIKAFDLDNPQFYSHTVLVVKVIDI
NDNAPIFNKAQYSFTISDQTPVGTIIGKVFANDADTGFFGQVTYFLDNNFNGPFSLSGNDILINGD
LDFTKVSSYEFVIKARDSPGSSQGFRTTSTNISVNIVETNGTMPIFSREYYEVTIFSNISTQYTVVKVSA
TDNDGNEFGEIKYSLISDSSNLFQVDELIGIVSLKDGVQLQTRSFKYTNTLQVRATDGAGLFSTAYL
VIHVIPVSGNNPPVFLQIQYLSRVSYLTSKGESIVSVIATDPEGAAVSYEIKSGNELKKFGITNSGIIYL
EDQVENPEVNVYRLGIEAIDENGLRSDPDAQVIIQILYFNSTFQCKLIPTFSSNLYISQVEENKAPTII
TSVQANGSSQNDSIAYSIAYTKDVTQNDFEINSTNGVITSQRTFNYEMKNSYQFEVIAKDTNSLKE
GRTIIMVNIIDVNESPVFESSNIVRSLSQSSPVGTFVGLAETSDADKNDLITFSFVPANIGNIFQVDA
NGIIRTKSSLNAADSPYNFTLIASDKVGLTANKNIKVTVIKTNVPEFSQNAYLFSISESLNSVRIGQLS
TKQILEPVGYRIPNNNYNNLFIISDGGIISSSKGIDYESDDRKYNLCVEVFLQSNPSLFDTCDVTININ
DINDNRPVNKKDGQYTVEVSENVMVGKMIITLDVEDIDSGEKGFLNYLITSGNNGNEFRINNKG
EIYTLKPLDYEVKRSYSLTINVQDNGVPVKTIEAPLTVVINLVNENDNNPIFNPSSYTISISEQQALTT
ILKVTASDKDALIKSTYSILENEDTFSIDANGNINLVKAVDFEISSKYQFTVVANDGSRSGYAIVTVDI
TNINEKPSFGQNYAIEVSESTPVDTVILTVSATDVDIGVEGDLEYSIESGNDENTFSIQSNGQIKLLEE
LDYETKTEYTLSIKATDKGQPQLSATTIVNIKVRNINDNKPVFSKQKYELTVKENSQLSLTVSVTDA
DNLGNMKFSIPSSKAAGMFKIEINTLNTNEAVVSNIKPLDRETGAGHQFLIKVEDDVGNQGLSEF
VIVVEDENDNNPIFTSEEYNVTLFSKLNVNDAVVTVTATDADATYGVVSYAIISGNNDNMFRVNT
KGEILINKQNYDSRANYVLTIEASDNFETPKKSLTNTNVKIQIQSSGLTFEFAQDQYKYTKSEINIGD
TFGPITGTSSTSLDQIVYEIKDSSGTFEVTSNRNIKVLKKVTTDQNFCVAATTKNGGTLLDLTQIHIL
LAKTNENRPIFQFTNPKVVKISQNTLVNSVVAVTTASDSDTGSTITYSITEGGEFFNITNEGAITLKN
TLQTSTVNQFNVTIIANDGTFNSAPANVVINVKKENNFNPKLSFSSLNLSITEGNKVSQVLTDTDT
DADGDQLNFKIVGKTANNYFIINNTVLESKSPLDYEQVRSYEFCIEIKDSIDTNSRSVILPVSISVTNI
NDSNPVFTSKSNEVEVPYTWPPDITIIEASAEDSEGDRIEFSIVNSSFSSLFSIGKTSGVIKLNQRLKEA
KVYNLTVTATGVQSGKSSNDNFILTFTAVEAMSQTMPITFSDVTDNTMKVTLNAKEEFGEADYEK
MNTIYVYAQEYLPNLDEFVTRTLMEPVSYYDANTFESFRGRRFMIAKVDMERPTQRRKRRDTSLD
EKNGILTILIGNNQCANKYDPTIPCNGPLKAGQSYRYQLEGDLLNKRKLSSFTEPKTTTSAAQSVA
QFSASNYTFNIYYIIGLVMLGLLLAVSIWVIAVLLLYKRRGTKLMQLRESMLPPAINNAQTIANGKF
GSNARRYTNPVYGDYDDDRNFTSDFNLPRGQNNQELAQLKQQIIPIPNQNNGRANYNNRSEMV
NRVPRHFDNPGYREEERKPTYTATVMSSPTVPNPPPPPPPPPMENTRLPSSGTARSTNQPRLRRTSS
GRVIVQHLSGHQ*
>TRINITY_DN4781_c0_g1_i3.p3   type:complete   len:183   gc:universal
TRINITY_DN4781_c0_g1_i3:2965-2417(-)

MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*
>TRINITY_DN73457_c0_g1_i1.p1   type:complete   len:467   gc:universal
TRINITY_DN73457_c0_g1_i1:1435-35(-)
MMKILLLISVALTNLFCLSQAGEVCYPPFGCFNDEPPFNNALTQLPWHPDDVETKFFLYTRKTQD
KPERLSTYFKKTASYSHFNPNVSTVIFTHGYMEHGGRWYVPRLKDELLKLEDMNVIFVEWKKGA
FFPYHQAFGNARLVGRQIAYLLRVMRNDTGVNWDKVRIVGFSLGAHVVGYAGEALRKAGMLVP
RITGLDPAAPYYENTHIDVRLDPTDADLVDVWHTDGKTILIHGFGTIQRMGHIDFFPNGGFHQPG
CGKLDIDVVQYFACSHYRAVRYYIESINNACPYYAYPCENWKKFDQDQCTKCPDEGCQAMSYHL
KKPKKHIDRAFYLDTFTQFPFCGFHYEFTFYTNDAFLADLNAVVVVELFGEKDSEVLRLPHKYYES
GRTISMVTLGTKDLGKLKNMKIKFEAILDAWYLRALMIKPMYSQIEYTACYGIWLNSYKNKRDFK
IDYNPLNCPIAHPS*
>TRINITY_DN464_c0_g1_i4.p1 type:complete len:717 gc:universal TRINITY_DN464_c0_g1_i4:2167-
17(-)
MLLHFGKSLHYLKFGTLFWRLKLVAIPRDTSNIINNIFLESKSQRYIRMSANILNEYSQNVGKMEDE
ISGLTSQLNALKRKLNGEIEDEDCSDQLKELRSKNQKLHYQKNIIQRALKKEQEKADSKMLNVQ
AALNVLFESAIRSAYPQIPNPPVALTIAHNPKFGDYQCNSAMAISKMLQKLTGEKIGPHVVAKTIV
ENIPSNSFIKKVDVAGPGFINLHLEKEFLKGVLEKVIKEKVYPPGIGNKKKVVIDFSSPNIAKEMHV
GHLRSTIIGESLSRLLEFVGHDVLRLNHVGDWGTQFGMLIAHLEDKYPDYKTVSPPIGDLLLFYKA
SKKRFDDEEDFKKRAYQRVVDLQGGNPDVRKAWQMICEVSRNEFQKIYDRLDVTLIERGESFYN
DLMSKVVENMKKSGICQKSDDGRWVAFAPNMKVPLIILKSDGGYTYDTSDMAALQQRLQEEHG
DWLIYVVDAGQGDHFKQIFGVGEAAGWYNSSITRVDHVAFGVVLGEDKKKFKTRSGDTVRLIDL
LDEGLKRSMEKLLEKGRDKELTKEELLAAQESVAYGCIKYADLSHNRVMDYVFSFDKMLDDKGN
TAVYLLYAYTRVRSIQRNAKKGRSEIEEYMKSNSLHFDHEKEWKLAKLLCRYPEIVVRCLDDLTLH
LLCEYLYELSSTLTEFYDACYCIEKNRETGEIISVDMNRIALLESVARIFEAGFHILGIKPISRM*
>TRINITY_DN67_c0_g1_i2.p1   type:5prime_partial   len:474   gc:universal
TRINITY_DN67_c0_g1_i2:1488-67(-)
VHREAPKKMKLLIAVLFALCAIACGENYMRVCYYTNWAQYRTRMEFFPEDLDANLCTHVVYAF
AKIGRGHKLTMYEWNDDKMYPRMMAMKKQNPNLKVLLAVGGWNHENGNGQGKFSKMVNS
NSNRRAFIDSSVALLRKWGFDGLDLDWEYPAGRPSGEKFPGDKQKFTQLCSELMSAFERDAGER
QTTRLMLTAAVAAGKGTIDAGYEVAKIGKILDILNLMAYDLHGAWDPVTGHHTAMATDGVDLP
NRVEFTIPYSVDYWIKKGFPAKKIALGMGTYGRAFRLKDKSQHGLGAPVTSGWPQPPKGQFTRE
AGFLAYYEICKMGLTIVKDNAVSAPYGYKGDIWVGFDDKESLIHKVNTQIKAKGLGGAMFWCLD
LDDFKGSQCGEGKYPLMGAVAKALGGYTPPPPPTPGPKPKSTRAPPGEKTDRPVKTEGPSGGVCR
AIGSWTGNANMNAWCVSNCARGNCPASVCKC*
>TRINITY_DN27379_c0_g1_i1.p1   type:complete   len:583   gc:universal
TRINITY_DN27379_c0_g1_i1:133-1881(+)
MFLFCFYLLTLLTTFTVKCHVKQAVPTFFHRRTPSGEILDRSSPDFNNHIKKPLGQAIDESDGSSYL
KLWPNPIKNGELVSVLWRNIKSPTEKDFIVYYCPYDDNPNHYLDLFHVTESLTWNQGYGHYQVR
VYNMRSQCIFKYYRHTDKESQMVGVSEKLNFVGGNNAPLQGHLALTGYPDEMRVIWNSAEINT
PPVVRYGLTKKLDMAEYEVEIRTYEANDMCTGPANTTDGFWHPGFIYDVVLNGLEAHTKYYYSY
GTEGHMSEIRNFTTQILPGDPTPFKFIVYGDMGVDSFPQGVTTSKQILDEIRENDIKLVFHNGDISY
ARGYAYIWEQWFHMIEPYATAVPYMIGIGNHEYDHRTGGEKDPSHAEGTGGFRPKWFNGGDDS
GGECGVPMYNRFHMPDNGHSIWWYSFEVGLVHLIMISTEHDFSPNSPMYNWLENDLRNVDRTK
TPWVIIAGHRAMYCSQSIASDYLVALNMQRLFEPLLYKYDVDLAFWAHYHSYERTCKVYQNKCR
PDGITHIVVGSAGKNRDPDVWYKKDWSVFHFADYGYGRVTVANKTHLGYEWIANRYDKVMDS
VWLVK*
>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-
481(+)

CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL

>TRINITY_DN247_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN247_c0_g1_i1:38-1156(+)

MKLVLVIFVILVYTWNVSAGGKKCISNKDFMTPYPTNFWTEHYPKFVNNRPTIGIVAMEVLGQKM
LVNVPWSWNKDYFGSSFVKLVESAGGRAVPIKEDITEDDLDKLMRKLNGVVLPGGDADVGDSGY
ERISKQAIAFSKKMAKKNVTFPVLGICRGAQMMMMAEAGKDFLEVTDSLNLSIPLDFTSEQKESR
LFGNAPQGLIKSLSEDAITFNAHAMGIPTLNFYNNSGLQKAFRAISTNYDRNGTKFISTFEGRDAPI
YGLQWHPEKSLFVFNPVLAVDHSIKGVMASQYIANFFISEARKNNHTFRDRVEEEEHLLMSYYPS
YVGNITETPYEQIYLFDFVKPFQNPKYTPGKVNKNDDDNSGDDDDE*

>TRINITY_DN17292_c0_g1_i1.p1   type:3prime_partial   len:534   gc:universal
TRINITY_DN17292_c0_g1_i1:38-1636(+)

MWKIYTIIFLALVSQAFSQDIVGCGGFVQSDVPIAFEKVEVKLYTKQGAYKFKTECAPNNGYFLVA
VYDKGDYVLKIDPPVGWGFEPKEISLNIDGKTDRCSKGEDLNFKFIGFRVSGKIGTVGKESGPSGV
TINLLDKDSKILSSNVTDEIGGFQYDNVMPGNYIAQASHPTWTLKQDKVHFTVENDNVETQTDI
VIAGYDVKGHVLSSGDPIQGVSFILFANGQIDKDAVSGCEKVPEDLLSKLKENGNEKPLCFVLSDK
DGLFSFPTVPTGNYILVPYYTTQNIVFDIVPSKLSFAVNFRSVMFKTPFQVYGFSVTGKVIDSKGNGI
PDVKVTATSQKGEKRSAVSNVDGHYLLENVTSNHYKFLLEKPHYHFIEESIHITPNTPNVKDIMST
RYSVCGKILAYQLPPGVLKVHQHKVLLTLFAEKVTSSNIKSTNPDMDGNFCFSTEPGKYKLEVHTT
ENERKLGFLLKPSHLTVDLVNEPILGLQFEQFRSVVTGKINCIEECKDLSVYMTPSNSPNDKQYGK
VEGSG

Band 5-6

>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)

KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLVSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK

EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI

FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES

AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANQFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ

FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV

FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*
>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)

MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR

195

TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-
1359(+)

MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)

MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGYFGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY

YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE
>TRINITY_DN199_c0_g1_i1.p1 type:complete len:229 gc:universal TRINITY_DN199_c0_g1_i1:207-893(+)
MVQGSMTIVKYLMFFFNFIFWLSGLALIVIGAVIRDKYGDYFSYADSRFTNVAVFLIVVGVIVFIIGFL
GCCGAIKENYCMVTTFAVILGIIFILEIVAGAIGFAYKGQVEEKADKALVRASKNYNNDDEPGAKK
LLDWAQQRFECCEVASATGNGTCADKSPKSCHPDNDCNKTKYSQKCKEGFVEFMKDNLVTVGA
VALAIAFIQILGIVFACCLMKAIKGEYEVV*
>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG

TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*
>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-
494(-)
MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*
>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)

MKLAFNIFTISLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*

>TRINITY_DN250_c0_g1_i5.p1 type:complete len:452 gc:universal TRINITY_DN250_c0_g1_i5:131-1486(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYP
RIHFPLATYSPVISAEKAYHEQLTVSEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDV
NAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARLD
HKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVDAEDEEEGDEY*

>TRINITY_DN1119_c0_g1_i1.p1   type:5prime_partial   len:949   gc:universal
TRINITY_DN1119_c0_g1_i1:2934-88(-)
FFFNPQTVMHEKKFSRMKFILLFSFFAISLGQNCNRMHKKIGCFWNDKNAKVLFNDRDSINNSTY
GALSDKLACKCNAVARSNGFKFFALRHFGICIGYNKITTGSKSIEHCIDTKSNGVCNLGDMNTCT
GTQNTADMMYQIVPEKCPSRHKKVGCYTEDRNATFLFNDRSNIDWPNFEKFLVELACKCNKVAL
EKGFNFFGIRFYGVCVGFKNISTEEKSAFHCKDPNYRPYRPCNMKDSNVCAGDHFLTDMIYKTER
QNVDKLFSEWSGWSTCSKSCGGGTQKRTRECKDKKSCSDAGGEEFKSCSNSFCKGSTGVAKAQE
VVETFLETFHKVEFPDIKPSGKYLKTIFEIQKAVGEEFNSVDPSVKGVPLEKRLTELEHFLKIAVEGG
SIDFARSTLGKGMFVFMKKKIKEGLPINDIDTAAKGFLNKLTGDIGSKKMNEILSSKGDATLMFTID
TTGSMAQEIAAAKAIAKQIISATREYEVDYILSPFNDPRTGPVRYRSTNDRANFVSDINKLLASGGG
DCPELSIKGMLNAFDKGPKYGSPMFVFTDASPKDATPSNMAALKAAASSNNAKITFFTNLKGCG
KELGIESYKEIASHTGGQVFPLKNEAELINFTEYVKSSLQQDTIIAAGGSLNSRISKRAAPRSHIFMV
DQSITRLIISVAFEKQNTGKHIKLLDPNNKNVDSSTMLAMSLIYDIKNPKVGLWGLSFPHIVGEFGY

NVQAVTENAIEFAHSFLHQHNVKGSDVTVSLENPIKGIRNMMVIRLGGADHIDLSTIKVHLVDHS
GNKLVSNVMTDRLDSDEIRNASIVPPTVQFKVLLTGKTKSGQQFQRMSQGSSTPVSAFMRTISAGY
DFTATMGKDWISIQIEIVNKGSAESFNFQAKTKYGTLKNPNQTKTVNKESMITFSYKPPNRHDLK
GKTDKVTVIAKRASGEKINHFISILLIK*

>TRINITY_DN33065_c0_g2_i1.p1   type:3prime_partial   len:804   gc:universal
TRINITY_DN33065_c0_g2_i1:2409-1(-)
MWQFVWLAVAITSQINGNVHHKHTKPRHQNLIDDIVPNDDFDLDYSHNIFIPFDAYDNYEKFLE
YAERSDLAKRGGVTSLPAIQSLPGDGSHTYAAPGVNCQVQLLNKKVEGTDKRVIERTSCAEGWTL
KNALGFFFAGVGHDLATKSAGLVHMNQLRFKMLIFEAEGYTFVADTDNEVYSNLQSKLSLKNAE
CRLTISNSYTFENSEIVLTGNHEVIEKITNAKKTLEVTFEKGKDTSSFDVKMKVPSMPLETFATIFLES
ETEFITADMGDTSYEINIDPIKAVIIESTSNSVTGVFDGSDGKFQLTGKFLSNDQNAFMGQATDIYLT
VNRKSLGSRTTYNLMLGFAKEVKVMDIIPKYVGKTEIQDEFDDNFLKTTIEKWHLLFTSKRIIVAD
GAEYKKTFANIFDADEYQEFKQGVGIKATVDLQKTLTACSSGSTVPDSLKSVKIKGLLGRRGLSMV
FPPGTSVPLIPLIKCKLRQIQDDLGFELPISLKGYEQKSKFKLEEIAYSSDSGAFKMSLLYENTITIYKD
VLEITNPQLTIEREGKDEPWQFTIAADVSIFQVDASVMISYSKTGYTVEVSSGNVPLTNLLRAFSFSD
KPAITFEIHDFKMQIEVKDKEEEEENEEEGEDEGNKNQLAIKRQDNKEEKKRDLKFSIAGKPVFN
GFDKVSIEALVWTSQTPAGVAVAVIMENIRLDEVLEKILDVPEVPMAWFSDMTLTMVISNVDAEG
CDNPAQSEDDCEEADEEEEEEEGEGEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRG
PGGGRPRRG

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)
MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG

PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN2113_c0_g1_i2.p1　　　　　type:complete　　　　len:1704　　　　gc:universal
TRINITY_DN2113_c0_g1_i2:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN6390_c0_g1_i1.p1　　　　　type:3prime_partial　　　　len:1941　　　　gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE

QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAQYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYCH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR

SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN113_c3_g1_i1.p1 type:3prime_partial len:1162 gc:universal TRINITY_DN113_c3_g1_i1:3485-3(-)
MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK
>TRINITY_DN36_c0_g1_i16.p1 type:complete len:224 gc:universal TRINITY_DN36_c0_g1_i16:829-158(-)
MMIKTTIVAVVLAACVLQSFAGRCYVGYSAKGLPLAIGVRDVECGKGYDYCTTIKYRLGGIEVTQ
GNCARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTT
GLITKFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNI
DNCNKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-2869(+)

MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVNQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV
>TRINITY_DN1676_c0_g1_i12.p1   type:complete   len:1631   gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY

GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*
>TRINITY_DN123121_c0_g1_i1.p1   type:internal   len:127   gc:universal
TRINITY_DN123121_c0_g1_i1:3-380(+)
LNQKLCAQQVIHLEITDANDNFPVFSQSRLSLNVSEYTEVGQVIATVRANDLDERSQGNLLFSILK
DEDFFGILSNGDNGVIFLKQSLDAERRLTHQIEVTVSDREGKSSLQNMEIIVFVEDENDN
>TRINITY_DN71276_c0_g1_i1.p1   type:5prime_partial   len:1201   gc:universal
TRINITY_DN71276_c0_g1_i1:1-3603(+)
LTFIESLRLSSIKNIFKMMISFETFVPSTTPYAEDYNTNPQVMMLSNKIKETIDTSLNPLASQIDRQKA
FQVQEEFKSSSPHCAEVGLYLYSVERKNSDAVRLCALKFVDHFIETKWNDLTYERKTFYKKESLKL
VEQMTFENETYLKEAAAQIVVEIIKRTWPQSWADLFKNLEELQAKGDAQLELVLIILMRLSEDVN
GLDERLTTQRKRDMMTTFQDNANELFEFFIKTIRDKVTALKTESSSLLIRLSEATLFTMMEFVSWA
HFDCLFNNEKIIFQILFWLLEVKYLRYYAAACLDNIFQRKGTPEKRIEFMVVLSDDVLNIVENVVRS
LKKTPENVLPEEGYKFLKKLAEMLVSFGKIQILSLWGDERGFNEKPVGYDRYLRLMLLLFQHESM
KLTYDVSKFWHALSIHPHGKLDDTFKELMPDLLDCAIMKIAKISDPKIPNNPSSHYSTMDFDDKE
NYAEYFANCRGHMTDVCRKITIISYTVVLDHCLAKIKQATSKPPPDVSGIPKNQIQITQHYLYWDA
LVHFLKNGFAGVFFRANKEISEDTISKCNEIITLLIHYKCEVPLFTIPVINLLESVFPIFKHSRDHLLPT
MQLLFSIIRLPQNDEDPLRDHVFKLKRHVCEAYAALCKEIPHCLVDYFKQLEEFAVYQMMHNASL
TGQEKCRLIEGVLRISKHVTVKEEQDHCINAIFDMIDSMFDKEPVRRACESPISLIQYIGLDQEGTV
AADSELRTRELLFAINLWTAACKALAMSKEEEVKDEITEEEMRTQIETYGWIKRMVTMLPKMLSL
LQSYSLIWQHQDKICDKRILVHKIITEINPTIQVFQPKCADEVNEKRGLGQYYLCTFYESAYTSLGSV
SKSVGPSLFSIGGLAEAMNEKLVQHWNNLPNYRLGRITRTFIKDICLACPKKYFETFIGPFVSQVLR
LYFERISNEWAKLAQLKENPREVTDKLQEQIEIAEERMIYLMSKDLLDLLLSLLTFKRKHLRSTTKP
ADGSLETFGELGHFLLDCEETNFIIVQIIFTSLTWPDTSAAIKVSQIILAVLKKIFTDTSKLNPELPKQL
LLLILQGLNIHGGDEFGRAALTNNVLQFYLHLRMQYRGIVQVMLMIPTCEEQHLREFDLAVFVQE
LPLTEQQQKKIFRRFVAGACGTVISKLHEKDVVIQDLPALMPRQKEKTLNKNGDADDDLGLCSLF
GV*
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE

LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*
>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)
MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN875_c0_g1_i1.p1 type:complete len:606 gc:universal TRINITY_DN875_c0_g1_i1:2207-
390(-)
MLRLVLFAISASVVYGSCNPLKLGCFIHSGSDRNLLHSDNSEDIYTDFYSGTNIEWDKFSSYLQRAA
CRCDQAAANAGYRFFSLRDFGECHGIGKGASSFDALKLKKSMYCIAPNLGQCDISEHQHCTGAE
EGEFIYETKAQPAEKVIDGGYSSWSAWSVCSKECDQGLQERQRTCTNPEPKGKDAKDCSKLGKPS
ETRSCKIKDCPPSGETVIFCEHRGVKRIACENDQVVEILAANYGRTSTKHCVFGRTKVTNCRAAH
SMSIVKSQCDGFNYCDLNPHNDVFGNPCGFYTKYLEVKFRCVARKTSSRRAVLCEHRGSPPLSCP
NPDEVLSINKASYGRLSTHYCQYGHFKQTNCRALHSDALIKKTCNGLNSCSLNPSNTVYGNPCG
NVNKYISVEYTCKKTNAASRQAVFCEHQGGKTLKCANPDEVLSINKANYGRLSTDHCQFGHFK
QTNCRAEQSDALIKLACNGLNECSLNPSNDVYGNPCGNVRKYISVDYTCKKANAASLRAVFCE
HQGVKTLKCANPSQVLSITKAIYGRLSTDYCQLGLFKQTNCRAANSDGMIKKQCNGKNSCQLNP
SNAVYGDPCKYVRKYISVEYKCINK*
>TRINITY_DN8597_c0_g1_i1.p1 type:internal len:124 gc:universal TRINITY_DN8597_c0_g1_i1:369-
1(-)
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQACGGSDADFSEERVRACSNVNQCGVNTGTQTV
YKVCNGNRCNFQGRDYQINEEVVIRVQSCSVVCDYSPWQDTQSCTKTCDGGVLIQSRTER

>TRINITY_DN5987_c0_g1_i4.p1 type:complete len:336 gc:universal
TRINITY_DN5987_c0_g1_i4:136-1143(+)
MAKKNKVATVTDRETNTKPIVDQMKDTRNSTNSSKAKDNSKKNGGGGISWFNLFTFFIATSSLAV
NVALIRGLVPLPGCVGPQGKQGEQGLTGATGPAGKEGPQGVPGADGPRGFPGNDGMPGPEGKQ
GETGEQGPPGPQGVAGSKGDPGPQGKPGKQGEAGEQGPAGLQGAPGSKGEPGEIGEQGKQGPV
GPVGPKGERGNDGEQGLPGPVGPEGEPGPPGEQGPPGPAGLTGERGNQGEQGPAGPVGPKGDT
GKQGEQGPAGTDGQKGEIGNQGAQGPAGAVGPKGEIGNQGAQGPAGAVGPKGEIGNQGAQG
PAGVVGPKGNQGEQGAAGAS*
>TRINITY_DN77_c1_g1_i1.p1 type:3prime_partial len:1965 gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN4781_c0_g1_i2.p1 type:5prime_partial len:3388 gc:universal
TRINITY_DN4781_c0_g1_i2:10182-19(-)
QCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWIQFRNDDFDFDIQSGKTSSSGT
GPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASGDCSLRFWYHMYGSTIGNLTL
FLRRDNKDTLLWAKSKPEGNQWRPALVTVNSWYKPFQLIFVGTVGKSYFGDIAIDDLMMTDEKC
PSPGDCDFEDFDKCTYQDLVEDDFDWIRGHGGTGSWRTGPSLDNTKKDNSGHYYFIEASAPRT
QGDRARLVSELFDPTSSTRGRCLQFYRHMYGTAVGTLNVYVKTGPGNSSDAESLVWTNAGNQG
NSWIQGQVPIYSSKPFRLVFEAVRGNGYAGDIAIDDINFNNNFAPCSFLPSNAAPPTLPPTTITPEDS
NCTFDKGLCRWKQMKSNDQFDWTLVSGSTGSVGTGPLGDHTSGKGSYIYIEASYPRKENDSAILQ
SPPIRPSLGSVCFKFAYHMHGAHVNALYIYKNVKGKRTMVWKRVGTQGNQWRNGQVNIRGVS
GIFNIEMKGIRGVDYQGDISLDDFVVTNGQCPTPSHCDFENNQCGWFNIGRGDDFNWKRSNGG

TPSLGTGPGTDHTTGVALGSYMFIETSYPRKYRDVANLYSPYYPGSKTGYCFNFWYHMYGSHIGSL
NLYQDTVKSTPIWNKTDNQGNMWKHGRVTVNSRAKFRLIFVGTVGKSFLGDIALDDVWVDDFP
CPAPGACDFESKSFCTWSQVPNKFNTSNYDDFDWELGNGPTPSFQTGPAVDHTKGTSVGTYAYV
EVSGLIKRGQKAQLMSEKFPPTNGKCMSFWYHMYGSGVGDLNIYLKYLGVKKSHLVKSISGQQG
NKWIQGEVGLHSQKDFNVIIEAVKGSSYAGDISLDDISILDGNCVGLCSSVQPVARVACGPQSVTS
ASCVVSYGCCYDNSVPNVPACFQHPSSCKAVPIIARQQCGYYSISKYFCARRGCCFDDSGAGGPP
CYHSLSKPTDFPTTRAPPTTQPPSKFDCNFEKNQCQYTNLRNDQFNWARHKGDTASFGTGPKFD
HTLRNQNGHYMFVETSFNKENDTANLGTPTIDFPTGGDDVCVRFWYHMYGQHVGAFKVYHKL
TTRVPTKPIWERIGSMVNKWVYAQLIVPRRPAFQIVFQGVRGKGYQGDIAVDDVGFVNGPCPPSL
QCDYQNGDLCGWAQDADDEFDWSVGNGKTMSTQTGPKADHTYETDFGKYLFIEGSSPRQPGD
KARIESFSHRPTKGMCFEFFYHMKGTGIGTLNIWIRRGKTMDSKPVWTLSGEQGDEWYRAKVTLV
EDTENWTVIMEGIRGADFNSDIAIDDVIFHQGDCAPQGDCDFENDDVSACGYENWPRNKVDWL
IYSGGTPSYNTGPMVDHTLGTKQGHYLYMETSSPAKKGDFGYFMSEKFRVNPNYKWCVDFYYH
MFGDGVGSFMVKMMYQTKYSRGRYLLQTLFKKEGNHDDIWQHGQVNITSSYDFQIVFQGVVGG
GITHRGDIAIDDITVKKGLCPAPKAPPKPNPCAIKCKDGTCVPSNKVCDFYPDCAQTSDNTDDTD
EKGCDGCDFEKGTCNWNDTSKGLFDWNRQNGGTSSYNTGPSVDHTKKNALGYYVYVEASKGQ
SSDLATLSSPVLNQASSTCKMTFWYHMYGTSIGTLNVYLVNGYRLTLHWTLSGNQGNLWKQGTV
YVNRQLKPYSVRFVAERSFSYRGDIAIDDIKFEGCELPRPAGFCNSRYQHRCAVTRACISYTRLCDY
TDDCGDGTDELNCRWTQYPYRCNFEYDLCYWRNLKDDDFDFTRQKGQTDSANTGPLFDHTTG
TSSGYYIFVETSWPRKTGDKARIGSGYLGPITRTYCILRFYYHMYGDHIGALSVKLRTCIGCPETQI
WRRNTTVGNYWVRHAMYLRSDKPFQVIFEAEKGSDYQGDLALDDISFDGCTPYQGTFPTVAPST
KPPPTTSPCPSGKFYCAKDAKCIKGSMKCDYIKDCSDGQDEQHCGPCDFEKDMCGYQDVSIGTL
EFKRTQPINDGSKNGPSVDHTTNSTKGYFAMAQKGSGNKGSPVSFLLSAQLSQTAPSCKVQLFYH
AKAGANYVRVSHRQPGSNGKTVISQVQSLSIRNMDKWQNDTVGVGQRPFGWQVLIGLLSEYAA
IDDIKFIDCFYPRPTGVCNRMYTQCDNGVCLDPEKMCDFSNDCGDNSDEKPSVCKNFKERCDFE
TDTCNWYQDQSDNFEWKRIKGGTPSGSTGTGTDHTTGTSQGYYMYIEASNPRKPNDTARLLSPV
FKPHGNKKCAMRFHYHMFGIHVDSLSVKMKFSQDDNSTMKTVWTKRGNQGNQWNTAKVYLL
SKVNFQVVMEARRGISFLGDIAIDDVSFSPDCLPDFKATLNPNPITKAPPPGCKAGQFSCGDGQCI
DSDFFCNFKQDCKNNADEIRCPSSCDFEGGKSCNWFNAKFGDIMDWTVHQGKTPTNGTGPPYD
HTKGTKDGWYAYMEAHQRKASNFPNAHFVSPMYYQGAYDCKFSFWFNMYHYKISVQNDARL
NLLYRKNGKDTKIWSMARTTGNKWVQATVQLPRCPRDFRMIFEGHHYWATKTDAAIDDLKFM
CTEPKAPSSCANDEFQCTKTKQCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWI
QFRNDDFDFDIQSGKTSSSGTGPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASG
DCSLRFWYHMYGSHIGSLTVYTATTFGVPETQVWQLSGDQGNTWKRGEVKLDSNKDFQVIFEAK
MGTSYKGDISLDDISLTPGCVYNNAVLPGGPTPPPVDPCLPNFQCNEAGNCVSRAKVCDFVVDCS
DGSDESNATCGYPQGFEYGFGAWRNAHFDTYDFTLQQGATPSIQTGPTTDAKNDKKGYYAFLEV
SNRKRSRKAVLSSPTYAVAYSQCVLSFYYHMYGRETGILKVHLVTTNETTLLFELKGEQGNKWIKT
KAFVGRRYHPFYLNFTATVGSYRGDIAIDEISFENCAHPQECTGVDPGKFRCKNGFCINQTEICN
AVDDCGDDSDEHVGSVCENYLGCTFENLNDPCNFTQAKSGDDFDWKLNRGWTGSYNTGPTRD
HTKGTSKGSYMYIEASGRVKGQKARLISLPVESRPGGNCQVRFFYHMFGKHINDLNVYILQSGTL
RLIKNANGDYGDMWREASLDLSKEKGVYRLVFEGVVGASYLSDIAIDDIIFNPDCMTNGSRVFPT
RIPCAANQFTCTNTRQCLSSSVRCNGVRDCRDGSDETGCKGPDTGKSSSVNTTTSIYASGVVGGLV
ILLIAVLIIYIVVKRKREKKLQLFSVFYDPTKQAENEKKQGKPSKNVTIKNEGVSNPIYDEQPMSEFS
MGELDTNMFTDEPYVPAEPKGQTSSMANPLYQDPYMEDDDSPLSNF*
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYVVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP

KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*

>TRINITY_DN1653_c0_g1_i3.p1 type:complete len:1023 gc:universal
TRINITY_DN1653_c0_g1_i3:180-3248(+)

MMRRSIKGSEDNWVEMQNDTFKNWVNANLKSRGLEVDNFETDFEDGVRLINLFEAVSKKSIGK
YAKQPKFANQKLENVSLVLRAMESDGVKLVSIDSDHVVNGNSKMILGLIWQLILRYQISGSDDKSF
KIALKKLLLIWLQHVIPEQGIRNLTTNWNNGIALCNLINVLKPGIFPEYNNLDKRTPVENLAKGM
QLAESELDIPQIISPENMASPNVDELSMMTYLSYFTQDGGIGESWTVDLVNFWNSSLSVTNFNTD
WNDGMRLGRLVETFLPGAMPIMESTDNLDNCRIAMDVAHEKLGISKIITAEEMSNPQIPELAVMS
YIVQFTKVKRVERASDKFSASGPGLVEPKIGIVNEFYVRSDAGYPLDGLQVTIIGPNNNYIPIEIDDS
DPQLRNYSYSCEEQGQYHINIIYEGEDIPRSPIIVTSQQDLNTIRVYGERLEDKHLYAELYERIGISVD
TSQSGDGRITSKTIGPDEKEIYSEVDAEGDGSYTVSFTPEVIGEYHTNVFWSGKPIHGSPFVVWVSD
PNKVFARGKCLYETRVGVESSFEVATNGAGPGHITGYAETNGVEYPINVRKREECLHDISFTANQV
GIYYVYINYNNVPIKDSPFQIKVGNPSLIEIEKHEEAIMESNQPQSFIVNVLKDAGFGDVLCVVRGP
AGEDVQCTIKDVNDSLKEIMFLPNYPGTYEVFVYYAGGLVERSPFIFAISEPKLAIYPENIRVSGNGL
SRAKLNELARFQVDTTNAGPGHLTVQIEDEKDDVEAGIRDNNNGTYDVTYTPKRSGKYRVIIKW
SDQHITDSPFEIIVDNRAEEVLVEGYGIKEGTAGQPVLFTLDGRNAGPGQLSCRCRAPSGKMTYVL
ISDNKDGTYTVDLNATEPGLHTVEVEWDNQAIPGSPFLVRIMQAPDVKKVRASGPGLRSGTLDSF
NGMFQVDSKGAGPGTLKVRIHGPKGAFKVEMSRENPKDRIINVRYNPTEPGTYTANIYWSDEHV
QGSPFEIFVGQNDQEVDRWDRNKEELSKSQVNVY*

>TRINITY_DN1535_c0_g1_i1.p1 type:complete len:779 gc:universal TRINITY_DN1535_c0_g1_i1:86-
2422(+)

MMKYFMLIVFTICLKNIHAQDKNLCTSAETCGKCLLKGGDCFWCIEEDFKFNRTRCNTEANLAA
QGCTDYGMGRGKKTNDADLDFTSVRQVKPQKVTLEIRPEEEQSFRIQVKSAKDYPVDLYYLMDL
SKSMENDLDKLQTLGTNIAAEIGNITKNYRLAFGSFVDKTVIPFVENDDANYKPCAECEPTFSFKH
VFDFSNDAKSFEKAVSEQKISGNLDTPEGGFDALMQVAVCEKEIGWNPKDKCRKIVVFVTDASPH
IAGDGRIGGIIRPNDGQCYLTEDGDIKMYTEATKMDYPSIGFLRSKLKDNAVIPLFAVTKNVTEVYK
SIAAELKDLQAVTGILEGDSSNIVEVIRDKVREISRTVTLTDDSSPDITVTYRVQNDPTKPNVCPSPV
APNRCEDVEIEQTVDFDVYVKASAKNCETKEKQDQTFTVNIPAFGKVEVNVKMICDCDCAKTSE
PDSPKCDGQGTFECASCKCNEGRYGDRCICDGNENKDMSLCKPNNVTDKICSGFGNCVCGVCQ
CNIRENPEERIDGNYCQCNNFNCPRHQNIVCGGPERGSCECGTCVCREGYLGENCGKTDCRIGV
KKCLDAKGQNCSLNGICECDRCLCDKGYEGKQCQTCVSCPGKCSEYKTCVLCKAFGETGEQCD
GCELIQHVLNRTNEECVVPVDENCFVIYRFEIDPVSMNETLYIQRDKRCIIIVKTKPPILAIVLGTIG
GIVLLGLLLLLLWKLLITAYDNREFQKFEKDRMKSKWENDENPIYRPSKQQFQNPAYAGAN*

>TRINITY_DN172571_c0_g1_i1.p1 type:complete len:104 gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)

MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*

>TRINITY_DN413_c0_g1_i3.p1 type:complete len:350 gc:universal TRINITY_DN413_c0_g1_i3:1286-
237(-)

MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCG*

>TRINITY_DN1280_c0_g1_i1.p1 type:complete len:426 gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)

MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE

RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*

>TRINITY_DN493_c0_g1_i1.p1 type:complete len:473 gc:universal TRINITY_DN493_c0_g1_i1:2681-1263(-)

MKCMKFISLMLITFTSILVAQDTGFIYYDDSSSSDIDSLTEPYGYQSVMDNREKSYEKPDMRYNFDK
PSASDIDSLNTPQYGYEPVMDDRERSYKRPDMRYNSDEPSARDIDSLNIEPYDYESLMDYRDTPSE
RPGMRFDFDESITGDIDSIDTPLDDYQSLMDHKRKPYARKRRSIRHRRFIGQRRWYGRRKFIRKNQ
RQRNGFRKINSQRKRVCSKGSNCRHKLEPMGCFKDIKSERAMTEEILNERDTASKVFNNRLINWR
QYHEWLPGFICRCAQAASERGYSVIGIQFWGECWSGPNSESTYNKHGQSDSCVNKNLQENRAN
LTQCAQAAGKDSTNYVYRIAPACNTKYEPVGCFQDDQKEPRPIPHYISTDRDSSLDIFSGKLLNW
KQWNTHMPDMICRCAALAKSKGHKMFAIQFWGECWSGPLSNDYKRNGASGECRGKDFKECSC
NSYYCVGKTHTNYVYRLS*

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN3448_c0_g1_i9.p3 type:internal len:102 gc:universal TRINITY_DN3448_c0_g1_i9:303-1(-)

HRGKIKSFPKDDASKAPHLTAFMSYKAGMTHIVRDVDRPGSKLHKKEVAEAVSVLEAPPMVVVG
FVGYVETPRGLRALTTVWAGHLSEECKRRFYKAWHRS

>TRINITY_DN11248_c0_g1_i1.p1   type:3prime_partial   len:1700   gc:universal
TRINITY_DN11248_c0_g1_i1:111-5207(+)

MEIRSLFVAFIYIVHSINAQCSSPWKSYKDSCYLFTAVSTVSPGHTWEDSRFICQRYGGDLLKLDND
NETKYINSQFDDLKIKYNHYWIGLNDIKKEGDWRWADQAPLNVTTQWRVSRGEPNNWQGNED
CIETTYDGQWNDNECSRMFGYICERSKDAVIPVTPTLPPFPTATDKPTTCEAGWIPWGTSCYGIIRG
LAKNFQDAQADCLRRFGDLVVINDQAENDFISNEISRSVGGLWIGLSDTYKEGTFYWVDKSELNF
TSWRAGEPSNDYGNEDCVEIYGRWGPGQWNDNHCTALRDYICEKPGGVHNCPRDWVSYKNY
CYQINAHPGQKVTWEDARKNCLDFNKAWRKSVNVAQADLVSITNLEEQKMLQKEFSKVNIKN
DNGFYYWIGLTDKNSTGGFYWTDGSTYKYSNWIGSPQFASQCVRSNVIGYQGGSWSKGDCSEAY
NYVCKVGRGQDRCYNPLGIQSFAVPNKAMTSNSVLGPSTPALAGRLYMKAGNSLDGAWCAGN
NTKTPYLQIDFGKMQKLTYMGHQGKSNSDAMVTSYYIKYSQDGIVWDTYGYIPPAQYYKFKIYIG
WRTNYEKVMNLPLPAPFIARYVRVYPLEWNIAPCMRIDFYGCQEEVDNQRCGLGWREDKKTKN
CYKFHNQITTWDSAQELCSIQGANLATIATPDEREFLSEQLGEFKSLVSEFWIGLNDLDYEGVFKW
VDGTPYQLSNWYYGNPKVRNEKSNCVVVRTTDSAWVNTECTVFRKFICKRNYISPYTPKESYNG
YVYSKTDYFWPLDSATDFEGSLPLTLNGNVDRVPFPIDYDVGVSRYALNVSGSSGFFKIDVANDVC
IHHPDADSCPHGITVSFVFKMSKKSSSKRQVIIDTTEKNKPLGYKVYTEFGSIYVNLRGHQKSYSGS
TVYNAHIFNHMTFTWSSLKGLSLYMNGKSRVFDLLGSYAKDYPKVDYGKSLLIGISGDSQDPAEL
MIRSLGIFKQVLDAKSIEAIYLGEFGTCKSHQFAHGSYCYEYNSTEVSWSNALSTCRDNGGDLISIH
SPVEQAFFNLKIAQYNYQRTNWIGLNAKSKNSFFKWADSSRLEYSYWAPLEPNNNNGRREDCVE
TFANGGWNDALCYLRNPFVCKYSRALHIMGSENTDDKEYKVFFSPYQTLTFGCPLGRSIEILTASY
GSVKDGCVKDVKDKVSNACVKEHCVRVQASDFFFNKINPCKDKNRFALKRLKVTYKCNLATPE
FDSTGCSNGKDSENSYRVFDKSNICYKLYRKPKTFKEAQKVCKDDNGDLVRINSRETQVYLTSLLH
TMYQKTDIWIGMMYNSTTQNYEWLDGSHVYYTNWVNRQPDPRNGDYVKVGLEEGAKNFLFW
KNGEANETLPFFCQRVKVGKTTQAPPTTQPRTGTCPKGWFTYNKNCYYVNTNRLSFPDAQAEC
QKYGKSSHLASVLSYEENRAVFYDVVNATVDFAWFGLTNEAIVTGFRWVDDQPVSFVNWYTNEP
HKINRHLCVGMGSGGKWIDLACYLKYPSICKLPLGEVIPTTTPLPTIPPTQASGLCEPDWIHYNGS
CYNFANRTSYADFHNARVTCNKMGAHVATIHYQKENDFISAQLKRMYIPNAYIGLTDFSIEGQW
QWEDESVVSYINFGEGEPKNWHGMEDCVVVKSIGEWNDIPCNLKRSFVCKKNNGTVVKTVNTT
AAPDSGYCPSGWKLYGNKCYYFRYGE

>TRINITY_DN9819_c0_g1_i7.p2   type:complete   len:483   gc:universal
TRINITY_DN9819_c0_g1_i7:1449-1(-)
MVHDLVLRQLGNGRKDAKGVARQQNDLLGMVLHLGWDPCVRDVLQRVRHPRILGDVHVFVI
DLASALVPNDVLQHRAETDRVVDFGLLLPREPDGLGVATALDVENTLRVPDVLIVADQVPLRVR
AERRLAGAAETEEDRDVVVLADVRRRVQGEGAVSRREIPLGHQRHQVVHDGEDALLHLAGILR
AEDDHLPPLEGHRDGRRRGHALRLAVGREDARVEDHERLLLGRRLEIHELFLGRGHQHVLHEER
VVRPGRDHADRHAVLGVPTAVAVHDVEALPGVEVIDSALAVGQEGLVLELDVYLAPPHVVRGRF
LEHHTLVQRRTASLFAALHGQGAGVDDGTAVLVPQRLLVQDPRWRVVVDLLHVQGQLVHLVH
DVLHVDPLGADLHGQRGLDLLGRPALELGLLKLLHQGGLHLVLARRRGAMADAARGERAPGR
ADDPPRRCQSGQHRCGASGGWRAGARWGPKRPSRGWELWNDT*
>TRINITY_DN585_c0_g1_i10.p1   type:3prime_partial   len:236   gc:universal
TRINITY_DN585_c0_g1_i10:705-1(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKES
TLHLVLRLRGGMQIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRG
GMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA

HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*

>TRINITY_DN21998_c0_g1_i1.p1   type:5prime_partial   len:507   gc:universal
TRINITY_DN21998_c0_g1_i1:1561-41(-)
AFLKYLRDKMSKREFFYLFNIAVIGVAGIVFLAVVVLTYAGYIAPWSGRFYSLYDTGYAKIHIPIIASV
SEHQPTTWVSFFFDLHVLICVFPYGLWLCVKNINSERVFIVLYAVSAVYFAGVMVRLMLTLTPVVCI
LAAIGFSRTLDRYLNDQDEEQEKEPEQQEAEPKTNEGDNKKKKKESSKKENKLEAGMQDSTSMG
SHLKMLVVIVILMLLMLFTVHCTWVTSNAYSSPSIVLATSNYDGSRNILDDFREAYYWLSQNTPDD
ARIMSWWDYGYQIAGMANRTTLVDNNTWNNSHIALVGKAMSSNESAAYEIMRSLDVDYVLVIF
GGVIGYSGDDINKFLWMVRIAEGEHPKDIKESDYFTPQGEFRVDRGGSPTLLNCLMYKLCYYRFG
DLKLDYRAPSGYDRTRNTEIGNKNIKLTHLEEAYTTEHWLVRIYKVKPLETRTKSSMKQRNTSMK
KNKKKYYSKKTRSNKAGQIKDKLTIKKGTSAKSTKKTKKGKSKTKKY*

>TRINITY_DN167_c0_g1_i7.p1 type:internal len:492 gc:universal TRINITY_DN167_c0_g1_i7:2-
1474(+)
PEEISSMVLSKMKETAENYLGETVSKAVITVPAYFNDSQRQATKDAGVIAGLDVLRVINEPTAAAI
AYGLDTKSSSAEKNILIYDLGGGTFDVSILNLDGGVFEVKSTAGDTHLGGEDFDNRLVNHFINEFK
RKHKKDISGNKRALRRLRTACEKAKRTLSSSTQASIEVDSLFEGIDFYTSITRARFEELNSDLFAKTM
EPVQKALNDASISKSEIDEVVLVGGSTRIPKIKKLLQNFFNGKELCNSLNPDEAVAYGAAIQAAVLS
GDKNEAVQDLLLLDVASLSLGIETAGGVMTKLIPRNTTIPASKSETFTTYADNQPGVSIQVYEGERA
MTKDNNLLGKFDLTGIPPAPRGVPQIEVTFDIDANGILNVTAKDKSTGKDKTITINNDKGRLTKDE
VERMVQEAEKYKEEDDKQRERINGKNQLENYIFQMKNTINDSNVKEKLDESDKTNISNKCEELIK
WLDNNQLAEKDEYEHKQKELEDICRP

>TRINITY_DN120478_c0_g1_i1.p1   type:complete   len:544   gc:universal
TRINITY_DN120478_c0_g1_i1:2674-1043(-)
MMRAPVMVLNSNTKRESGKKVQISNIEAAKTVADIIRTCLGPKAMLKMLMDPMGGIVMTNDG
NAILREIQVQHPAAKSMLEISRTQDEEVGDGTTSVVILAGEVLSVASQFIEDKIHPTLIIAAYRKALD
DMLDVLKEQISIPVDVDNDEEMINILKSCLGTKFVNQWSKLACNMALKASRTVSTEASGRREIDI
KRYAKVEKVPGGSLEESCVLDGIMLNKDILHPRMKRYIENPRILLLDCNLEFKKGESQTNIELSGET
DFNRILQLEEEFIKKMCDAIIKHNPTLVFTEKGVSDLAQHYLVKAGIAVIRRIKKTDNNRIARAVGA
TIVNRPEEIREEDLGLKCGLFEVKKIGDEYFSFLTKCEDPKACTILLRGASKDILNEVERNLQDAMH
VARNVMVDPRLVPGGGAAEMALSCALEEKAKSITGVVQWPYKAIAKAVEVIPKTLIQNCGVNAI
RTLTALRAKHAEGGNSSWGINGETGEIANMKDLGIWDCYSVKAQTLKTAVETAMLLLRIDDIVSG
SKKSKGDEGATSGGMPTM*

>TRINITY_DN691_c0_g1_i1.p1   type:complete   len:1726   gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG

PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG
QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*
>TRINITY_DN65215_c0_g1_i1.p1   type:5prime_partial   len:383   gc:universal
TRINITY_DN65215_c0_g1_i1:1336-188(-)
HYRKKTTMAAYDDDENFGTSDSYGNVGSFPKEFGYAEEQEELNNYSEEQKPKILLMGRRRSGKSS
ILKVVFHKMSPNETLFLESTNKIVKDDISNSSFVQFRIWDFPGQIDFFGHDFDSEQIFSGCGSLVFVI
DAQDDYLDALTKLHQTVTRAYKVNPNIKFEVFIHKVDGLTDDHKIETQRDIHQRATGELEDAGL
ENVQLSFYLTSIYDHSVFEAFSKVVQKLIIQLPTLENLLDILIQHSGIEKAFLFDVVSKIYIATDSAPVD
MQSYELCCDMIDVVIDISCIYGLKENGDANAFDTHSASIIRLNNSTVLYLREVNRYLALVCILREDN
FAKHGLIDYNFHCFRQAIQEVFEIRQQARDALLPKNGTILSKGESVVV*
>TRINITY_DN991_c0_g1_i2.p1 type:complete len:3229 gc:universal TRINITY_DN991_c0_g1_i2:278-9964(+)
MKKKMKVGDLLYSKTVMFLMLLFVISVSSEDLLDRNQNNAYFAKYYECPVGWVLRCEKCYLLVE
TAKTWTDARYYCKKHGGELVTVKDDSTNFFLARYVQQTNKKIHNVYIGLHDREKEGDFKWSDG
SEAIEKEFRWLPGEPHKSLTNENCVEMFTRSNQYLWNDAPCSDELSFICQMPACVQGSNRCDNG
KCVSKQAICDGVDDCGDSSDEKNCTKCGGYLNGMTGTFQSPNYPDKYGNNRRCSWVIEVPTSH
KIQLAFKDFGIETGFDYVEIFDGKTLAAKSFGRFNGDENPELIMSTSNQIRVTLVSDMTTSFKGFLA
TFKAIPDKCEFDLVIPKNGYEYIKSPMYPDNYPDNKKCIWNIRSEDPFGTLTMMFVELDTEENNDF
IEVRDGKGVKDLLLGRFSGENDVKFMSPIFSTAKHMFVKFQSNYMTSKKGFRAIIRSGCYAEINAS
QGMITSPGFPYQHYPKLIQCTWKINEPDNKAISFMHRFDTELNLDVLYIKDKSGKIVGTYSGVLS
NNALQVQWILETSQSSLEVTFTSDVTYTMSGFNVTFSKGCPSISVLGGKVKGKSHYGGKISYECDE
GYHLRNGKTRTCLYSGKWSDPMPYCAKINCGHPGVVVDGGFQTYPKKDNFDVNTRLVYYCDA
GYRLIGNNERVCQNDSTWSGSQPECKLSFCDTLTTPKNGKIVGDDFTVGQSVTIKCNPGFNIVGV
TTLTCGKDGKWNADEPVCEAVTCPIIKPSDNMEVLNLPNNTDRFPYGAMFDIKCKNGFELNGEN
QIKCVAPGIWSPKLPKCYDVNECLQKSSACKGVGHQCINTIGSFKCECKNGYQKNGANTCQDID
ECKISNATVKCSQKCINQLGTYKCDCEEGYYLYSGDNSTVSRIELRTAVVNHTCYGVRCSVAPIPD
NGFVINYGRRHPVRLIYQCDRGFVIKGNEMVMCQKDGTWNREFPDCVHAGCQNVTVAKSATF
KVNGTKLSDGRYKLGTEVIYTCARGFKITSGNLRQECIQNTTHAFWSGELPVCERKSCPTLTAPVN
GKVSSMNNLFESEATFTCDDGFQLLGDAKLTCTESGKWSGATPVCAASSCPYPDVPKYGEFVGRL
ELGRRVIYSCYKTGYTLVGNKERTCLYKKGTGHYWTGDTPLCKDITPPVFTCTKQINVQLPRSENS
MLVKWDVPTATDSTGKRITVTVSPDIHPPAKLKAGQHNIVYTATDKAGNNATCTVVVNVQDKQI
PRIKCPPNVEIESDFPAKVTWDSGLFSDNVGISRVSFNPSNGSTFQSGKYHRVEMTVEDLQGNRDV
CVTEVYVKGCGCESNKSCNSIAPHNGGISTCHINMGITSCSLTCPKGLSFVQDNFKHDNVMCLPQ
GKWSEKDIPGCGERKSVTSCLNAVLEFEYNTIDTSKVDEDNLATYFNDLFKNFGNMKTTYCDAV
KFIPNEYELKSKNIELLFKMEPKGDILKDALKEVLEGCKTELENRFQSSKQDILNLVSHASVNLQA
KSIIKFDAASCCGDSKYYCCPKGHSVRAKGANVENIVCLPCSPGMFLNASSNHCTSCPKGYFTDT
SGNEACQKCPDNLNTLKHQSTKCTEKCPLGTYSSTGLQPTCRKCDYGEYQNEIGQTMCMVCPSS

TTTASRGSQKLEDCKAPCQLGHYSDTGLKPCVPCEKGTYQNETGRSVCKACPSGGIYAGIEGATK
EEECPSDNACDMKLCKNEAKCVPGVYSYQCLKPGYKGKNCEIDIDECETKPCKNNGTCVDLV
NDYNCTCIPGLTGKSCETNVNDCKNDTCINAGVCEDLINDYKCWCPLGWEGKRCEKFINKCLSS
PCQHKSKCTPLLNAYKCDCTPGYKGHDCETDINECQSSPCYNNATCVDLLNDFECKCQPGFKGE
LCAIDINECVGSPCFNNATCIDGINGYRCECQPGFAGQNCSINVNECDTKPCLRNSTCIDLINKFK
CECEPGFYGDRCEFEINECEDEPCKNNATCIDQVNAFECLCPLGYKGVRCETEINECDVNPCKFG
TCIDLIGDYRCNCTPGYEGRNCDILIDNCVAKPCENNATCTNQVHDYSCKCLPGYEGKNCSIDTN
ECLPDPCNGNALNCTDIVNGYICYCKPGFRGTNCSEEINNCIPQPCMHNSTCKTIIETNDYQCNC
TAGYEGKQCENETNECLGSPCQNNATCIDKLATYECVCPTGFTGFNCETNIDDCKNVTCQNNG
MCFDKINDYYCRCHATHKGRHCEKKIPDEVDIKLPGGTGSVIIHSNISTVQEFSLSIWVRYLGSNSR
GDFLILANSNGKVMTSHFLKLSHQRVMVEFNGNMDIFSLDKMLNDGLWHHVFVSMSGLSSKIV
VALDSKVIIEETKSYLNGQSFFKPSGYLIIGKNVNRTGFFSPSGFAGEISQLAIWNRVLSPNEMNNLA
SNCSVDLKDSIIPWVGLLDNAGSKVELLERWTCGTNVCPAGFMGRFCEILIDKVAPTVASCPKSKK
VVSLLTSTRVNWPEPRFDDNVAVTEITRSHAPDQVFGWGDYVISYIAKDAFNNSATCVFELYVTPY
DCPDLEEPNHSASATGRWLWGLFFDFQCKPNYELAVPKPPFYSCGKMGTWSHGPPTYMDNPKN
LLPSCTGTARPIVIGTNAFTYSTTSKCDETFKAEFMKQFKRKVLEIHQYFKICGEKCDFANIRVKCT
DEDITTSRVKRDASLNEVKVYFDSKFNESLSNSFNDTQTLQAAIKNDKVDLSFTVGGETITSDKNN
VDIAEPKLACNPGWKFVKDKCVLCPAGTYRDSSMIKCELCEAGSYSSLGSATCVKCPHPKITYGT
GAKSMNECYENCSSGYYFNNGSCSKCQIGFYKSFKGLEECTQCPKGTTTTVIGASRLEDCSVECPL
GHELVGTECQPCMNGYYRSNKNQPECLPCPYGTTTYLVGSASNICYKKCELGFESSNDGKVCMP
CNTGYYREEEIQRKCLKCSGDKITLVYGAKSKNQCKEQTGTKFDVELRFTSLEWNNTLIDEDSAYF
RTTAYNIANKIAKIYENDKELLYIKIINFSEGSVIANMTISFEKEKKDPLEVLRKTVATGKLDGLSVDP
DSFKTDRCEFFDCPKDRVCWYNSTGRGCKCKPGFYETSDGKCFAGCEPDYCLNGGACVESDSGR
NCRCSKEYSGERCEKEEKDFSLALIIGLVVVAILILLLLCYCLRRRKRSGNVSLYKYWKSEDKEHGLS
SIPNTPIVQPVKGDNGDIAYAAENKLVEKDDEEQSESSDRK*
>TRINITY_DN165536_c0_g1_i1.p1 type:complete len:249 gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)
MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*
>TRINITY_DN329_c0_g1_i2.p1 type:5prime_partial len:320 gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN2003_c0_g1_i1.p1 type:complete len:370 gc:universal TRINITY_DN2003_c0_g1_i1:89-
1198(+)
MGVINTLVVLTLALALEAADHMTPHEYEFWIKTATSCTQEIYEGDTSHSTYSDLKTKLEDGIKAAY
TNNTKYFSARVKSMQCTTKPHYVAAKIMLIMTGHFTFDEALADLKNEIMDNVLDGSALNLTDN
MLRASMDEGAKPKEKVTLKFSFTNELFCENMATLKVNLAKRVILSDGMKRIESNRIVIYEHECNE
EANKYKKAVMKFYIYDDNDFLTADAALTNLAYQVVDQLQYDGTAWKLGVIFHKHINDVDYESE
SEDEDFTEIEKTYIGFGAVVGLLLLIVIIVLFVSCICPNACGKQEDPYLIEDRPSRFTNVNTHRDAYSN
QVYSKEEYANGYEREVEMDTVLPHEEQTVFHGNQPNEGMKESV*
>TRINITY_DN6188_c0_g1_i1.p1 type:complete len:566 gc:universal
TRINITY_DN6188_c0_g1_i1:2302-605(-)
MVKAINVRVTTMDAELEFAIQPNTTGKQLFDQVVKTIGLREIWFFGLQYTDTKGYTAWLKLNKK
VNAQEVQKDVPLKFKFRAKFFPEDVAAELIQEVTQRLFFLQVKDGILTEEIYCPPETSVLLASYAVQ
VKYGDYTPEIHQKDFLIGDRLLPERVRGQHQMSKEQWEERIMSWWGEHKDMLREDAMMEYLKI
AQDLEMYGVNYFEIKNKRGTELYLGVDALGLNIYEHDDKLTPKIGFPWSEIRNISFNDKKFVIKPI

DRKAPDFLFYVPRLRINKRILSLCMGNHELYMRRRKPDTIEVQQMKAQAREEKQTKQLEKQELA
KEKQKRADAERQKIELEERLKKFELDAQEAQAALDKAKEEQEKLENEKCKAEEAAENVKKQKE
NAENERLKLEREAAAERIAKEEYEARTQKLEEESARIAAMVEEQNRKAKELEEQLEESQKREEEQ
KQELLRIISTPPAAMVQTDEQEDENMEHETNFESQDVEQMELNYTSHADKNERLRLQLKELGNE
LNLARDETKLTQEDILHEGNLKEGRDKYKTLRQIRSGNTKQRIDEFESM*
>TRINITY_DN69276_c0_g1_i1.p1   type:internal   len:887   gc:universal
TRINITY_DN69276_c0_g1_i1:2659-2(-)
FDRPKYQYSVFENANIGEAIDTVVVTQNTEINVNYSFYKPNSLFTINSMTGEISIAANLDYEEKTQH
FFHVEAKCISGSNIFTAYTSVKININDVNDEAPVFFGTNEAVVPENSLVGTPVLIVQASDADTGNN
GRVRYDIIDEVENLPLAINSDTGVIFVSGNLDYELKKSYSLPVSATDLGSPSRRAISMIKISVMDKND
NSPVFSKNYYELAIAEDQPSQLIACLAASDSDSDENGKLSYSIFLSDNSLAETFFINGTGCLSTLKKL
DRESKDSYSFTVVANDNGNPSLKGIAEVHVKVIDINDNIPIFSKSQYLLRISKNTLVGSTIISLDAVD
NDEGINGTVNYSITDGNIGSSFDIDSGGTVHLVRELSNTIAKYVLTIQAKDQGMVTSFLSTTKVEIE
VIGNSTSSGCYPLFTSSIYDVEISENIAINSNIITISANCPNNSNILYSLIESSINSGGKFAINGNGEIFVV
GTIDFEQTKFHSLIIKAYAESTPNMFSTSIVRIKLSDINDNRPIFSRTSMVIFLARNSKAKSIISTVYATD
KDSGSNQEISYQIQPNIQPSDLFEINALTGDVILSREILFKDIKNYRLQVLANDRGTPSLSSPQLTIIDI
KIYPDNMHTPQLQPSNHVKFPENSGINQLVYQAQASDLDIDLSIEALQNRPEAGNFGKFTYHLRN
TTGSQFFSISETNGRIENLISFDREKKESYDLIVEARDGGSPPRKSIQTVVVKISDVNEIPLFELSSYVF
YVSESSKIGLSIAQIMAKDNDAGQLGTLKYFIKGGNVGNKFSIKENNGILILSDFLNYMEQSVYNL
RIYAEDISNRPLGNNADVVINVLQVNASQIPVFDLSLYTYQVPEEQTSTLGTITARLGANRQTEIIYT
>TRINITY_DN65211_c0_g1_i2.p1   type:complete   len:342   gc:universal
TRINITY_DN65211_c0_g1_i2:1592-567(-)
MAVSQAPKRKEIYKYNAPWTVFGMNWSVRPDKKFRLALGSFIEEYSNKVQIVQLDEQRGEFAVK
AQFDHPYPTTKIIWIPDDKGHYPDLVATSGDYLRVWRVGEDEVRLEALLNNNKNSDYCAPLTSFD
WNEIDPTIVGTSSIDTTCTIWGLETGQPIGRVQGHVKTQLIAHDKEVYDIAFSRANGGRDQFASVG
GDGSVRLFDLRNLEHSTIIYEEPQHTGLLRLAWNKQDHNYLSTFAVESSKAIILDTRMPCTPVAELS
NHRASINGMAWAPHSSCHICTSGEDHQALIWDIQQMPRAIEDPILAYTAEGEINNIQWASTQPD
WIAICYNKNVEILRV*
>TRINITY_DN26392_c0_g1_i1.p1 type:internal len:469 gc:universal TRINITY_DN26392_c0_g1_i1:2-
1405(+)
PDILIGASNSDKAYLFRSRPIITISDRLELNVTSVPLKKNCDNGDGRNYFCAVLKVYLSFQGISVSNK
FDLELSLTLDDDQVEKRAFIKTVKKNDTSLNSQFKRVLNNITVNTPVTEDFMVYFLVKADLDIQKP
IPIVSKYKKIEKSGGCGANPCPIFNIYGSIGSSIQVPYLRECGDDKKCTIDLVTTGSIELPGKEKEFEILY
GVTDEVYLNITVENLGEAAYLAYMKINASSDLDVISVNVNGGPNILWKSSNIDAETMQVEFSIAN
PIDKGGKYHILAKFSVGKQPRPSTPIYEFGMEAFALGEDKNMDNNRKTLTIGTKVETCIEVIGYSSV
PQVIYHSTAKQPPDVNATVNDIGDEILYQFLVQNKGNKPVDTLTVDIDIGAEKEKTTLMYISDLTV
DSVRCEEEKLNPKKFLIPDDISRTLNEESTKSSLKRKRRDVANDDGTEDKKGYKYSPLNCRTASC
>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)
MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA
QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP

PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA
DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*

>TRINITY_DN3347_c0_g1_i1.p1   type:5prime_partial   len:924   gc:universal
TRINITY_DN3347_c0_g1_i1:2-2773(+)

YGDGSDDDMDSIDEDEDEDEDDDDDEYSDDDDMSWKVRRASAKCLSAILGSRMDLLSEFYINVA
PKLIARFKEREENVKSDIFQAYISLLRQTKPVAMNDALEDKPDSPLSMLKQQVPLVVKALHKQLM
EKNIKTRQGCFNLFTELVGVLPSGLTEHIDKIMPGIHFCITDRNSTSNMKIDTLSFLGCILQHIKAEV
FYPHIHQFLPAVVECIHDPFYKITSEALTVAQNTIKVMRPTGTENYFDFKPYINDLYQSILHRLRATD
IDQEVKEKSITCMGQLLRNMGDNLSKQLPECLPIFLDRLRNEITRLTTVKSLTTIASSPLHIDLSILLL
DGIPLMATFLRKNHRGLKLHTLTCLDLLMQNYGNVMSTKHFEAVLDELSNLISETDLHVSQLSLN
LLTTMISKQQLLLKKVSSTVLSHIVILTRSPLLQGHALNSMVSFLTTLVRYSSSGLGYTDLLQMLTEV
IYGSTTENIHKSAYHSIARCASALTIACPSEAEAVVTKFIKDIKNSGTNDSIRLFSLLTIGEIGAHLDLS
SKAELKNVIVNSFSADSEDIKTAASFSLGHITIGNMDAYLPFILKEIESNAKRQYLLLHSLKEIIVCQS
TDPSSVKSLEQYVPSIWSLLLTHCENKEEGTRNVVAECLGKLTMVEPQKLLPELKSYLSSDLYSAQ
MRSTVLTAFKFTITDQPQSIDILLKDHLQAFLQPITDNDLNVRRVALTTFNSAAHNKPGLIRDLLTK
ILPHLYNETKVKKELIREVEMGPFKHTVDDGLDIRKAAFECMYTLLDSCLDRLDIFEFLNHVENGL
KDHYDIKMLTYLMLVRLSKLSPNAVFQHLERIIDPLRTTIQAKVKANSVKQEYEKQDELKRSALRA
VCALQKIPDAESHPILSDFVSQIRSNSDTKVMFESVQRDPSSTSLDKMDTAS*

>TRINITY_DN59572_c0_g1_i1.p1 type:internal len:725 gc:universal TRINITY_DN59572_c0_g1_i1:3-
2174(+)

FSSVLEYNIEDFELVNQYMFVTKNSSSHPGTKDLLVSYYRGDFQNTSFPMKNNGTSYIIADAHENE
TMVAVNHNGTANLYISNPEGTKYSLSLGNILYYNKDEGQKSYFEHSFVDLHRIKGISGIYIATSLTTG
AVGTRHLQSYITFNKGGYWSLLKAPEDTKNCSIWRGCSLHISQEFGYHNPLLNFSPITSKESAPGFL
IGTGNVGDSLKTKPNVYLSRDAGLSWRKVLQGHYYYNMLDHGGIIVAVEKFGLTETFTYSYDEGK
TWHSEVFSKERVRVYGLLTEPGEKSLIVTIYASYNKAHAWEVFEIDMTKVLGRKCSIDRDYNLWAV
ADQRNDTERCVLGKKQIFERRKAKSRCYNGYNYDRPINVSACLCTREDYQCDYGFKEKMILWFR
WDCVHDSDFEDYSKKPPSWCKPGLTYNISSGYVKAPGDACYGGEESKYVSTRKMCPIPKVDDYL
LYATRKSFFGYDFESKKSIEFKLDGYSNIVALEVAYDDGVLFFADKDRDSIVKIDTNNGNISTLLGFD
ESSTHIESMSYDWLSGNLYYCDSGNSTIGIINLAGKHKKEIMKFADADKPRAMMVHPTKGYLFWT
DWGAKPRIGRATMNGKNIKTIIDTEIYWPNGLTIDYDADLLYFADANKDRIEACGMDGENRRVIL
STGVYHPYAITIYNDRLYWDDWNQHSIFSIDLQGSGRETVVSYLAYAMDIKAFSKKRQKKGTNGG
T

>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)

MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA

NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*
>TRINITY_DN15847_c0_g1_i2.p1 type:5prime_partial len:166 gc:universal
TRINITY_DN15847_c0_g1_i2:3-500(+)
NRQGATQYKMSEQTERAFQKQPTIFQNKKRVVGKESKGKEQRFSKSVGLGFKTPREAIEGTYIDK
KCPFTGNVSIRGRILSGIVQSMKMKRTIIIRRDYLHFIKKYQRYEKRHKNLAAHMSPCFRDVQLGD
LVTVGQCRPLSKTVRFNVLKVNKSTSAKKSFEKF*
>TRINITY_DN3016_c0_g1_i5.p1 type:complete len:406 gc:universal
TRINITY_DN3016_c0_g1_i5:2713-1496(-)
MAPPNLKKMIQVKIKPRQDSYSDQFSRILMVKMLMLTAAFTGITWMKDKVKCIVPKNHDADGG
FVSKSCWINGFYVFKGLKEKDTSYYYGIPKDVLSDGYDKYGALCSTKNQQGRLNQGCTPLEKTFF
LQYQWFPLVIAAIAFLYYLPYLMFRIVNTDLQEIKDIIKGRNANDVDAKAIVKRFFVRKNNSTSRL
KARVLLNVVVKVLYVVVNVLGMIFVDSSTNSEFMQYGANWSSWTALKNEDMHDYTNREHEKA
GHRLLPSFGLCQVYTTAQDIKTKVANDHTYICELSQHVIYQYILIVMWYMFVFGIIISIIGLIQHMVL
KTMAILSMNAEGDSVRKIYSDLTVREKEYLDFIRRKNLPVFTKVLDEISQLKGVSRSYATSESDRSSF
GATAPEKENMMME*
>TRINITY_DN11522_c0_g1_i3.p1 type:5prime_partial len:855 gc:universal
TRINITY_DN11522_c0_g1_i3:2878-314(-)
FSAQLFKGSSKSILGGIPNIQLNRGRIGLGNIRDPSISLTRGSKIDYNGYMGFSATSGYFGNDKHIHF
AGGSPRSNALKGRVIMYKDSAGYEISQYLDDPSDQIGTYFGSAMASADINGDGLADLVVGAPYYT
GTVSNEGIAYVYLNKNGIVELVQTLRQPEGKDVKENGMFGISIGSVGDLNNDGFADIAIGAPWGG
EDGKGIVFVYYGQRDPAQLKLMQTIKPSDLSGIDVDGFGYSFAEFYPYSGGPDQYGFIENDPDYNI
YPDLAVGAFKSNHAIVFKSRPVYTIVGRLSLGGVKRLDLVNKENLCPNGMKCLDKVQACLMFKE
EESEGEVDYTLEVDSGRDSPKRAYLLDSDGKQVTKINKQTTVSKDEECDDYTIYVKNTTDVLSDLV
IKLSWKFVVPTTCDGVCPVANELCQFVDTKSIIFVKGCSDDGNDTCSSDLKIEKKEFPPKLVGNNR
LVGTEEIISAGATDGIILTFNIKNLGENAFDNSLKLEYPGKGDMKLVNIDDAKVISDYYGTPIWDSD
VTREKDVTTLSVMLSSPIVKGKPEQVQVKMSLNPIPKGTKFLKFKVYLETDSEETDTSNDFQEITIP
VELVSNLLVSGQSIPEILTWRKDVKDVQDKGAEITYNFLFQNQGPSNVDTSEAIILIPEKFKGSYFLN
IYNYDVKGSKSGSDPGSCRIEGELNPLKLDYYGRRIGNNTRKRRDTRGVPALECGADTTCREIICN
FNIENRNSATVTVKATLVDANFDSVIGAGREIHVTAEFSSDAVTPPSGLEFPVKSMVTTTVNSPYLT
KTEGGESIPWWIILLCILAAIIIIGVIIFIMYKKGFFKRKKMADEDEALRNGDPEMDDD*
>TRINITY_DN840_c0_g1_i1.p1 type:complete len:409 gc:universal TRINITY_DN840_c0_g1_i1:1437-
211(-)
MAMVATDIKSMLSINIKSRHDSHTDQYNRIFMVKLLLVSSLIMGLSWFQDSINCMIPDTHGINGGF
VSATCWIQGVYVFKELQTRVDKVAYFGIPKDMNNDGMLPDGQLCTTRKRFDEEPNPLCKEMHK
TYFLQYQWMPFLIAALSILFYAPYVFFRTANTDLISLKNTLKTEEPDAEKIVKSYFNHRVNPQRTMY
LRLIFNLLVKILYLVANLVAFLGLDSLLNGEYVGYGNKWVSWSKMDNAVAYDYLGMRDFPKPGN
LLLPPFGYCEVYESAKDVKQSMANKHKFVCELSQNILYQYCLIVMWFALIFGIVISVLGIILLIIHYA
LNIMGIKSRGGAAKKLYKALTFRELEYLEFIRKRNILLFGEVLEQLRNEILGPNAPDDRAPLYPNLP
KDEYDAKRPGYQL*
>TRINITY_DN1936_c0_g1_i3.p1 type:internal len:1070 gc:universal
TRINITY_DN1936_c0_g1_i3:3208-2(-)
GEYKPTLGRCLSFWYHMYGSHVGELNVLVLQNKSRSAPIWNLKGNQGNVWRPSRVTIKSAVNH
NIIFEGRTGDGYMGDIAIDDVMMSEGPCTDYGNCDFERDLCGYTNKKNIDQFDWQLGSGGTSSV
TTGPSNDHSTQTALGQYMFVESSYPRLPHETAIIGSETIPVSGSGKCLQFWYHMYGEHIGSLEVNM
RVANDLSETIVWKLEGNQGNKWLQGQAPLLSRGQNMEVRFEGIRGTGYKGDIAIDDITVVDYSG

ACAITPKSAKPWGCNFELDFCKWQQSRADKFDWLRNQGATGSAGTGPKADHTTNTTQGYYAY
VETSFPRQPNDTAAIISPTIKGNGTKQTYCMWFAYHMYGPHVDTLKVYTRSQGSDKPVLWRRRGS
QGLNWNHAEVQVTVLYDTKVIIEAVRGKDYKGDIAIDDIDIWFGDCFSSGICTFEGADLCFWYVP
KNGQLYWQRASGATPSVKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYSPWYYNTGQKC
VQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNNVYFQIIVRGTKG
NGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGSTNSFLTGPSIDHT
TQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNLTIYLRKVSNTKT
LSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVVIEGVRGSSYDGDIGIDDIEFTSGSCSFLPKGA
WPSGRSTPAPTQASTTLGPTIGNKGFDCNFDKEFCKTWMRNSTRTNFQWKRHQGSTSSVGTGPH
HDHTTNTDQGYYVYIESSSPAQPNDTAYLIGKDIPNNNGFCLSYWYHMYGPHVGSFRVYVVNKT
NAEARFVRVGTQGDKWKHGQLYISPKAGNPITIRFEGVRGSSFMGDIALDDISVRYGNQCPAPRE
CTFEHDNNGGSSSTCGWTQEKQKDSFDWSIGSGDTPSVLTGPNFDHTLETKQGHYFYIETSYPRK
FGENATIISQSYQQTLGKCFSFWYHMYGSTIGNLTLFLRRD
>TRINITY_DN6542_c0_g1_i3.p1   type:5prime_partial   len:545   gc:universal
TRINITY_DN6542_c0_g1_i3:2-1636(+)
SSTTEAPATTAPTQSTTTTVATTATSAATTAAPEITSTASSTTEAPVTETPETTVITSKPSTTAAPTGYS
RVCYYTNWSQYRNGAGKFFPSDIDPFLCTHIAHSFAKIEGLNLAPYEWNDIDVLYPQMISLKLAN
PKLKILLAVGGWNHERQGVARFSDMVQTKSNRATFISNTIGFLKLHQFDGLDLDWEYPASHPGSR
PGDKQKFTELCKELLEAFVEDAKTTGTERLLLTSAVAAGTSTIATAYEISELTKYLDALHLMSYDLS
GGWNPTTGHHTAVNADSGNSVTNGLNAWISGGFERNKIVLGMGTYGRSFELSNPASNGIGAPAS
GYGSPGKYTKEKGFISYYEICEMKNAGMTVIRDPIAKAPYGVKGNQWIGYDDEESLRYKVQHFVV
KEQLAGAMFWALPLDDFKGQFCGKGNYPLMNAVKEELAKHENMATTTQSPAITAATTAAPEITS
TESSTTEAPATTAPTQSTTTTVATTATSAATTAAPEITSTASSTTEAPGNSNPNTISFHNCSNICYARS
HNSNARDNFNKKFNN*
>TRINITY_DN80458_c0_g1_i1.p1   type:5prime_partial   len:157   gc:universal
TRINITY_DN80458_c0_g1_i1:519-49(-)
SKSAKMGRMHANGKGISGSALPYRRSVPTWLKLTEEDVKDQIYKLAKKGLTPSQIGVILRDSHGV
AQVRYVTGNKILRILKAKGLAPSLPEDLHCLIKKAVAVRKHLERNRKDRDSKFRLILIEARIHRLAR
YYKVKRVLPPNWKYESSTASALVA*
>TRINITY_DN6428_c0_g1_i2.p1   type:3prime_partial   len:303   gc:universal
TRINITY_DN6428_c0_g1_i2:906-1(-)
MLSSLKLERNKNLRYYRYRYSCCNIRVPSTSQKILNPFTLVVGGNAIYLDRQNVQCPGSAVITQLLL
RRYKSTIRYTYSCSTIPRKMECQNMKTPLNFDGKGDARYLDRHPVSCPNDYGLNKMRLQRGSNL
KTYAYHYRCCKPLYSVQFQENKVDGGFTNWSKYGTCTKSCGGGIQERSRSCENPKPLNGGKQCI
GVSVETRSCNTDPCPVDGGFSNWSNYGTCTKSCGGGIQERSRTCTNPKPMNGGKQCVGVSVETR
SCNTNTCLGPKQCKLKFTAYNKDGKGQVFYLDRHNVACKPDEM
>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-
2701(+)
MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*

>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN149493_c0_g1_i1.p1   type:internal   len:148   gc:universal
TRINITY_DN149493_c0_g1_i1:2-442(+)
EVKKAGVNVTGKIAICKYGRGSRNAKTRFSEARDVIGLVLYSDPREHTYPGLEYPKGWMLNKDG
VQRGTVNRLPGDALSIGFPSKDGYFRYGEDKYAGNPTIPVQPISYDTAEKILRWMKDDSVPLPEGF
GGDLNVTYRLQSGAGRE
>TRINITY_DN2217_c0_g1_i2.p1   type:complete   len:254   gc:universal
TRINITY_DN2217_c0_g1_i2:884-123(-)
MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*
>TRINITY_DN1071_c0_g1_i2.p1   type:internal   len:339   gc:universal
TRINITY_DN1071_c0_g1_i2:1016-3(-)
DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTPATTTESTTTTLPTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTTQATTTTTKATTTTP
ATTTTKATTTTEATTTPTTKPCECKVLQPVGVSDGRIPDNQMTANSVLVNVSGPTFTGASQARLN
NKPSKDGVGAWEPAQQEEIYLEVHFNKIEDVREIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDED
LYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVSVGDPKVAMRVEFYVCPPCGVTTPAITTTEQTTMP
T
>TRINITY_DN77_c0_g2_i3.p1 type:internal len:1381 gc:universal TRINITY_DN77_c0_g2_i3:4141-2(-)
EPPTSTEPPTSTEPPTSTEGTTTSSGPPPLLFIDSEGSTTPSYPPPLIFTEPEGSSTSTELLSTTVSAPVLTT
SPPSQDLGDLGDVTTEPPTELASTTEQSPILMGDPGLKGEKGVKGFDAVNGTQGVKGDRGPKGD
RGENGTKGEKGDVGPPGPGGDFILGEIGAQKPSDPLSGAVGEIEGLAVPGPKGITYDVRSGPIGSIG
SVGKVGPIGLSGDDGKKGQIGQKGPSGPRGGFGNIGEKGKRGTDGVPGNPGEKGPKGTAGRKGE
LGGDGRPGVQGAFGHKGNDGTIGLDGETGDPGLKGAKGYAGEKGDQGDIGGAGLPGPKGEDG
PIGPPGQRGLRGPIGANGPLGDPGLAGDKGQQGTRGNPGYTGKPGESGPNGEKGLSGSIGPVGE
QGPIGSPGEQGRNGNDGTQGARGPRGLAGPDGPTGPQGPRGESGPQGSAGGPGNAGLKGVRG
KPGLRGLTGPKGESGDIGDPGARGPQGQVGKQGKTGPPGASGEPGLTGNQGPQGPGGDPGPNG
NKGLMGSQGPVGEKGSLGPKGSPGRAGLTGPKGLLGEQGSPGQPGLTGRDGKNGLQGVNGKD
GEPGASGPQGMQGAPGLIGTTGPPGDNGDFGDDGPAGADGDKGSRGDSGVRGPAGAPGDEGQ
TGMRGERGDKGPQGNPGSQGSPGPRGTPGLDGLEGAEGRKGTAGRNGNPGLTGAQGVVGNTG
LPGSQGSRGVPGEQGDSGSDGAPGEMGLPGLPGLKGSIGRQGLTGRRGQQGVPGPKGKYGLQG
EKGQKGEGGNAGSRGSEGLPGRAGRPGSRGEPGPVGSAGIDGNPGNSGEIGSPGRAGTKGMQG
PVGLRGPVGTSGLRGPKGPAGDKGDSGETGAIGIAGELGTPGVTGQSGPRGQIGEIGLRGENGPQ
GMPGSQGLSGPAGPTGPTGPIGLPGKDGNKGPVGEAGDPGKPGQAGNTGATGKDGLPGEPGAG
GNQGKEGPEGVKGTPGPIGAAGPRGLPGRQGFPGENGMAGFPGRDGSTGLAGNRGPRGEEGEQ
GTLGEKGVDGSPGSTGTNGGNGVPGDNGPKGYIGERGEVGPEGPEGELGEKGVKGEEGSEALKG
VRGPNGKSGASGKRGDRGDTGGNGPKGEDGSKGSVGLKGFKGNIGFTGFIGPIGAKGYKGDMG
PDGPEGHTGPQGNTGDPGVDGDPGAVGSKGPAGNPGQIGSEGNQGKPGDPGKPGEAGLSGPPG
SIGQPGDMTGAFAGMYWNYIHSAGMRSQRYYKGKNKEEVDEDSNSIDKLFKTTYETFQNFDFV
WNQVVDDLVVLKTLGTMKNPAVTCADLFKTNPYFQSGDYWIDPNEGSPDDAILVHCNATNYET
CIYPRWPSFEKDNWYEGEEDYLWAYKDRLLSDEEYISYSADI
>TRINITY_DN4815_c0_g1_i2.p1 type:complete len:638 gc:universal TRINITY_DN4815_c0_g1_i2:79-
1992(+)
MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI

DGIAIVEKCENVKCNVTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEETCQAFTCNLNAECSNTENGPDCKCESGYKAINGTS
GKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGTRGRDTICEDINECAIKNICGGL
KVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSCSKTCGAGDQKQTRSCSNPSRE
APHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKTGEEPKKDFSSFNGLSITDGETS
RRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKKYSSTKMEMQDIIDCNANIDIE
KNLWDVYDVLAEHSICNYQVQKDLEMKADRIQAEITRCNNRGWYSTILDAII*
>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)
MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*
>TRINITY_DN187147_c0_g1_i1.p1   type:complete   len:1223   gc:universal
TRINITY_DN187147_c0_g1_i1:3708-40(-)
MLTKFETKSARVKGLTFHSKRPWVLASLHNGVIQLWDYRMCTLLERFDEHDGPVRGIDFHENQP
LFVSGGDDYKIKVWNYKQKKCIFTLLGHLDYIRTSFFHKEHPWIISCSDDQTIRIWNWQSRNCISV
LTGHNHYVMCAQFHAVEDYIVSASLDQTVRVWDISGLRKKYCAPGAKPKEDITAPKTPGQMDLF
GHSDAIVKHVLEGHDRGVNWVTFHPTMPLIVSAADDRQVKLWRMNDSKAWEVDTCRGHYNN
VSSVIFHPRLELILSNSEDKSIRVWDMSKRTGVQTFRREHDRFWILGAHPTLNLFAAGHDSGMIVF
KLQKERPAYAVHQNTLYYIKERYLRMYELGTSKDIPIMQLRKSSGRSTPLKLIFNPAERCILITYNND
TSAGESQVYELHTLPKDIRSTDPEQSEGRRAAGTAAVWVARNRFAVLDKQQNVVIKNLKNEVTK
KVQTPACDMLFYAGTGSLLLRDAEQVMLFDVQQKRVMATVKIAKAKNVIWSSDMSYAAILAKH
SIAICNRKMENLCTVHESVKVKSGGWDDSGVFVYTTSNHIKYTLTNGDAGIIRTLDLPIYITRVKGS
NVYCLDRECKTKVLNIDPTEFKFKLALVNHRYDEVLYMVRNAKLVGQSIISYLQKKGYPEVALHF
VKDEKTRFGLALECGNLEIALEAAKTLDDKACWEKLSEMALLQGNHQIVEMCYQRTKNFDRLS
FLYLTTGNSDKLRKMLKISEIRKDVSGHLHNALYCGDVEERIKVLKQVGQGSLAYLTAATHGLVEE
CEEIKATFDLNPEKLPPINPNAKLLRPAVPILKNEGNWPLLSVSKTLFEGAAAMKDAGTSNMAAA
VDMDDEGEGWGDSDLVLEEDAGFVDPEEKLDIDEEGGGWDVDDDDLELPPDLDVGPVSSGGED
YYVPPTRGNSQAQVWCTNSQIPVDHLVAGSFDSAARLLNEQLGVVSFEPYKQLFMLAYARGRVA
APGLPSTPPLFYYPHRNWKEAGAKAGLPAVAIKLNDLVQRLQTAYQLTTGGKFADAVERLHQILL
SVTLLSVESRQDVTEAQQLLGICREYILGLQMELNRKELPKQNAQQQKRICEMAAYFTHCNLQPV
HLVLTLRTALNLAFKIKNYKLASSFARRLLELGPKPEVSQQTRKILLACEKNPTNAVQFDYDELNP
FSICAVSYTPIYRGKPEEKCPLCQASYKPEYKGTICKICRVAEVGRPGSGLKISMGR*
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-
372(+)
MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*
>TRINITY_DN79_c0_g1_i1.p1   type:5prime_partial   len:478   gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)
VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN

EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*

>TRINITY_DN12627_c0_g1_i1.p1   type:5prime_partial   len:1061   gc:universal
TRINITY_DN12627_c0_g1_i1:3456-274(-)
YGENNRLKFNDARQYCQQWKDDQGDLVAIHSNYENSFIMSQLYDVNEPMYIGLTDSFSERTFLW
VDQSSVVYTNWYARQPSFVGNEDCVEMMPYFKTHGRWNDIGCSAERGFICQRTPSKTPLPTPEP
VKDSKPCPAGYRKFMKACYRVVHTPMTYDDAVKDCRTSVGGELGDLVSLHNQFEQSFVFSQFAK
FDFHSWIGLKKIKGEKEFKWSDETPYDYRYWLSLRYDNTVYNDDKCTTQEFSSKVDGKWKVTDC
TQKHPYMCKIERDFDQPHLTFIGNCTDGWTKFYDKCYKLQNYFSNWPAAREKCKGFGGNLVTIT
NSDIQKQMEYLARDAYRSVWIGLNDRAKEYVFEWSSGIPLLPDSYQNWGPNEPNDNSGTENCV
HMTTESSGGKWNDLSCSQRMPYICEHPLECNSALGMEDGSIPDTNINATSYVGTYFPKYARLNAK
SDNNRNTAWCTNITTGAESLTINLGEVMQITRISTQGLLDSSLGFSRGGYVVSYMLEYSNDGTTW
MTYISEDAYDQKPIALPGNIDASKIDGTTINLKAAYLRFIPKLYKNIICMRVELYGCKSVCSRALGM
TNFAISDKQLSVSSSQAGSEKAQLRPNIDGSWCAKDDDYSPFVRIDLPRLTKITRVTAISSSKVQYKI
AYSDDGELFTRFQTLTNEERVFSTVPSTHDLETAISAKHVKFDLLKKDQGKLCLKVELYGCLKDCD
AVLGMETKIIPDRLITASSAKPSNPARNARLSVGVYGDNSWCSSETDNAQYLQLDFVQEAHLTEIA
TQGFNGDSAKYVSKYNVQFSDDGDFWHQYSEELPGNSNGYSIQRNKLKEPIIARYIRINPTEWKN
GICMRVEFYGCPMKPFTAPKILTQKTYNGAIRILNEDFNENLLNANSIEYIELANKVETDITSLYLLE
ESFKDGFNSVTVNKFREGSVITEFTIKTHTSDASLDAAEPLRKAVQTGRVGTFDVDPNFFEIVTAST
DKSTATNDDSGGLSNGGKIALIVFFVILICIVLAGGVVYYLRSRRNGFRLQFQHRAFENPTHVDDL
QNDDMKVEFMNDDY*

>TRINITY_DN1936_c0_g1_i1.p1   type:3prime_partial   len:1224   gc:universal
TRINITY_DN1936_c0_g1_i1:3669-1(-)
MVCPAVITIFLFSVLGSSSSQNCDFEDVKSCKWTQYAADKFDWSRASGSTGSTGTGPVNDHTTLV
KTLKVNTTGGNANGASCVFPFIYQSKKYFKCLQYYNTEWCATVPNYDKQAKWGYCVPTGFYMF
IEASNPRKKGDNAILVSPFVPKGPKCLKFWYHMYGPHINRLNIYVMIGGHTGKPIWSRIGTQGNK
WNKGQVTLVGRQPFQVVVEALSGISYKGDIAVDDISVSSTKCTQPSSTTCSFEDSQCGYIDDTSSDV
QFQWTRSSLSTSSSGTGPKTDHTMQSETGFYMYTEATRKKTGSKARLMSPVNKATSGSCLQFWYH
MFGADMGTLSIYLKVNNKLQSTPLWSEQGDKGNEWKVATATITTQDSYQIVFEGKIGRGYRSDM
AVDDIKLTDGNCPPPGFCDFETGYCTYFNSKNDKFDWLIGSSRTPSRFTGPNFDHTYGNANGSYL
FLEVSQPIKAGDIAILESQQFNAVGGKTRCLNFWYHMFGSDIGSLQVVYKVFSGSQQERVLWNLT
GQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSGYKGDIAIDDVQFTSLACTIDPPEANPNG
KTTMKPPTTYPRTAPSTPVPTEFSCNFEKDLCKLTQDSKGTFNWTRIQGYTGSPGTGPSTDHTYGR
GFVPKYGPGSLRHAGGKCVHVLNGGFNKPKEGNPLVLYQGCGQTRLEFVFKYGYLKLTRLNMC
ATLEGSSTSSGTKVVLSNTCMNKWKMLDNNTIQDVKTGLCLSPFKGSDYPSNNSPLVVDKDCKP
KSRIFTFSPTMGHYAYIETSPPRQPNDTARLISPILKTPRCLNFWYHMYGAHVNMLNVYVKTSNGP
YVSPAWAKYGSHGDTWKAAYIYMNMTGPYVYAFEGVRGIGWQGDIAIDDITLSESCPAPVECSFE
ETSPIMCGWTNLKNDDFDWSIGQGKTASTKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYS
PWYYNTGQKCVQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNN
VYFQIIVRGTKGNGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGST
NSFLTGPSIDHTTQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNL
TIYLRKVSNTKTLSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVRFIYLRLFHCKICLPCY

>TRINITY_DN144508_c0_g1_i1.p1   type:internal   len:265   gc:universal
TRINITY_DN144508_c0_g1_i1:1-792(+)
PRRPNDTARLVSSDVPATSQMCFEFWYHMYGDHIGNLTVFKRIGKAMTMLWAKSGTQEPRWRH
ATVDITSASVFKVVVEGTASSGYMGDIALDDLFLTPGACPPSAECTFEDPQLCGWTNIAGDDFDW
TRGNAGTASWGTGPRTDHTYGTKQGFYMYIEASTPRSKGHKAWLKSEEYKPTLGRCLSFWYHMF
GLHIGELNVLISQNNSMSAPIWQMKGNQGRPWRPSRVTVKSSLNHNIVFEGRTGDGYRGDIAID
DVMISEGP

>TRINITY_DN2626_c0_g1_i2.p1 type:internal len:219 gc:universal TRINITY_DN2626_c0_g1_i2:2-
655(+)

SSDRGSSPFLIPGRQPAARTRSRAMPPAQRRVLVIGGSFAGLCVARDLKDHYLVTIVDAKEFFEYTP
GVLRAYVKPKHLDALTFTLYPVIEGRMGCKFIWGEVTELNGADRTCTIQPMFTQEQEVIDFDYCVI
AAGCNFGVFHKWGESLWFPTIHAAARPEGSWPHLDERYLEGRRRHILEEYASIGALNDKGASILV
VGAGFIGVEWITELQHFFPK

>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)

MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN3986_c0_g1_i1.p1   type:complete   len:446   gc:universal
TRINITY_DN3986_c0_g1_i1:252-1589(+)

MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEEDA*

>TRINITY_DN195348_c0_g1_i1.p1   type:internal   len:311   gc:universal
TRINITY_DN195348_c0_g1_i1:1-930(+)

SGCNSIDLGLLVDFSSSKDYDSKQLTKFVREFIDKITNVFAFSATKSHLAYLPFSSRINENITGQWFD
NKYMKTIGDWDYQELTQYLDRVIVPYTPVTGYETGKANAHEAFQATNDKMFNALYGMRYNMT
KVLIVISDGNEDFKEKQNLVDRAIDQLKAKGVIIYTVSIGNNVNWDRVFRYASRESSIINGANFDD
VFNRFFDFAKMLCEDSKVPIPATRTTASTTTVSINTTKLTTTTTTELVPVTISTTTTMSTTLRPIQACY
EDIDLGFVVDFSKMNANDMKERQTANDIVKVIKKIASSFNIAANK

>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)

MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYQDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY

222

ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*
>TRINITY_DN1704_c0_g1_i1.p1   type:5prime_partial   len:190   gc:universal
TRINITY_DN1704_c0_g1_i1:1-570(+)

SLPSSQIPIMAPTKEEKKVDKVNPMKEIRIQKLCINICVGESGDRLVRAGKVLEALTGQTPVFSKAR
YTVRSFGIRRNEKIAVHCTVRGAKAEEILEKGLKVKEYELRRGNFADTGNFGFGIAEHIDLGIKYDP
SIGIYGMDFYVVLARPGYNIAYRRRKKSRVGFQHRLTKVDAMKWFQQKYDGILLK*
>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)

MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*
>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-
2618(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*
>TRINITY_DN1739_c0_g1_i1.p1 type:complete len:400 gc:universal TRINITY_DN1739_c0_g1_i1:86-
1285(+)

MAITDNIKDILSVKIKPRHDTYSDQYSRIFMVKIMMMSALLVGLNWYSDKIKCIIPDSISADGGFVG
AACWINGFYVYEKIRYHVNEVGYFGMPREIDHDGMFPDGQTCNSKDTLSSDPSMECQPMEKTFF
LQYQYMTFVMAAFALLYYAPYAIFRWINVDLVSLKGSIQDNSAEKIIGNYFNHRVNSPNKMRMRV
MGNIVVKILYIVVNIAAFLLLDSILNGGFTTYGTLWTQWAKLDNDLAYDYMGIRHSPKPANALLP
TFGFCEVYMSAKDIKTTVNNKFKFICEISQHILYQYVFIVVWFAMVFGIVLSIVGLLMQLIEHALTIT
CFLKQGDQARRMYSILTLRECEYLEYIRRKNIPLYNDVIKKLKEQFQDGFHKPRDHYNNDGLPKY
QDTQA*
>TRINITY_DN141338_c2_g1_i1.p1   type:complete   len:720   gc:universal
TRINITY_DN141338_c2_g1_i1:2850-691(-)

MSEADETETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYQSLTDSGVLESNKDMKIE
IIANKDEKTLTLFDTGIGMTKADLVNNLGTIAKSGTKAFMEALTAGADISMIGQFGVGFYSAYLVA
DKVEVVTKNNDDEQYIWCSSAGGSFTVKRDTINEPIGRGTKLVLYMKEDQLDFLDEKKLKDIIKK
HSQFIGYPIYLETQKTRDKEVSDDEADEEESTDKKEDEENEDKEDDGPKIEDVGDEEKEKEKKKKT
IKENYTEMEQINKTKPLWTRNPDDISTEEYAEFYKSLTNDWEEHLAVKHFSVEGQLEFRAILFVPK
RAPFDLFENKKQKNSIKLYVRRVFIMDNCEELMPEWLNFVKGVVDSEDLPLNISRETLQQSKILKV

IRKNLVKKCLELFAEISEDKDNYKKFYEQFSKNVKLGIHEDTQNRNKVAELLRYSSSASGDELTSFK
DYVSRMKENQKDIYYITGESKEIVAASAFVERVKKKGFEVLYLVDPIDEYAVQQLKEYDGKKLVCV
TKEGLELPEDEDEKKRQEELKAQFEDLCKVIKDILEKKVEKVVVSNRLVDSPCCIVTSTYGWSAN
MERIMKAQALRDTSTMGYMAAKKHLEINPEHQIMIALKKKIEADKNDKSIKDLIILLYETSLLSSG
FSLEDPQNHSSRIHRMIKLGLGVDDDGDVEEIETDDLPPLEGEGDDDEDKARMEEVD*
>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)
MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*
>TRINITY_DN1043_c0_g1_i2.p1   type:complete   len:700   gc:universal
TRINITY_DN1043_c0_g1_i2:2410-311(-)
MKESYLKRFALLFSVLILFQEGGALLRENLIVNHRLRRNVYSEEKVTAVDLPQSREKRFVGTALIIIS
AASAGLDIYKQVRGCKDITPDLDDKIAEGKALQQSLLNLRDQVNLAWVPAESREEYTRRLASNM
IIIREQVSTFDSLQADLVKLLDQKLLDKLNNVTKHLENQIDRNNETEIGSFEDLEGKYMDTTTFALT
LTAKLLPVGFLLGTKFLLPKITARFSKGVAKAFAADNPSRVQKMLSSFAEKQGKLANWKAEKINSF
KVSLNSKWNTFKLKFPRITAAMNRMSNSKIGKALGKAMGKVKGIAVGVGKGAVVAFFIAFEVW
NFVQFHGACTEKRNKAIEGIATMNANKKNMTDLLTEIHDMKAKADEYYNLMKSNVTNDEFLN
FLEDIADLGENAKEQTKVIVDATNQIKQYKAEIKNADDSRTDALNTMLVTAFSNINFKLDCLRSK
LAIIKGVVDDCGIGLGVYDDIYARALAKQKKITETCIEGSYMDKNEIKGLMVAAMDLDKKQSICV
RNNPTKKQLVCEKWYDDVSDADILAANPDLTKDDVTYFISTCPPAPVNDQTKTTICVKKNNELA
TLQSIQQTYQKYDQTAINSAYEECQLSSISVTTICTAKKEGQTVVYAQQKFPVFPASMVTNVYNSC
KKETNITPADKMMICLLKKNGFALDSPVMANYVKNYDYATLEAFYNQCS*
>TRINITY_DN108993_c0_g1_i1.p1   type:3prime_partial   len:180   gc:universal
TRINITY_DN108993_c0_g1_i1:538-2(-)
MGNTATAKKGDSENAVKAFLTQAQEEFKKKWDNPSHNTASLDEFERIKTLGTGSFGRVMLVRHR
ENGKYYAMKILDKQKVVKLKQVEHTLNEKRILQAIDFPFLVRLDWHFKDNSNLYMVLEFVPGGE
MFSHLRRIGRFSEPHSRFYAAQIVLAFEYLHSLDLIYRDLKPENLLIDEKG
>TRINITY_DN1613_c1_g1_i2.p1   type:internal   len:1068   gc:universal
TRINITY_DN1613_c1_g1_i2:3201-1(-)
TKSCGGGIQESTRSCSNPSPAHGGKPCSGELSKTRACNEHECPVDGGYTPWSAYGKCSKVCGTGV
QFSTRTCTDPKPKFGGEPCTGLTKKSRNCNTHPCPVNGNWGAFGSFTTCTRTCGGGIQKRYRKC
DSPAAAHGGKKCPGLSFQFKACNTVHCPVDGGYTQWSSFGSCTATCGGGSQTSTRTCTNPSPKY
GGEGCVGPSEKTRTCGTKPCPVNGGYTEWGEYSKCSEECGGGIKTKSRSCTNPAPAHGGKGCQG
PSSESDVCNEQPCPVDGNWSAFGPLSVCSRTCGGGTSLSKRTCTSPSPKYGGKSCSGSRYRIVACN
TRICPIHGGFTAWSNYGVCSEKCGGGVQTATRSCTNPRPLFGGKACVGSSRKSRICNSQPCPVNG
GFSDWSAYGKCSKSCGSGIQVSSRTCTNPAPAHGGKSCAGPLQQSRVCNTLPCPVNGNWGSFGR
FEECSVSCGGGVQKRFRPCNNPSPAHGGKACRGLSFEIQACNTKHCPIDGKYGSWSSYSKCSVTC
GGGTQVKTRKCNSPAPAYGGKNCVGVASHIQACSTHHCPVNGGLTSWSSFDECSEECGGGIQER
SRSCTNPAPAHGGKSCVGALVDSRKCNTHKCPVDGGFTKWSSYGSCSKSCGGGSQTSTRSCTLPK
PAYGGDACVGPTIKTRGCNSQACPVNGNWGGFGVYGTCSKSCGGGTQKRYRRCNNPAAAHGG
KQCSGLSYQIKACNTHHCPVNGNWGSWGSFATCSKPCGKGVQKRVRKCNNPSAAYNGKACPG
LDYQLQACNTHHCPVNGNWGAFGPYEACSKSCGGGTQKRHRRCNSPSPAYRGKTCSGSSYQQR
SCNTQHCPVHGKWGTWGSYGACSARCGGGIQKRYRSCNKPSAAYGGKACPGASYNIKSCNTQ
HCPVNGNWGSWGSYTTCTKSCGGGTQKKSRSCNNPAAKYGGKACSGSNYYLKTCNTHHCPVN

GNWGSWGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHHCPVNGNWGS
WGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHH

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN5001_c0_g1_i1.p1   type:complete   len:1575   gc:universal
TRINITY_DN5001_c0_g1_i1:40-4764(+)

MHAGLTSVFLTKRFISHFVLQKQIRSTFPVIQTFYRGFTSNMIEVNADGKNPASVVLLAVEHLKKH
EIQVTVKDNNKTFIKVSNTIVEGENDVSRFLARKYPEVGLYGKSGIESSQIDSWLDFSCLYIKGSQDL
LPSLKELNRAIGQADYLVGPKLTVADLSVWSALHGNSKWKNLLDSGKAGEPVSKWFKTCMQQG
TFKVPTESSPNKIKSKDKGSNPKNSKSNMEEGGKFIDLPGAKIGEVVVRFPPEASGYLHIGHAKAA
LLNQYYKDHYKGKLIMRFDDTNPAKENSHYEKIILEDIKLLEMTPDIYSRTSDYFEEMFVYAEQLIK
QGDAYIDDTPADLMKTLREQRLPSPKRESSIECNLKMFDEMKKGTPEGLKCCLRAKIDYKSDNGC
LRDPVFYRCRDEEHVQHGNKYKAYPTYDFACPIVDSVEGVTHAMRTTEYLDRDVQYAWVIEKLG
IRKVDIYSYSRLNLINTVLSKRKLTYLVDEGFVEGWDDPRFPTVRGVLRRGMTIEGLREFIAAQGSS
KSNVHMEWDKIWAFNKKVIDPIAPRYNALLKEEVVPVTVHGVEESTAQYPQHPQNPGSEKKTVY
YSNKVFVEGADANLMKEGDLVTFINWGNLRIAKVNKSDDKVTSLEANLELDNKDFKKTLKVTW
LAEHSEAPFIPTKCGFFENIIEKADMTREDDFKQHIRKDTKKVSDMMGDQCLANLKKGDIIQLQR
RGYFICDEPYQPPSRHSCKESPCILFHIPDGSTAGMMNQGKSKNTAGGKTSSSTKSSDNKNKGSSK
KQNKEKSPPADTGTIVEHTAVQQELFDSIVVQGDKIRNLKAQKATKDEITAEVATLKELKSKYKTS
TGKEFVNPTAATAAAPSKQPSKQPSKQQAASLSTSATVNHTPEQQALFDKIVEQGNKIRTLKAEK
ASKDQITSEVNVLKDLKSQYKSSTGSEFSNPSANNQSPTKKSKEKMAPVPVATPEAVTVESPEVEA
VKQKIVAQGDKIRELKSKKIEKAELQPEIDNLLKFKAEYKELTGSEYKPPGGGGNQKKGKEKKQN
EPKKAPEKKVTQQEAADGSAKKITRLGLEAKKEESLSDWYQQVITKAELIEYYDVSGCYILRPMAY
GIWERIKAFFDTRIKSIGVENCYFPMFVSQAALEKEKEHIADFAPEVAWVTKSGQSELAEPIAIRPTS
ETVMYPAYAKWIQSHRDLPLRLNQWCNIVRWEFKHPQPFLRTREFLWQEGHTAFATREEACEEV
HIILDWYEKVYTDLLAIPVVKGRKTEKEKFAGGDFTTTVEAFIAASGRAIQGATSHHLGQNFSKMF
DIVIEDPNNPDSKDKIHVHQNSWGLTTRTIGVMVMVHGDNKGLVIPPNVSNVQVVIVPVGVTAN
TSDDQRKLIKDTSLSYRDLLLDSGVRVKVDDRENYSPGWKFNHWELKGVPIRIELGPRDIEKNEYV
AVRRDTGEKISMKRESASTDLSNLLKTIQEDMYKSACKQLNDNLTVVKSWEEFLSMLDQNKLIQA
PFCGAIPCEEKIKKDSARDDGTADAGAPSMGAKSLCIPFNQPGKVDGLKCVCPCCSKDAVSYTLF
GRSY*

>TRINITY_DN785_c0_g1_i1.p1 type:complete len:289 gc:universal TRINITY_DN785_c0_g1_i1:1062-
196(-)

MIIESKMLSSIMLKMIFVVVFLCGITLSEGIEKCDLQLEPIGCFKDDVWKRTMPEQILNERDPLNKV
YNNRMINWKKFDTYLPGFICRCAEAAFKKGYRVIGMQFWGECWSGPEAHLHFDSLGAADTCSN
QKFEREYDNITQCVSAIGMDSTNYVYRIAPTVCDTHYEPVGCFKDEQKVPRPMPHYISTDRDYSL
KIFSGKTIDWRNWNTYSPEMICRCATLAKSKGHALFSIQFWGECWSGPETNGYMRDGVTTDCRG
KDFEMCPCNGYHCVGKAYTNYVYRLGHHH*

>TRINITY_DN11097_c0_g1_i1.p1   type:complete   len:730   gc:universal
TRINITY_DN11097_c0_g1_i1:2348-159(-)

MVRPQGVTQEHSSKPSTSERNSFVFSALSKSGCFETLPSIYDSIIIQRSHWLHTEGFSMRTSSTGSQQ
TSRRAFYEELQAFSSTIPFYESLSWALLSLSGCLNPVSTPNIREEILADLEGRSVDESREVLLVFATLFD
VYKSYQNSIVVEISAILPGGILRCISLGQTEGFNSYNTVGLINYQPIVYPVGRNVLGRLFNVTGSCID
LYNEVTMDMPFVRSVSTEETHTPQKTTLIKTGANADTSSDSDCVKANALFKECTSHINVKETSLD
HLISLYCGCYMGMTSAPIAPISRLPIEAESSRAPEHMVQKLQECMGTYSGSADPSTPNQIGSKKQPF
WLSKEALESGVSPIHSTPLPISKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFI
RNLAIEHKGISIFCGVGERTREGNDLYSEMAEAGIICKDYTTMKPSDPSSNGGPTGSIDQHSVTFTR
SSVTLVYGQMNESPGCRMRVAHAGLTVAEFFRDVFKQDVLVFVDNVFRFLQAGSELSTLLGRMPS
AVGYQPTLATEMGAFQERIIAALWGSITSIQAIYVPADDLTDPAPVTIFTHLDAVSSLSRELAAKGIY
PAVDPFNSTSRMLDPQCLTSEHFRVALEVQQILQRYRELQDVIAILGIEELSEEDLKTVERARKIERF
LSQPFSVAEVFTKIKGIFVPLEATIRSFAMVLSGALDDVPEGNFYMKGGLDTLKL*

>TRINITY_DN61_c0_g1_i1.p1 type:complete len:625 gc:universal TRINITY_DN61_c0_g1_i1:2929-1055(-)

MRAVILLCIAMCTMVYADVYFHNIRGSNNRLKGQNRNRDNAYRMFDSQNNDRGGYNVGPTPM
YFYTGSILTLEWTNQHQCGGPNANCDLILQYMCSENLRDGLEERTIPERNKDCKDDDCNTDIRY
GMHEDYDYYMNCKNRQRNPGLFLADQELEGTSAKYTRQNPDGDRYGYECPEERDHYPYWLPT
PWIDIAIMTRDLRRCNYYRENSQNNNAKYYCKPPQKYLDELKKRDPPSNLPRIPISQDDCERFHY
PANDKTDRGVWTRHDSWNVDPPECIAAPPSRDNHNGNGEDGYFNSYNFTIPNAPHKNCAIRM
RYNISTSDYDVNLDADGNGDPARAINIHDLVGIDTKKEATERGYVFKDYPKVYPMKGEIGKKLGL
ALAINTAQYFRTFEDRSHRTSFKARTPELEGVEIRNLNVKGKRGNIVQVYPAVEYGFVPDRMLAE
VGDMIHIQWTGSDRNPRNNDGEGPAGEDRSNIAELDQPRVAQVVADYNEYGDLTRSYPAHLDN
ATFLGLSRDELISLALAKGDCEFDRQGARSRTPYFDMGPVALTKKGIYNYLCTINNNFTNRSQKGT
AIITEKSKAGGGSKATASASKSASFRSVNGKDQEKRKYHAYNYFEQYKKK*

>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)

MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*

>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)

QMKMAASNMAGHVVRNNLIFLLSFVIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*

>TRINITY_DN17117_c0_g1_i1.p1   type:5prime_partial   len:345   gc:universal
TRINITY_DN17117_c0_g1_i1:1183-149(-)

KCYKHYKVFTKMNLKVILYLFALYLVSLYAQIDLSECNGIPGACELSLNQVTLPGAHNAGAGFDG
VLYYHGLYAAAASCWYRNQGENIYDLLNDGVRYFDIDLCYEERSGYEKGAWACHQDAYGGPMS
KFLGQVDKWINEDDNRNDVVVLHFNRDHEAGDEVQKKIGKSIIKLLEDLWKPSSGNIRAGNVV
MQSHLYAKLKNSVQENKRIYVFLHHRLQTTRRSYLFHENKVGYTWKSMGFVGSNKCKQLADDIS
DECPKQTGRPFVRLDLYLTWGLCVHDLAGYCNDKIEYTANRCYEKIENASKRIGETVNFIVIDYAD
SAAGKKQVEVAKKLQCLILKNLG*

>TRINITY_DN17358_c0_g1_i1.p1   type:3prime_partial   len:125   gc:universal
TRINITY_DN17358_c0_g1_i1:42-413(+)

MSSFLVVPLKKTASVDFIKPLSNYIKNTFSGDVLNEVKDSLAELNQLRANAVVRSLDKHETSLEVL
QRYHDQLSTMEAKLPITEDQIRLSLTWYDAFDKGSIFGSTKCALSSGAYERFGVLFNI

>TRINITY_DN7299_c0_g1_i1.p2 type:5prime_partial len:345 gc:universal
TRINITY_DN7299_c0_g1_i1:1201-167(-)
WRLGGGGAAYAVKGAWQGEPTALRGAVKGDFGTVVAGLEPAVAFPPVRYSREGVSLSVEDGHL
NAEYAAKLDEDTMFNLRVDDEKAWVASLAGHDASLRVRGEGADLDRLSWDASQESSVEDVGD
VRVEFNSDKAYNLTVTRESLATVAGAELDAKVRATNAGVTGRFGLRRQLPRGAALTYTVENPVG
VYDLGKSTHIGRLSAPVAGGEAALRVEGDASAQDYEGSYRRGLAGGQADLRLSHKDGALGYNV
SYARGLGEALPVDAAAQVGVDEEGAYTRLTAGRSLGHGLAARYEALARLGFGEEAQQHFRQAV
RLSNKLGHAELSHGGGEGARLRVGYEFNA*
>TRINITY_DN5500_c0_g1_i2.p1 type:3prime_partial len:1183 gc:universal
TRINITY_DN5500_c0_g1_i2:3546-1(-)
MEIKNFLILLSLLSLTSQLKAGLVFNETGVDQPVDLFFVIDGSGSVGYELFDGQLQFVTELTDQLGG
VSPFNVHVAIAVITTSPYQAIGLTQYQVNSEFKQAVSEIFYPRGATRIDKALLAVERELLPTSRAGVP
KVLVILTDGIQARWPGVYNTHVIIERLFNAGVSPVVVGIGSDYRDLDRLNKLAIKENHHLNEPIEK
LFLTTDDMEVGSPALVQKAASTVKKILSNVARFGYEVRSDFAFLLDGSTYAEDQLKLMEGLASYFQ
INRELSRFAVASSQGGGRTYIEFNEAQLSRDFKAMLMKLNVDSESIDIGIAAKYAYEEIFRIEEGERYS
TPRTLVIFSGNAEAKDSTLFGKYYSLLKKANVNLVMIAVGGGKGRSNLRNFPVDYYLPDFNDEVS
FTEECNIIAREMHNYIIRFASDTQRSKKCLHDGDLFFSIDVSGSAGAYYQENLNIIEKIIASFEISNED
SRVGFAIDRDGNTQVTPLDKHNSLESLMRDFDSLPYYPRGRSDMVAKLKAAYNQFLTSSRIHFQDI
LFIFTDGYLNRKSESESKELIDKLKAFGVEVFVVSLGYDVNFPFLMTLSSDKGHFFHVNQLPKDSDS
FVNSIINKVCDYTETFQDKYEIPINVALVLDGSHCSEKFHEAQKTFSNVIIDGLDNSPLAKNYLFSYS
SGVQQLDSNSSLAINFGSDGNRLDLALNEVVKLFQSISSNEVNMAIFVTNAGLESEFNATMSQAR
KLRSLGVITMVICIGDNFNYDVIRTLASSRQLIYMIPSPSQLTDTKFLRHIISAAFEMAESMPPPRLEA
GKSWYPAFFGNWVDSNSLEGEVPDAPLKAYHFGPTVLWSKPIQQKNYIIESTIIPAGSESGRFGTCG
HIFKHKVGATKKEKYISKSWGYFLWSNSFLYITTDGTETSPRIEFDYSSRDKLNLKTIVDGSKVKIYI
DGVFIRSIELEGTEADSQSHMFVGVWCHRLSAVTVEDFKVSALSNPCTVNNGGCSQICSADPYEF
KCSCIPGYRLVEDESTCVAESTCPELITTTVITTTLSSSPPTTNQSKFISTTTKPDELIDTTATIISTRESDI
TTTLILSTKSTEKPIEKIEKTTTSAIGDILEQTTVAPIKTSTVFVPTTKEEVILTTKEMAETTLTVPTTASP
VEETTTVAPVSTAAKTEATTQAVITTLAATTK
>TRINITY_DN61707_c0_g1_i1.p1 type:3prime_partial len:417 gc:universal
TRINITY_DN61707_c0_g1_i1:1250-3(-)
MNVIAAIIRIAILALVFQHEAEGKVYYIRTDADSGRCTYQGYIPGGKEINISPIKAPTAQLETNVLA
NIAGFGGKAGTGVMHLSKFTETIGKIAPKLGPALGVFGVAFGVVADFVKPSPADILAATNEAIGKL
TEEVNDRFTDMKSYVDLELMNVVKERINVEYKHMFTMFSNCIKDVSLERVLECQEDANQYITSGS
GKFMLFNMDDYSDSSPPTANEIKKMELTFLPFREYVSLNLMQLQVLTDTYKDLQNSVKDGPLIYR
KHLSELSEEAAKLIVYARNMFKWIDKTYDEFSRQRCKETKTYWSRCTTEGSWSGNTACYATAQCQ
FDITIPDNKKCKTKCTVRVDGKKIYDRYDFKNKNYGYEEAGQLFAGGKLDKKASSYLNQQAADV
KNYWQAEVLSSIPVWEEMKKRADD
>TRINITY_DN1668_c0_g1_i1.p1 type:complete len:220 gc:universal
TRINITY_DN1668_c0_g1_i1:748-89(-)
MTGMMWKVIAIAAFVGMAYTDDLNPLTYLPDGVETSHEAGESLSNMTITNETIVQEKTKGFGFL
DMTSNAQYSKGLRGSYLPRYLSRTLKPFAAISANMSKVVDGLQEYIKDLIGKDHEDHFFALVGKE
QYGQTRAIFLKFNQREDGRYNLKKLSFRGTFKLAADLVITRYTNQETGEINDVVSYVPKEKVSKD
DVKDLLNLMVPQLAEVMKGFAPKEL*
>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-
550(+)
LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-
289(-)
MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSMRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP

GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*
>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)
MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN775_c0_g1_i1.p1 type:complete len:635 gc:universal TRINITY_DN775_c0_g1_i1:1927-
23(-)
MKQMIFLLAVSLAILNFDGHVVDAITCKSNSVWSWECQNSRCVKVLASSNSDAIELNTCKLTCGK
YSMLFPKPSGEIQLGKKTVPFIPTQARLRSVKVKKSNPKATWLVQNAYSLFLNTLEHSYKRYSGSTS
RLYNNMCAQEAQKRVLVMDVILEDGDTKITLDTDESYDLTILADDKEITVSINAQNFFGARHAME
TVSQLAAFSESYNAMQIVSSAQVKDDKPSYAYRGLLLDTSRNYFSVDSILRLIRAMSYNKMNTLH
WHITDTHSFPIEIKSLPEMLRYGAYSSKRIYTHDDVRKIVSYASINGIRVLPEFDEPAHCGEGWQWG
PKAGLGNLAVCVNRQPWQKYCVEPPCGQLNPTNDNVYDVLGKIYKEYFQLFDPDIFHAGGDEI
NFNCWNTTTEITNWLKQNYGGVSEKNFMDMWGMFLDKSSSKIYEANNNKELPMILWTSKMTS
EEYLTQYMDPKKHIVQIWTASKDKELSNVIESGFRTILSTYDTLYLDCGYGNWLVEGNNWCSPYK
DWKLLYDNDPVKILESFNVTVTDKIRSTILGQEAAMWSEQVDEFSSEGKIWPRTAALAERLWTNP
NHNWRDAEYRLIYHRERMVERGVQADALQPLWCLQNAGNCYYDPAIKGEH*
>TRINITY_DN71243_c0_g1_i1.p1   type:internal   len:422   gc:universal
TRINITY_DN71243_c0_g1_i1:1265-3(-)
PFVGIRIDSNTGSVFLAQHLDYETAQQHNVSIFAVEKDPPTRYVSSYFLINVLNVNEHSPQFQNNE
TLVITVNEDIQPGVIGSSPATDKDAGVFGNIDYKIIRFDDQLFDVTASGEIRLIGKLDYEKKRVHQFL
VEALDGGQPRRKSLRPVSVIVGDMNDNVPLFSQDVYNVSISDLTAIGSSLIKLSASDADDGLNGEII
YDISNGNFGTTFIIDKSTGVISLSRKQLLSELRKFTLKVSTRDKSPISPRNGETATVHVNFIEASANEP
FFSTTFQKLNVLENQAAGIKIGQSKVINSKMEAVYLIVSGSKTRITDYFGINYRTGEITAKQSFDRES
RDHYTFVVSARFIDDNSLTGYQTVDVSIIDENDNRPMFLGNISQTVSISSSFDGSRPVALLNAFDKD
LVSLDKIEMQLLNSQE
>TRINITY_DN33065_c0_g1_i1.p1   type:3prime_partial   len:663   gc:universal
TRINITY_DN33065_c0_g1_i1:1986-1(-)
MWWFVWLAVAITINVDGKKASKHKSLLEDVDLDEDFDLDYSHNIFIPLDAYENYEKFLEYAQGT
DLAKRSGVSPLPVIQSLPADGVHTYSAPGINCQVELLNKEVEGTDKRVIERKTCPEGWTLKDAMK
YFFADVGQDLQSDSAGLVHIEQLKFKMLVFEPSGGFSFVADTDGEDYSNLQSKLSLSNVDFKLTM
GASYSYESSEISITGNHEVIERSTNEAKQIEVTFEKGKDTSNFVVKMNIPSMKLETFATVFLASETEF
VTSEIGDVTFNINIDPIKAVTIESTSNSVNGVFDTVEGKFQLTAKFTSDDTNAFDGEATDIYLTVNR
NSLGAPTHYNLMLGYAKTINVMDVVRKYIGKPEIQEQFDDKFLKNTIEKWYLMFTSSRIKLAADD
DYQNMFSDIFTDDDYKEFKKGVGIKAPVNLQETLTACGGGTVPDTLSDIKINGLLTKSGLSLKFPS
NTAVPLFALMKCKLRKIQSDLGLDIPDYLKKIEEATNFKLEEFSYDHESGEFKMSLLYSNTITIYKDV
LEITNPQLTIEREGTDEPWQFTIAADIMLFGVEASVSVQYSKTGFTVEVSSDVIPLSKLLTAFSFGIEP

PFTFEIHDFKMQLVVSDKEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRGPGGGRPRR
G
>TRINITY_DN598_c1_g1_i1.p1 type:5prime_partial len:745 gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN128406_c0_g1_i1.p1 type:5prime_partial len:150 gc:universal
TRINITY_DN128406_c0_g1_i1:474-25(-)
FGSTRKMSQTQSVQVFGRKKTATAVAHCKRGNGLLKINGCPLHLVEPSTLRYKVQEPILLLGKERF
EGVDIRVRVKGGGVVSRIYAIRQAIAKSLVAYYQKYVDEVSKKEIRDILVQYDRSLLVADPRRSEPKK
FGGPGARARYQKSYR*
>TRINITY_DN564_c0_g1_i1.p1 type:complete len:563 gc:universal TRINITY_DN564_c0_g1_i1:2018-
330(-)
MKLLLFCAATLLVAGCVLADGVATQKKCEDFLPVDTCNQLRVIAQKFNEKAGAVNKAITDAFNK
HKTKAGEVLSYVKEYLVANAKNFSCASVLSTQQCQQLKDFAKLMHAKAGEASIAVREAIVNGA
KNSKVQFQKAMEFLKNDVSCEKILGLEQCEKLLESAKTLKENIKTVHQALVAALQKHLSKTKDIL
KSVRETLVEKAKNFNCTDVLTLEQCNRIKNIGQRLKLKSSEVQKAVKEAIANGAEKAKQIFSNAM
DFLLIDARNMTCEDLIKAETCQKIKDFAKKVHARASDVALAVREAIVQGAQSTQDTLKKAIEFLK
AEISCKDVFSIDTCDKIRKLADSFHVSLKTVNEAMREAIANGVTKVSDLYKAAVKYITEKWGGIFG
DEPQIEKRSVDEKLTNIGELLKQKITKMAMDLLDMLKVTNEKIREKVKELIENGKIKITNIKEKVN
DLLALVNSNDEDTMNDVNMIYKRSTEDSLVDLLKSIKGKSQEFIEKLLKLSKDKLEQIKEWIKQLK
QTDDSIPSDEMEDDLDLVHDVLKDGVNMAFADIVEDTIKNIE*
>TRINITY_DN14015_c0_g1_i3.p1 type:5prime_partial len:2566 gc:universal
TRINITY_DN14015_c0_g1_i3:2-7699(+)
PNEGVTIVFSNGDYELKKDYYAMIEAKSNGTLYKGKTVVHVTLTDKNDNPPRHQNLQVDIAISES
TKPGTIVTILYADDADDKQNGEIFFMLESASSDFSISSFNNTGVIRLSKELDNEQETSYKLMILLKDF
GSPSSKFSNMATVNIDVIDENDNTPLSEKTFDTIQVSRLKANGVIYQVKFTDADSGLNGQIEYDIEP
FKSFDDYFTINKTTGEVSLIKSLETTTEDNFWLFIIATDKGNPRRKGSFTLQVNVNEPSSLNPIFNPD
TYDIEIYENRLPNSLVARINVLNVDPNKDSLTFKIVSGNDGDRFLITNKGDLVLKQNVDFEQQNLY
NLVLSVRKNQNSVESVNQATVKIKVLDVNDNNPLFEKTDYTFIVTENTPINTFIGGVSAVDQDFGE
NSKVSYTIFDTTKTFIIDSSTGRITVVGQLNSFVENEYNFVVYAFDNGNPRRASSANVKVIVEDINE
APQFSPPSYNLNVSELLHPGDHIITPKVIDNDIGINSQVRLTLDASGNIDDTFLLENGKLKLNKQLD
FETRSTYDLTLVATDSGRLPLSTNAKVKINVMNVNEHRPIFNINPYMTEINEDQFSTPIFQVKASDK
DALSKVRYVIEDGLDYSLFSINQITGEITNSRLNANFKKEYSIQIKAFDLDNPQFYSHTVLVVKVIDI
NDNAPIFNKAQYSFTISDQTPVGTIIGKVFANDADTGFFGQVTYFLDNNFNGPFSLSGNDILINGD
LDFTKVSSYEFVIKARDSPGSSQGFRTTSTNISVNIVETNGTMPIFSREYYEVTIFSNISTQYTVVKVSA
TDNDGNEFGEIKYSLISDSSNLFQVDELIGIVSLKDGVQLQTRSFKYTNTLQVRATDGAGLFSTAYL
VIHVIPVSGNNPPVFLQIQYLSRVSYLTSKGESIVSVIATDPEGAAVSYEIKSGNELKKFGITNSGIIYL
EDQVENPEVNVYRLGIEAIDENGLRSDPDAQVIIQILYFNSTFQCKLIPTFSSNLYISQVEENKAPTII
TSVQANGSSQNDSIAYSIAYTKDVTQNDFEINSTNGVITSQRTFNYEMKNSYQFEVIAKDTNSLKE
GRTIIMVNIIDVNESPVFESSNIVRSLSQSSPVGTFVGLAETSDADKNDLITFSFVPANIGNIFQVDA
NGIIRTKSSLNAADSPYNFTLIASDKVGLTANKNIKVTVIKTNVPEFSQNAYLFSISESLNSVRIGQLS

TKQILEPVGYRIPNNNYNNLFIISDGGIISSSKGIDYESDDRKYNLCVEVFLQSNPSLFDTCDVTININ
DINDNRPVNKKDGQYTVEVSENVMVGKMIITLDVEDIDSGEKGFLNYLITSGNNGNEFRINNKG
EIYTLKPLDYEVKRSYSLTINVQDNGVPVKTIEAPLTVVINLVNENDNNPIFNPSSYTISISEQQALTT
ILKVTASDKDALIKSTYSILENEDTFSIDANGNINLVKAVDFEISSKYQFTVVANDGSRSGYAIVTVDI
TNINEKPSFGQNYAIEVSESTPVDTVILTVSATDVDIGVEGDLEYSIESGNDENTFSIQSNGQIKLLEE
LDYETKTEYTLSIKATDKGQPQLSATTIVNIKVRNINDNKPVFSKQKYELTVKENSQLSLTVSVTDA
DNLGNMKFSIPSSKAAGMFKIEINTLNTNEAVVSNIKPLDRETGAGHQFLIKVEDDVGNQGLSEF
VIVVEDENDNNPIFTSEEYNVTLFSKLNVNDAVVTVTATDADATYGVVSYAIISGNNDNMFRVNT
KGEILINKQNYDSRANYVLTIEASDNFETPKKSLTNTNVKIQIQSSGLTFEFAQDQYKYTKSEINIGD
TFGPITGTSSTSLDQIVYEIKDSSGTFEVTSNRNIKVLKKVTTDQNFCVAATTKNGGTLLDLTQIHIL
LAKTNENRPIFQFTNPKVVKISQNTLVNSVVAVTTASDSDTGSTITYSITEGGEFFNITNEGAITLKN
TLQTSTVNQFNVTIIANDGTFNSAPANVVINVKKENNFNPKLSFSSLNLSITEGNKVSQVLTDTDT
DADGDQLNFKIVGKTANNYFIINNTVLESKSPLDYEQVRSYEFCIEIKDSIDTNSRSVILPVSISVTNI
NDSNPVFTSKSNEVEVPYTWPPDITIIEASAEDSEGDRIEFSIVNSSFSSLFSIGKTSGVIKLNQRLKEA
KVYNLTVTATGVQSGKSSNDNFILTFTAVEAMSQTMPITFSDVTDNTMKVTLNAKEEFGEADYEK
MNTIYVYAQEYLPNLDEFVTRTLMEPVSYYDANTFESFRGRRFMIAKVDMERPTQRRKRRDTSLD
EKNGILTILIGNNQCANKYDPTIPCNGPLKAGQSYRYQLEGDLLNKRKLSSFTEPKTTTSAAQSVA
QFSASNYTFNIYYIIGLVMLGLLLAVSIWVIAVLLLYKRRGTKLMQLRESMLPPAINNAQTIANGKF
GSNARRYTNPVYGDYDDDRNFTSDFNLPRGQNNQELAQLKQQIIPIPNQNNGRANYNNRSEMV
NRVPRHFDNPGYREEERKPTYTATVMSSPTVPNPPPPPPPPPMENTRLPSSGTARSTNQPRLRRTSS
GRVIVQHLSGHQ*
>TRINITY_DN4781_c0_g1_i3.p3   type:complete   len:183   gc:universal
TRINITY_DN4781_c0_g1_i3:2965-2417(-)
MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*
>TRINITY_DN3052_c0_g1_i1.p1 type:complete len:362 gc:universal TRINITY_DN3052_c0_g1_i1:45-
1130(+)
MAHLSQEQRNELKKNAESIVAPGKGILAADESTGTVGKRFAGINVENNEENRRLYRQLLFTADKS
ISNYLGGIILFHETLYHKDDNGKPLVELIKELGINPGIKVDKGIVPLHGTNNEGTTQGLDGLAERC
KQYKQDGCTFAKFRCVIKINTPLGVPTDIAIQENAQVLARYANICQANGLVPIVEPEILIDGDHNL
ATSQRVTERVLACVYKTLVDHHVYLEGTLLKPNMVTPGQSCPEKASAEEVGVATVKALRRTVPA
AVPGITFLSGGQSEVEATKHLDAMNKTDLARPWALSFSYGRALQASVLKAWGGKKENVAEAQK
VLLHRAHLNSLASLGKYEGENASGATGDSLFVANHQY*
>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-
481(+)
CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL
>TRINITY_DN247_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN247_c0_g1_i1:38-
1156(+)
MKLVLVIFVILVYTWNVSAGGKKCISNKDFMTPYPTNFWTEHYPKFVNNRPTIGIVAMEVLGQKM
LVNVPWSWNKDYFGSSFVKLVESAGGRAVPIKEDITEDDLDKLMRKLNGVVLPGGDADVGDSGY
ERISKQAIAFSKKMAKKNVTFPVLGICRGAQMMMMAEAGKDFLEVTDSLNLSIPLDFTSEQKESR
LFGNAPQGLIKSLSEDAITFNAHAMGIPTLNFYNNSGLQKAFRAISTNYDRNGTKFISTFEGRDAPI
YGLQWHPEKSLFVFNPVLAVDHSIKGVMASQYIANFFISEARKNNHTFRDRVEEEEHLLMSYYPS
YVGNITETPYEQIYLFDFVKPFQNPKYTPGKVNKDDDNSGDDDDE*
>TRINITY_DN5153_c0_g1_i1.p1 type:complete len:862 gc:universal TRINITY_DN5153_c0_g1_i1:61-
2646(+)
MSEKKEFHRLSRSVRPIHYNITLKPDLENFTFAGNEDIDLEIKKETKHIKVNSLDIKVSSAVLTVDSQ
DIEPSDIRYKEDEETVTFKFSNPIPVGNAKLSLKFTGELNDKMKGFYRSKYTSASGEEKHMAVQFE
PTDARRAFPCWDEPAVKATFDITMIAPKDRVVLSNMDVKSEKDHAEDDSFKEVAFNTTPIMSTYL

VAFVIGEFDFIEETLENGVLARVYTPLGKTEQGTFALKITSKTLPFYEEYFGIKYPLPKIDLIAIPDFAA
GAMENWGLVTYRETALLVDEKESSASSKQWVAIVVGHELAHQWFGNLTTMEWWTHLWLNEGF
ASWIEYLCVDYCCPEYDIWTQFVTNDFTRALELDALSNSHPIEVKVGHPSEVDEIFDAISYSKGSCV
IRMLHDFVGVGDFKRGLNSYLTTYKYANGETEDLWYHLEKASGKPVANVMATWTKQMGYPVLS
VSAEYVDTQCILKISQKKFTADGSADPNDQRWAIPINIMTNDNPKFSTLMTDPEMVLFMENEPES
NYIKLNPGQIGFYRTCYSSDLITKLVPVINSLSPVDRLGLESDLFALSIAGVSKTVDFLNILKGYKDE
MNYTVWTDIDSNISSLGVILQNTDNFELFKEYVIKLYKPISEALGWEPKDDDDHLTALLRNLILRRL
GNYGDADTLAEGQRKFKAHVDGTELVNADIRSAVYSMVSKHGDEETVDQFINLYRNTTHSEEKT
RILTYIGASYKSEVIEKSLKFSISDDVRSQDTVFALCSSTGSLNGRRLTWNFVKENWDDLFKRYQGG
FLLSRLISRTISNFATVEEANDVKTFFEEHKAPAAERCIKQGIESIQLNNAWLTRDGESINQWLFQE
N*

Band 7

>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT

231

NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST

LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN

RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*

>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)

KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLVSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT

DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS

236

GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV
>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ
>TRINITY_DN240_c0_g1_i1.p1   type:5prime_partial   len:397   gc:universal
TRINITY_DN240_c0_g1_i1:1518-328(-)
LKAAAAFSGVSPFALVQPRARVPSRSRVAMVRRSPLPVLGLAGAACFFARSPCFIPGGPLRRQPWA
AAAGSAAVLGATPALADPIGDAAKKLADASYPFAKEVDWNSGIYLQAPGKLAPLEALKAIDKMI
VLGSQADPKLLKAAADAHHKAISSASGPTGMTSKADWEAVNAALGRVFASVPESSVMDVYNAV
AKITDPGVPAYLKSKVNGADAEKAYAAFLEFKDVVKANQVSSAAAAPVPAAGGDKIGAAAQAL
ADQSYPFLKSVDWTSDLYLKPLPGVSAAKALKAVDKAIVMGSAMDGNLLKAAASAHHQAIGSI
DAAGVTSAADYASVTAALGRAIASAPTSKVMDVYNAFAGIVQPSVPNTLFSKVDPLAANAAASA
FYEFKDVVKAAQR*
>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT

237

FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-
1359(+)
MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*
>TRINITY_DN161_c0_g1_i3.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i3:1450-254(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGIHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKEEYDESGPSIVHR
KCF*
>TRINITY_DN3190_c1_g1_i1.p1 type:complete len:315 gc:universal TRINITY_DN3190_c1_g1_i1:68-
1012(+)
MATVVDYPDFDAQADAETLRKAMKGLGTDEAAITFILGSRSNKQRQEIKTQFKQMFGKDLIDDL
KSELGGHYEDVVVALMKKPDEYDASELHNAMSGLGTHENVLIEILCSRSNAEIKAIKETYKKKYK
ADLEKDLQGETSGSFKRLLTSLVQGARLEDEPADHASAQADAHALFKAGESQWGTDESRFNAIL
ASKSFAQLEMIFHEYQLISNKTLEKAIKSEFSGDIQNGLLAIGKCAQSRPAFFAERLHKSMRGLGTT
DSTLIRVMVSRCEVDMVQIKQAFERNYGKTLNSYIADDCSGDYKKILLKLCGPE*
>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
238

EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI

LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*

>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)

MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG

>TRINITY_DN5818_c1_g1_i1.p1 type:complete len:282 gc:universal TRINITY_DN5818_c1_g1_i1:49-894(+)

MHPPNSAPVKSEYTNVEIPERDTDSYGWCALLLTILSFVIVVCTFPLSLLFCLKIVQEYERAVIFRVG
RIRRGGAKGPGLFFVLPCIDNYIKVDLRVVSFDVPPQEVLTRDSVTVSVDAVTYFRISSPIDSVCNIE
DATRSTKLLAQTTLRNELGTKNLSEVLLEREAISRNIQRILDAATDPWGVKVERVEVKDVRLPMM
LQRAMAAEAEASREARAKVISAEGEMNAARALKEASEIISESPQALQLRYLQTLQTISAEKNSTIIF
PLPIEMLSKAISS*

>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL

QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*
>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*
>TRINITY_DN2113_c0_g1_i2.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i2:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA

NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAQYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN691_c0_g1_i1.p1   type:complete   len:1726   gc:universal
TRINITY_DN691_c0_g1_i1:5662-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG

VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPVGPPGKDYVFSGTAGELKGMKITKGDVGPDGVKGEKG
DRGDKGLDGRRGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEPGLDGDVGEK
GEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVRGETGEEGPKG
DRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPGAQGEKGDQG
QKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGPDGPKGNEGEK
GDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVKHSQTTIVPSCPA
GMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVASRNDYSFWLSTD
EPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAGYSFLMYNSAGA
DGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPKSETLKAGNLKT
RVSRCSVCMKTVRNGNFP*

>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)

MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)

MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV

QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDDANE*
>TRINITY_DN1199_c0_g1_i2.p1   type:complete   len:296   gc:universal
TRINITY_DN1199_c0_g1_i2:164-1051(+)
MDGLNDAATKAKTIYGGNLLFSAAMTAVAHPMTYVKVLIQIGHEPLPPQQVTTLFGKKVMRLP
NFFQYAGHIKKIDGWFGLYRGLGPRVVHNICSSAITNSVTNKIKGNSRDEARPNDKSVEGFLRETG
NLAIAKTAGIVVSYPFHLISIRMMVQFVGREGHYRNIFTSVQEIYREEGILGFFSGLIPHLVGELFAL
WMFKTLNFLVQNYLISEEYSQVAEIKSYSQGVSQYIASMVTYPFQLVSNIMSVNDSRLVAGNPPLM
PIYDSWTDCWIELGKKGLRNRGSTLFRRNVLT*
>TRINITY_DN3986_c0_g1_i1.p1   type:complete   len:446   gc:universal
TRINITY_DN3986_c0_g1_i1:252-1589(+)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEEDA*
>TRINITY_DN199_c0_g1_i1.p1 type:complete len:229 gc:universal TRINITY_DN199_c0_g1_i1:207-
893(+)
MVQGSMTIVKYLMFFFNFIFWLSGLALIVIGAVIRDKYGDYFSYADSRFTNVAVFLIVVGVIVFIIGFL
GCCGAIKENYCMVTTFAVILGIIFILEIVAGAIGFAYKGQVEEKADKALVRASKNYNNDDEPGAKK
LLDWAQQRFECCEVASATGNGTCADKSPKSCHPDNDCNKTKYSQKCKEGFVEFMKDNLVTVGA
VALAIAFIQILGIVFACCLMKAIKGEYEVV*
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)
MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF

AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDGLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN250_c0_g1_i3.p1   type:3prime_partial   len:402   gc:universal
TRINITY_DN250_c0_g1_i3:131-1333(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLMGQIVSSITASLRFDGALNVDLTEFQTNLVPY
PRIHFPLATYSPVISAEKAYHEQLTVAEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKD
VNAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARL
DHKFDLMYAK
>TRINITY_DN3036_c0_g1_i2.p2   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i2:1643-3(-)
AFAGAARASPARQGSVARRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN

NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
ASPARQGSVARRRALDQSSRYADLSLTEEDLIR
>TRINITY_DN73067_c0_g1_i1.p1   type:complete   len:831   gc:universal
TRINITY_DN73067_c0_g1_i1:3714-1222(-)
MHWFVILLLLFGVIFVTVSNYEIDVLSTFELSEDIAGISPLDNKYQAYQFAADGKELLLDDSIKTEIVR
GVTNFKDFFIAVNIRHDKQKPSSLLSLQTKTTGKQKFTLWINAEEEKIGIRSHSKESKKGKKNLTFR
KVPLNTGQWHRIVLNFKKIDTDEPVVDLYVDCKFHDSKTFPFSIGHALIEDALISELRLGQLKHLP
EKDPIRFIGAMQDFRLVSNRDVHWYNRPQHCYNMMIEVKGMKAYHEPVSTISHDVDNMAAAM
KNMQKQLKLQLDEIRDIKNWLQQCTACKTAAENVLGGEIPKACSQNRCNENANCIESNGGSAF
RCECKAGYAGNGEKCGLDSDSDGVPDNKLDCLGKECSQDNCPGFPNAGQEDADEDGSGDACD
IDDDNDGVLDGDDNCQFLSNRDQKDSDADNRGDACDNCPFESNYNQLDSNNDGLGDACTRD
ADGDGIRDKSDNCPRVYNRDQIDRDSDGIGDACDNCIDIYNPIQKDVDNDNLGDACDSNVDID
NDGIQDNKDNCLYIANANQQDIDNDGIGDACDPDDDNDNIIDENDNCRLIYNPDQSDSDGDG
QGDACEDDADKDETVDLKDACPENPEIQNTNFTNYKHIMLDPEGTSQVDPEWEILNKGAEIKQ
WRNSDPGIAIGDKVFGGVDYSGTFYVHDDKDDDFAGFVFSFQSNSKFYALMWKKDKQTYWFET
PYKVTGHAGIQLKVVTSSTGPGEHMRNALWSSISIPGQTKIIWSDPSKEGWKPKTSYRWTLMHRP
SEGLVRITIKEGSQVRADTGYLIDKTYKGGKLGVLVFSQKEIVFSALQYRCTEQIPADYNPNSPN*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)
MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*
>TRINITY_DN909_c0_g1_i1.p1   type:5prime_partial   len:313   gc:universal
TRINITY_DN909_c0_g1_i1:1-939(+)
RRVLFRSLTFIESLRLSRLVNKKNKTFMEMSEKGGIYNDNEREMNFTGNSDYESGDLGFCGWFLTV
LSFIIAVCTFPLSLFFCIKIVQEYERAVIFRVGRLLSGGARGPGLFFILPCIDTYLKVDKRVISFDVPPQE
ILTRDSVTVSVDAVTYFKIQNPVASVCNVEDAQRSTKLLAQTTLRNELGTKNLSELLLEREAISRNI
SNILDQATDPWGVKVERVEVKDVRLPPMLQRAMAAEAESSREARAKVIAAEGEMNAARALKEA
SDVISESPQALQLRYLQTLTTISAEKNSTIIFPLPINMLQSMMNK*
>TRINITY_DN413_c0_g1_i4.p1   type:3prime_partial   len:463   gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF

NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR

>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)

MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK

>TRINITY_DN1189_c0_g1_i1.p1   type:5prime_partial   len:449   gc:universal
TRINITY_DN1189_c0_g1_i1:1554-208(-)

VSAKSQVIAKMKFFLFSIAAILLVNSALADNAVQIPKTCEDVLAMETCDRLRAVAKKFHEKVGTV
NQAVTDAFKHHKTKAVEVLTYVKEYLVDKAVNFKCEDVLPADQCHNLLEFAKRLNVKASEASIA
LREAIADGSEQAKQLYQRAVSFLVNDVPNLKCEDFFKKDDTCDKIRNFATKVNAKAKDVTAAVK
KAIVENLENAKDGLKKAKQFLKAKISCDQVLNEKMCNTIQSIGDKFSVSMKKIDAALREAYANG
VRKWSELYEAAIKYIMDKWSIFGDDEPQRERREIQPENVKKAIKNLLDSLKVKSKKVRAAIMKLIE
SGKVKFGNLRKTVKQLLASLKGDKKSEDAVTAVYKRSVVDTLKETLQKLKEQIKDLAGKAKEQA
KAKIAELKELIKGALGSLDQDQSDELDQDFEMISDVLEAAADESFDEIANNALENHLGQYY*

>TRINITY_DN36_c0_g1_i16.p1 type:complete len:224 gc:universal TRINITY_DN36_c0_g1_i16:829-158(-)

MMIKTTIVAVVLAACVLQSFAGRCYVGYSAKGLPLAIGVRDVECGKGYDYCTTIKYRLGGIEVTQ
GNCARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTT
GLITKFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNI
DNCNKWCDILSIHQSMENCVAKCCKGDNCNA*

>TRINITY_DN2636_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN2636_c0_g1_i1:986-45(-)

MSAIAVVVIVIAAVLLHFSVHKIEEGHVAVYYRGGALLSSVSGPGYHLMAPMLTKYKSVQTTLQT
DEVKNVPCGTSGGVVIYFDRIEVVNLLSVDKVHDIVKNFTADYDKALIFNKIHHELNQFCSVKSL
QEVYIDLFDQIDENLKRALQQDLNEMAPGLKILAVRVTKPKIPEQIRKNYELMEAEKTKLLIRIQH
QKVVEKEAETERKLAVIQAEKQSQVAGIQYEQKIMEKESMKRMSEIEDLTHLAKRKAMADAEFY
THQKQAESNKMKLTPEYLELMRIEAISKNNKVYYGSNIPNIFLNEGGLSQKTK*

>TRINITY_DN495_c0_g1_i2.p1 type:complete len:655 gc:universal TRINITY_DN495_c0_g1_i2:152-2116(+)

MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPSNSVFGDPCVGTVKYLNIEYFCVKR

TPPTINTPTLTPVTLVIPVQSSYQGDFGKSLTLKWNLGLTEKDRIIAVYLYDDIKPCKTKIIFSSTGFNT
PMLQESYAQLIFGNRISATISKSSYQLTIKGLKASDARSFTLEMFVSGPGRSSCKPILSVIKISKINNINS
DKVDGGYTGWSVYGPCSKACGGGVQERNRSCTNPAPANGGKACDGVPSETRACNTNQCPEAS
MSYASTKYPASNCIDGDINTRCHSKKGVNPWLKVDFHKKVLFKSVELIKYFKYVCCDAVIKISAIQ
SDGTKKLCATDDQAEKGVQDLEIELSDNCVGHSIELQLDTHGKKSALRLFEIKFNAE*
>TRINITY_DN3545_c0_g1_i2.p1   type:5prime_partial   len:236   gc:universal
TRINITY_DN3545_c0_g1_i2:3-710(+)
SGPGRSSCRPILSVIKISKINNIDSGKVEGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGK
HCDGVSFETRECNINQCPVDGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGKPCDGVS
FETRECNINQCPVCPEIVGTYDISSRHHYGGAKYGTVVFKKLSNSKTVEAYYTINDGRRGVLTCKIE
SAQPDQCSGHGYYGKYFTYYKNRCQIIWSNDVIYTKQNC*
>TRINITY_DN120478_c0_g1_i1.p1   type:complete   len:544   gc:universal
TRINITY_DN120478_c0_g1_i1:2674-1043(-)
MMRAPVMVLNSNTKRESGKKVQISNIEAAKTVADIIRTCLGPKAMLKMLMDPMGGIVMTNDG
NAILREIQVQHPAAKSMLEISRTQDEEVGDGTTSVVILAGEVLSVASQFIEDKIHPTLIIAAYRKALD
DMLDVLKEQISIPVDVDNDEEMINILKSCLGTKFVNQWSKLACNMALKASRTVSTEASGRREIDI
KRYAKVEKVPGGSLEESCVLDGIMLNKDILHPRMKRYIENPRILLLDCNLEFKKGESQTNIELSGET
DFNRILQLEEEFIKKMCDAIIKHNPTLVFTEKGVSDLAQHYLVKAGIAVIRRIKKTDNNRIARAVGA
TIVNRPEEIREEDLGLKCGLFEVKKIGDEYFSFLTKCEDPKACTILLRGASKDILNEVERNLQDAMH
VARNVMVDPRLVPGGGAAEMALSCALEEKAKSITGVVQWPYKAIAKAVEVIPKTLIQNCGVNAI
RTLTALRAKHAEGGNSSWGINGETGEIANMKDLGIWDCYSVKAQTLKTAVETAMLLLRIDDIVSG
SKKSKGDEGATSGGMPTM*
>TRINITY_DN165536_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)
MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*
>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN2472_c0_g1_i1.p1   type:complete   len:344   gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)
MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*
>TRINITY_DN11522_c0_g1_i3.p1   type:5prime_partial   len:855   gc:universal
TRINITY_DN11522_c0_g1_i3:2878-314(-)
FSAQLFKGSSKSILGGIPNIQLNRGRIGLGNIRDPSISLTRGSKIDYNGYMGFSATSGYFGNDKHIHF
AGGSPRSNALKGRVIMYKDSAGYEISQYLDDPSDQIGTYFGSAMASADINGDGLADLVVGAPYYT
GTVSNEGIAYVYLNKNGIVELVQTLRQPEGKDVKENGMFGISIGSVGDLNNDGFADIAIGAPWGG
EDGKGIVFVYYGQRDPAQLKLMQTIKPSDLSGIDVDGFGYSFAEFYPYSGGPDQYGFIENDPDYNI
YPDLAVGAFKSNHAIVFKSRPVYTIVGRLSLGGVKRLDLVNKENLCPNGMKCLDKVQACLMFKE

EESEGEVDYTLEVDSGRDSPKRAYLLDSDGKQVTKINKQTTVSKDEECDDYTIYVKNTTDVLSDLV
IKLSWKFVVPTTCDGVCPVANELCQFVDTKSIIFVKGCSDDGNDTCSSDLKIEKKEFPPKLVGNNR
LVGTEEIISAGATDGIILTFNIKNLGENAFDNSLKLEYPGKGDMKLVNIDDAKVISDYYGTPIWDSD
VTREKDVTTLSVMLSSPIVKGKPEQVQVKMSLNPIPKGTKFLKFKVYLETDSEETDTSNDFQEITIP
VELVSNLLVSGQSIPEILTWRKDVKDVQDKGAEITYNFLFQNQGPSNVDTSEAIILIPEKFKGSYFLN
IYNYDVKGSKSGSDPGSCRIEGELNPLKLDYYGRRIGNNTRKRRDTRGVPALECGADTTCREIICN
FNIENRNSATVTVKATLVDANFDSVIGAGREIHVTAEFSSDAVTPPSGLEFPVKSMVTTTVNSPYLT
KTEGGESIPWWIILLCILAAIIIIGVIIFIMYKKGFFKRKKMADEDEALRNGDPEMDDD*
>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-494(-)

MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*
>TRINITY_DN166344_c0_g1_i1.p1   type:complete   len:360   gc:universal
TRINITY_DN166344_c0_g1_i1:93-1172(+)
MQKPKKYDWKDSNMALFGSDTEKKVKKESAESEPAWQGAGADVGVQVWRINKFKVEHWDKE
QYGEFYNGDSYIVLNTYKEPDTDELKYDVHFWIGKYSTQDEYGTAAYKTVELDTFLDDKPIQHRE
VQGHESSKFKTYFPTLTLLKGGADTGFKRVLPEAYEPRLFHVKKQNRTQITCTQISLKRGNLKSED
VFIIDLGDKIYQYNGSSCSADEKYKATQEVARLKSVRGKARAETIEERTVSDEHPALMVLKDGSSK
EKSTVEGEKKMLRVSDADGSIGMDEVASGDDISKDKLTSDDVYIINTGSHVYCWIGSGASIDERKN
GLSYASNYLNKTETPWLPISVVGQGKEDSQFQKAF*
>TRINITY_DN118_c1_g1_i5.p1   type:5prime_partial   len:203   gc:universal
TRINITY_DN118_c1_g1_i5:620-12(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPVYSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
SSH*
>TRINITY_DN1936_c0_g1_i3.p1   type:internal   len:1070   gc:universal
TRINITY_DN1936_c0_g1_i3:3208-2(-)
GEYKPTLGRCLSFWYHMYGSHVGELNVLVLQNKSRSAPIWNLKGNQGNVWRPSRVTIKSAVNH
NIIFEGRTGDGYMGDIAIDDVMMSEGPCTDYGNCDFERDLCGYTNKKNIDQFDWQLGSGGTSSV
TTGPSNDHSTQTALGQYMFVESSYPRLPHETAIIGSETIPVSGSGKCLQFWYHMYGEHIGSLEVNM
RVANDLSETIVWKLEGNQGNKWLQGQAPLLSRGQNMEVRFEGIRGTGYKGDIAIDDITVVDYSG
ACAITPKSAKPWGCNFELDFCKWQQSRADKFDWLRNQGATGSAGTGPKADHTTNTTQGYYAY
VETSFPRQPNDTAAIISPTIKGNGTKQTYCMWFAYHMYGPHVDTLKVYTRSQGSDKPVLWRRRGS
QGLNWNHAEVQVTVLYDTKVIIEAVRGKDYKGDIAIDDIDIWFGDCFSSGICTFEGADLCFWYVP
KNGQLYWQRASGATPSVKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYSPWYYNTGQKC
VQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNNVYFQIIVRGTKG
NGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGSTNSFLTGPSIDHT
TQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNLTIYLRKVSNTKT
LSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVVIEGVRGSSYDGDIGIDDIEFTSGSCSFLPKGA
WPSGRSTPAPTQASTTLGPTIGNKGFDCNFDKEFCKTWMRNSTRTNFQWKRHQGSTSSVGTGPH

HDHTTNTDQGYYVYIESSSPAQPNDTAYLIGKDIPNNNGFCLSYWYHMYGPHVGSFRVYVVNKT
NAEARFVRVGTQGDKWKHGQLYISPKAGNPITIRFEGVRGSSFMGDIALDDISVRYGNQCPAPRE
CTFEHDNNGGSSSTCGWTQEKQKDSFDWSIGSGDTPSVLTGPNFDHTLETKQGHYFYIETSYPRK
FGENATIISQSYQQTLGKCFSFWYHMYGSTIGNLTLFLRRD
>TRINITY_DN942_c0_g1_i2.p1   type:complete   len:5116   gc:universal
TRINITY_DN942_c0_g1_i2:15664-317(-)
MKMKLALLVLFTGTTLAAPFWVLDDNLPRAEIKEVGCSGKRFQNGKSHVYEYEGVTYNTIEGST
DKKTGIKLTATATITPMSECKFMMQLKSVELMSKSMNQDTFTTNAESAKLKDELEKLMVGFTMK
GNQIVTIHASENEPTHVLNIKRSILSSLQLDESTEKETDINGICDVEIVTKSGKIVKSKTLSECTERAQ
NEIGFQSTSIKSATTLKPLDSTSKCEYVMEGDVIKSVVCEEKHIFKPFSAGYKTPSGAMTTVKQSLSF
KEYTVAAISAVPSDFTVETNLLFDHSTEEPTATSTINDQVEKVMLRLVDPAQKSDLSAKENSAQEFK
NLVTLFRRMDEKRMEATWTKYFDCIKSGVCTDANTRDLYRQYLLDGISHCGTSTCIAMVRNVIV
NGQITGERMNMFLRSIPFVTKTTMKMIGHVLEICEKNPSRQAYLTLGTLLVRHCKQNPEDCSENL
RNPVTMAEEHLVKKLGQECEGQDDHERVEELLRVLKAIGNAQRPARVQEKLMKCAEKSKHSNI
TTSIFDAFRGFSCDALKQGELLRVFEDINNEDETRIHAFITIMKCPTVEILEKVTMMLEKELSNQVA
SYMWSYLTNLMESSDPRHQVARDILTKMTAQKPLREVNLPVHQFSKAFEKSLHSEFLKSGLTTEG
HIIFNKDKYIPKMGMLNMKANMMGNSLDMLETKIGLDGIEPILETLVGPNGMLPKDLNIDLGSY
GKFNSEFLRKMLEKKNNKRKLFNDNLTKMHLKANKQFEEPCAHLSVKIMGQEVSVLSYDDILW
MIDQIDNMNAVQLLTNIAKGGHKTFSKSLMFLEMSHNVPTGMGLPLKLKLTGSAVGTVEFNGKF
DIRNLFWGTPAVNIKGHMKPSTVVELSGQMGVEGHYVSTGMFVKSSMFTSQIVKGAIEYKHGQIL
KINMDVPEEPLAAVKFSSSPFLFMNEESELVEGTSRFVNPEHCTKSALLGYGLCASMRLPIAFREYE
APYYPLSGPAHFAVRAIRGDEKLTTWQFLVELNKQSGTTFGNIEFSTPGAAYERKLNGKVSMKQE
GKMNMFTLSTEGYDRKASVELNFNKETYSTAIITKNNIFTTKDMTTKLAIFNEEIDSGRQYGIQAL
ATMDWYTFDHITKFVRKPNVYMFQTSTTYYPKKVVMGTIVYDTKENKLSTRIQANQFQQAYEFS
GKFSDDGQEKGVTVTGKCVTSGKSITLYGGIQNTKQTKQILFTADVLGYSAKQYIRYENNNDVHT
VSQFLSVNGKIISLNGELSSFTEMKRLKFVADIIGRKADTTFLLTNNKGEKSLSVDMNAMQKHAN
FKTGCYQAKDSNECKFNFKIGTKEGEILMKQIMRDGNVITTLETLFDKYVAGFRNVYSNKNANA
KSLCSSIFYGTEEKEHEPVNVCLKYNAASDEKKILAITFDIVDRNQQGEINMELTKQTEFVKMQTE
VVYNKNSLAKAMQSMKYSKDLNNEIKMEVNVGKYNAGFRWFTLKTTNGANVGIEGYAMDKKI
QFVNKYVKDVVSGTTESKVTSELYINDKLVPVTTETIFLNGKGIAGPKFQVNIGKHSVSYATLVTYG
KGVYGIDLEFLVAKESNMLFKLFNGAAASVTPKKMDFQYKFGFGINGKQYTYGGDMSYNNLGN
DEKMEHSVKLGLQYSINRRSSMTFVLSNDKTKAALNMEFEYIPTKSVSHSIEYTKNDRILQVSVEFL
PKMFYTFKSQLVKNEGYSLASSVTLNWKNYNRVLKMINSMVNNDKKFELSTVFGKDLTFTFTFG
KENQKSMTLSASGFKRSLKVIGTFVKPNVQLQVYKNGEKIMDVTTSFDGITNKFQFALTNGKDTY
LKMMKSYNEFVLASGKETYLKMKKKYNEFVVTSGKETYLKMMKTYNEFKNQYKFQINGKIWTK
VQEWYLKMTKMTKDNKITKFLAPFLDLTVKLDRETNDMKLVLSNGKQTFVKIVKSYNEAKNQH
DFQIFGMSKEWVDLMAKYNKRNKVLKVSFSFFGKELAMFTLNMKEKDTVSLTTGSDYWKKNIV
LTGSLDRSQKSIAGNFQYGKTKVQLKLRADWNNMILENAFTFNDNVAKIGLLREQNSMVFRVKL
SPTLMAQVVMEVKNDNIIKMTIQRSEGDKLIEETSMQFKLSKDLYNLAFKWNPETFKAVIRAVQN
MIQNGYYKDIKPFITNVFVKGQRMSRKALTTTVMTFTEKVKEAKTKLIDLITNFEASVDKINFVAIR
EQIGQLSLKTIQKLKELVKVTLKELMTKLENAKENIPELLKKYKQIRNKIEKLSKDTAEVLPKFYKE
TLEAMDKQYNKLNGYWKDVSKVVMSNFELVSKNLTDSTKPVVEKAIYLISNFKLRGKAVKEIVSI
ARELVEKYIQILIEQGKIIMANGKIQLENMKLKSMEHYKNLKLKGMEQYNNLKLKGMELYQKGK
MPYLDETVEGIIKISVEKYMDLKKKMTDFDFEKYIQSVRDQIMEKKINGKTIVEHLNTAKEEMKNL
PPALKENYVKLIELITKLTKALNTNLKEWKIFAKPLTNYMKLVALSTKKHFGPILTKSMDKILPLITG
IELPDFKMMALEQWKQLENFMLPLIKPVGPLYENIKTQIRNIKVSGYPIGSFVDFNIEIAKTFIQTSL
KTTKQKLDENVKMVTEYANLIKKMTPEEIMNQITLKSTELTKEYKEKVLKVYEERQERLKVLVEKL
KELYNEFKQQYERITAVPVQDHIDDMMFKSSKFVKGNLEEISKVVKQITEIEISKPTWDAWKQADV
MGHLDKYGINQKMIDFIKAVKEVDMKRIAQKTTRLIQDMISTIYSKAFVRFVQVYGKLEKVHDYL
RSIPKKEYEEWVKELKEFSLENKERVIEFMGKMYKQTQKKSLNLYTQSKFLYAIMHKIVLKNMEKI
NINLVKPSQELYSDIKYRSEQVYGDLEQPTIDVKNHYQKIINDFVEEQYTIVKGAVLRHYKSLEEYK
EIMYTKAQEKMEEVKKLIELKYNELLAKYGDMTYEEMYDNAYKYGKSQYKVVRKTVKRGYKKL

REQMEKMEERLNALYQLYSTKYSDLVNRIKTEIIPQTQEQYQKYRLIVINLIKKYQKVLMEKMAEL
KTRGMTIYNDLKTRGMAIYNDLKTKGMTIYTDNKDKTIKALFREVKQNAIKNINTVYVLVKNFG
DEKLKQVRTIIVTYYNKAKGVMVDVIIPEVKMELVSIINQTLRSSKVMTEEIMKAYTPHMVLAKNF
ANKGAILIIERGTVAMKASEKAIREFMDKAPAMMKDIVKKIKDQEYYNKIVNHEVVKKYIAKTQE
MIENLKTKVEQLKQDPTVVKYQKMFSDKVTELKERAKIVIDKLNQRIEELKNHPMTLKYQKIVTE
KMTELKKKAQLLLEDVKAKIEELRNNPSVLKYQNMMNEKIAELKAKVKMLVKELKKRIEDLRK
HPKTIEYQNMIKQKIVDLKKQISMYKQKIENLYQHPFVTKSMVTMKRIKRSALFTADKINVNLQP
KIKEASEMAQKRIEKVQEQAMSAVQFFKNEPEEAFWTGVSNLEKSGKDLYEQIKRLFNKELIKKQ
FDVLTTDAKMQWKIFLNDYFDDWSKEASRKMYEQVVTLVKNMNMKIIDMKMNMQKLPEVYK
PIIEDYKNQIMENYKNIVEYSLQNMIQGKVYLSNQWVELNNQWKACPYRLIMENPVWSEIGDEI
MQHEAMTAVKYVSNLGNLKFQAMKTILMKEYEIKKQLLNQKITELQVSLKKTVEDLRSKGLKNY
QLAKEKAEQMVKNIKEIAIKMDKFLEEKTIGEIVEITLEKYQMLITKVEFLRTQVVGLSQWYKEKA
TVIYNEKRKRAEKIFEEQKEKVLAVYQKYKAQVMPIYQKYEDKVKQYYNKYSSIIIEQYKMLLKKS
AQKYIQLRTKYEELDLKNKLNKLQKDAIDMYQNKKESALKLWEESGVPTKLVELKQMTIRKTIEA
LKQLPGQTKEQLTAVFDKYLNELKVQYKKYYSAGYTKLIKEYNDLKAKFEAKFELNRNLLIKLAK
PYTTPVVVAYKWVENEVAETALFVYRYHKLGERYNNGRELIKSEIERLTPILKNNFKKYNAEIRKY
VKDQADKYSAQALEMSKDLKQKAIVLSKDLSKKVVASLKTYSLMTGDKILRSIHSSMKCIDNVDF
GKVQKQISKKAQDFYREFTKYVIIDPSKGEILINIPHGDMVPSFTHQFEQIKLRARRSVQVLKENGK
VLMKKINNRMAELKVKIEKVRNKVMKKVMDNTVEVRRDLLSSYNINKRIFDRVYVKAQIIYKKS
LRKATNQYKVLKTKSQDYIRKATAQAKAYYEEYMTKAKDYIRKNTELAKVYYQKYMTIMKERYL
TVNKIIMDLYNTPPAELYKQLKESKASLKVIELIMHLYNTPTAELYKQLKASPTYLRIDRIIMDIYNT
PLSQRLEQLKTSSAYLKVNKMVMDIYNTQYMDIYNQRLEQIKNSPRYIKVKGMIIRLYNTPAKELL
SKLQYRGQKLYKIWFNKVKVMINKAIEKNAPLIKARLNAIKKELRPYTESLKTMYKKIKLGYSVKD
SFYPMYKQMKFATKFYRGEAMRQARKIKAQICKEDPKLCKAIKSSAKVHSFIINKYATRVNKVLNI
ALDKYQEGVAKTHRAYRHALNMIARPKSTYAAVAMVFKDHYVTFDGKSYEFDIPSSKCQYVLAH
DFQNADFTILKTQDAIKINNKDMKVVIFKNGKTMTVFPDKKISNGLPVQAGESKCIRQHNEIICN
FVEDKLRVVVDLENDITTVSISAWHHGKLQGLLGTNNRESFDDMKMSNGDLAKDQLQFTNSYE
MTGSPKCQLNKVAFKKLQCGKVTQKCKKLFENPKSELAGFFNIINAEPFIKACERDLVSCEKSKEA
KHCSSVNAYLSMIKSRGYPVELHSECMKEGERMTGDKWQQKQSNKEFDIVVLVSQRKTVNKKPI
MKVLQKLQSSFKSNSIDTRYALIGFGGKGVNEEAHVHALGKGASVFSNMNDLKRAITNTMVFNG
DEESNDAYHAIVEASLQRFRPGAHKIFVMFNSEPHTSHKYGATLKEAIFTLEKESHASLFVFDEINF
KSLNKKGLTIGQTNSKIYTTKNLKGLRLSGMELPKSEFKDMVESTNGGMFTNELMNKQNELATV
LFDAITDTVTQNQRQCLDCEKHTTWYGSTRQLCHPVAC*
>TRINITY_DN875_c0_g1_i1.p1 type:complete len:606 gc:universal TRINITY_DN875_c0_g1_i1:2207-
390(-)
MLRLVLFAISASVVYGSCNPLKLGCFIHSGSDRNLLHSDNSEDIYTDFYSGTNIEWDKFSSYLQRAA
CRCDQAAANAGYRFFSLRDFGECHGIGKGASSFDALKLKKSMYCIAPNLGQCDISEHQHCTGAE
EGEFIYETKAQPAEKVIDGGYSSWSAWSVCSKECDQGLQERQRTCTNPEPKGKDAKDCSKLGKPS
ETRSCKIKDCPPSGETVIFCEHRGVKRIACENDQVVEILAANYGRTSTKHCVFGRTKVTNCRAAH
SMSIVKSQCDGFNYCDLNPHNDVFGNPCGFYTKYLEVKFRCVARKTSSRRAVLCEHRGSPPLSCP
NPDEVLSINKASYGRLSTHYCQYGHFKQTNCRALHSDALIKKTCNGLNSCSLNPSNTVYGNPCG
NVNKYISVEYTCKKTNAASRQAVFCEHQGGKTLKCANPDEVLSINKANYGRLSTDHCQFGHFK
QTNCRAEQSDALIKLACNGLNECSLNPSNDVYGNPCGNVRKYISVDYTCKKANAASLRAVFCE
HQGVKTLKCANPSQVLSITKAIYGRLSTDYCQLGLFKQTNCRAANSDGMIKKQCNGKNSCQLNP
SNAVYGDPCKYVRKYISVEYKCINK*
>TRINITY_DN8341_c0_g1_i1.p1   type:complete   len:368   gc:universal
TRINITY_DN8341_c0_g1_i1:1281-178(-)
MFRILILLAICLTTGNCKVRTLSLAKGKLRGSVKVINEETDQHTRSSYPHNNNTETETKKICDQLK
KFTPNLCSIYSAKTKCPVHCALPPALVKRELDCGKKFSQAESRKADKRIFGGKESQIGEWPWMVTI
MTKSTVPVKYCSGAILSKDFILTAAHCFKEPGLKDPTKWQAISGNDHLVYDNKREAKHDVRKIMI
HEDFGSPSEPSFSDIAVVQLGKSLDLKQENSNRLCLPDIDHTTVPGMTCYVAGWGKASSNETSTAL

ILRQGALKLIEKYVCKLPNVIPGGIKDRELCAGWEDSRTDVCKGDSGGSLSCEIEGKWYAIGIISRG
YKCGTQRGERNPFAALADVRTFKEWIVNAVLNDSGAL*

>TRINITY_DN941_c0_g1_i9.p1 type:complete len:3186 gc:universal TRINITY_DN941_c0_g1_i9:86-9643(+)

MADPAKIVDPIDDPTASDAEWKKIQQNTFTRWCNEHLKSSNIYIYNLETDLCDGLKLIALLQVLS
HKKIVRYNKKPTFRPQKIENIAIALKFIEKEQIKLVNIDASDILKGNLKLILGLIWTLILKYQISMSMV
ADDDDDPDQKTTPKQALMGWVKSKLPPELKCGNFNKDWNDGIALASLVDSTAPGLFPEWEDL
DPANKLDNAKEAMKRAEEWLGVPQVLTPEEITNPNVDELSVMTYVSYFPESKLKPGAPLKPKMN
NASKCSASGPGLQEHGVVVNKPAEFTVFTSGSSRGKLNVQVFGPGRKAIDCMVQDNHDNTYSC
QYTAPKTGVYDVHIRVGGHHIPKSPFRVNVASDLDTSKVTARGPGLEPHGLIVGRPASFEVIATDA
GSGELVIDVIDPKGNKKTELKVEARPDNVYFCTYMPVQVGRYVIVIKYGGKEVAKSPYHVSVTPA
ADRVKIYGPGLEPGLKTGKPASFTIDCSEAGEGGLDVKIVGPGKGDIKYEVKDNGDGTYTCTYKP
TRPGQYEITVKFDGGVVPKCPVKVSVGSTADPSKITAWGPGLERGVAGRPVEFYVNCKGAPVDNL
TVGVEGPGEAKVDMKTNSDGTVTVTYYPTKPGKYIIHVMYDEMDIKESPYSATISPRGDVTKVYA
EGPGLEAGNMAGKPAEFTVFTKGAGVKGNVQVTCVDENGKPCEVTVKDNGDGTFKVTYYPKTI
GKYVITISFMDEQIPKSPINVTIIPFSDPTKVKATGPGLQGGKTNKLAKFKIDASKAGEGGIGLTIEG
PNESEIKCDDNGDGTCNVEYMPTESGDYKINVLFADQHIPGSPFTAVIGDDFDASKVKADGPGLK
PGNKAGKPCDIAIDARKAGKAPLVVEVTDEVGNPVKVDLNEEEPGLFASSYHPEKEGPHTINITY
GGKHIPRSPFKVTVKPSSDASKVKVFGPGIKPTGVKSLEPTYFEVDAGEAGEGNVDIKIEPTAKGM
PPVKDIDVKPGKTPNSYIVTYIPPKDGEYNIVVTFAGVNVPKSPFKISVTPGSDASKCKASGPGLEE
PIVGKENVFQVETPPEAGLATLTCTIDTPSGRKLKADCKKNKDGNGYDVTWTPKEVGRHKVTVK
YGDKEVPESPFYVDVLGKPDPTKVKVYGPGLENAFVEKPAEFTIETRDAGPGNLGLTIEGPEEAKI
DCKDNGDGTCSVTYIPTKEGPHDINVLFDDQHVPGSPFKVAATEPIDASKVKCKGKGIGKSTPAS
YPAEFVVDATKAGKAPLEVDVVGPGDKKYPCDIVDNNDGTFNCAYVPEKKGRYEVTPKYGGTP
VPGAPFKVSGEPTGDASKVKCSGPGLDRPHIGHAAPFEVDTTKAGDGKLNVNAKGPDGKELPV
KMVEEEEGIFACEFVPEELGPHELEVLFGGQPVKGSTFKADATPAPELDKVRTPALEEILEASPCVD
QQFEAPVDCSEVPDNKGAKLSGKITTPAGKREKVDVTDNFDGTFALNYTPTEVGKYVLDVGYDG
IPIPGSPFEFEVTEGGPDKVKVFGKGIKKGVVAVPSRFTVDTKNAGPGDLSVAVEGPSKVDIECVDN
GDGTCEVTYVPVEPGEYDVIVNFDNQQVPGSPFKPQIVQDEPAIEVGRQSDLCLTPEGISAKDIPSL
KGVLQAPSGKEKPVDITEGPNDSFIASFVPDEPGKNLLHVKKRNKPIDGSPVPVMVREKPVIGEES
GIPMDLADCDLPKDLPKLNAVLTRPNGKEGPCGVEPGPDDTVAISFVPEEPGKHIIKVYKDGKQIE
DSPFVVMVEGSPDQYPKVGHPCDKDFYQPEPCRRGDISKMKGTLRRPSGKEEEVDVKLGPDGTIA
VSFVPTEAGEHLVSVKKDGRHVPNSPFSIMVIDEPTVPTVGSECSANFDIPELDLPKDLQYLKGTLT
RPNGVEEPLELSVGADNSLAINFVPKEPGKHLVSIKKRGKHVKDSPFEIMVEEGKPTDAPTGGPVV
GHDCGVNLDIPELSLPRDLKNLDAELTRPTGKKEPLKCDMGPEETLAVNFTPTEPGKHLIDVKKR
GRPVKGSPFEVMVGSTPVSEDQIPVSEEIMAQSAPDVESGLPGGLDSLDSGKDKPVTVGSPCDVNL
DIDGVDLPKDLDKLKAELTRPSGKKEPVKCEMADNGGLSLNFVPEETGKHLLEVKKNNRPVKGS
PFEIMVEESASPESKPTAGQKCDLDLDIPDIDLPRDLKDLKAQLTRPNGKQEPIECTCTPENTLGLE
FTPDEPGKHLIDVTKRGRPVKGSPFEVMVESPESKPTVGNNCGLDFDIPDIDLPKDLKVLKAELTR
PTGKKEPIECTATPENTLGLEFTPSEPGKHVIDVTKRGKPVQGSPFEVVVGEEEPASKVPTVGSECD
VNLEIPGLNLPRDFKYLDGTLKRPNKTSDEPLELTMNENGTIGVNFVPEAPGRHEISIKKHGKHVS
GSPFDVMVESAPSDQPEVGSPTTLGLDMVIPKEDLRLLKGTLVRPNGQEEPIEITLDDNGHPNVTF
TPQEVGNHVINIKKRGQHVPGSPINVMVGPAKKPTTCDVGFEIPGIKLPDDLKYLKGSVVSPSGTE
EPVELQAGQNNTIVVSFLPKEAGIHYIHIKKNGKPVGDSPYQVNVKPEDIAAGQPDASKVKCTGR
GLRHGLPGVKADFLVDTKDAGYGGLGLSVEGPSKVEINCVDNEDGTCAVDFTPAEAGQYLINVT
FADTHVPGSPFKCKVGGPGVEDDIVPMTDDGVECASSDMLAFPSSKARSPQDFVIKFSGSGDLKA
TVTRPSGVEDEAEVVETGPDTYTVRFVPRETGEHLVNVKSRRRHIPGSPFKVLVEAPAGGAASCKA
HGPGLEGGVAGQPCRFTVITRDAGPGGLAVAVEGPAKAEIQCHDNGDGSCDITWYPVESGEYML
HIRFADEAIPGSPFKAFVLPADEGKAMPMESFKDQVLRVGQQASFAVQMKGKKGKITASVQSPSG
VQIDCSAVELEEGNYAVRFVPRELGDHLVSVFLDGHHIPGSPFTVKVGGLDSDPSKVTAYGPGLKG
GVASQPAEFTVNALNAGSGALALSIDGPAKVKMHCVEQDDGTYKVIYNPTVPGVYEISIRFGGQH

IPGSAYKVRIVGSGDDAINIFGDASKCNASGPGLNQATIGQPATFKVDASNAGRGSIMVGVEGPVI
PAKEIIVKHTGNNVYSINYILEQSGDHILRVLWADNHIPGSPFHVNV*
>TRINITY_DN6920_c0_g1_i2.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i2:2147-915(-)
CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN
GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT
PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*
>TRINITY_DN144508_c0_g1_i1.p1   type:internal   len:265   gc:universal
TRINITY_DN144508_c0_g1_i1:1-792(+)
PRRPNDTARLVSSDVPATSQMCFEFWYHMYGDHIGNLTVFKRIGKAMTMLWAKSGTQEPRWRH
ATVDITSASVFKVVVEGTASSGYMGDIALDDLFLTPGACPPSAECTFEDPQLCGWTNIAGDDFDW
TRGNAGTASWGTGPRTDHTYGTKQGFYMYIEASTPRSKGHKAWLKSEEYKPTLGRCLSFWYHMF
GLHIGELNVLISQNNSMSAPIWQMKGNQGRPWRPSRVTVKSSLNHNIVFEGRTGDGYRGDIAID
DVMISEGP
>TRINITY_DN8597_c0_g1_i1.p1 type:internal len:124 gc:universal TRINITY_DN8597_c0_g1_i1:369-
1(-)
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQACGGSDADFSEERVRACSNVNQCGVNTGTQTV
YKVCNGNRCNFQGRDYQINEEVVIRVQSCSVVCDYSPWQDTQSCTKTCDGGVLIQSRTER
>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)
MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*
>TRINITY_DN360_c0_g1_i1.p1   type:5prime_partial   len:476   gc:universal
TRINITY_DN360_c0_g1_i1:2237-810(-)
FQELLNCKNSKQQTIRLPANRENLTMALPYSSAEDFYQSVVKRTPNEVEFHQAVKEVAFALWDFL
VKNPEYAKEGVLQRLTEPERTIMFRVPWVDDTGNIQVNRGYRCEFNSAIGPYKGGLRFHPTVNLG
ILKFLGFEQIFKNSLTSLPMGGGKGGSDFDPKGKSDAEVMRFCQSFMTELSRHIGPDTDVPAGDIG
VGGREIGYMFGQYKRLRNEFTGVLTGKGYNWGGSLIRPEATGYGCVYFTKEMLETKGHSFKDKIV
VISGSGNVSLFACEKCTELGAKVVTVSDSSGYVYDKDGIDKEKLAFLMDLKFTRRGRVIEYTQKYP
SATFHAGERPWGVKCDIALPSATQNEISGEEAATLANNGVLAVAEGANMPSTPEAIEVFLKHKVL
YGPGKAANAGGVAVSGLEMSQNSTRFQWSREEVDSKLHTIMVNIHKTCQKYGTDESGFTNYVIG
ANVGGFVKIADAMIAQGIV*
>TRINITY_DN141338_c2_g1_i1.p1   type:complete   len:720   gc:universal
TRINITY_DN141338_c2_g1_i1:2850-691(-)
MSEADETETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYQSLTDSGVLESNKDMKIE
IIANKDEKTLTLFDTGIGMTKADLVNNLGTIAKSGTKAFMEALTAGADISMIGQFGVGFYSAYLVA
DKVEVVTKNNDDEQYIWCSSAGGSFTVKRDTINEPIGRGTKLVLYMKEDQLDFLDEKKLKDIIKK
HSQFIGYPIYLETQKTRDKEVSDDEADEEESTDKKEDEENEDKEDDGPKIEDVGDEEKEKEKKKKT
IKENYTEMEQINKTKPLWTRNPDDISTEEYAEFYKSLTNDWEEHLAVKHFSVEGQLEFRAILFVPK
RAPFDLFENKKQKNSIKLYVRRVFIMDNCEELMPEWLNFVKGVVDSEDLPLNISRETLQQSKILKV
IRKNLVKKCLELFAEISEDKDNYKKFYEQFSKNVKLGIHEDTQNRNKVAELLRYSSSASGDELTSFK
DYVSRMKENQKDIYYITGESKEIVAASAFVERVKKKGFEVLYLVDPIDEYAVQQLKEYDGKKLVCV
TKEGLELPEDEDEKKRQEELKAQFEDLCKVIKDILEKKVEKVVVSNRLVDSPCCIVTSTYGWSAN
MERIMKAQALRDTSTMGYMAAKKHLEINPEHQIMIALKKKIEADKNDKSIKDLIILLYETSLLSSG
FSLEDPQNHSSRIHRMIKLGLGVDDDGDVEEIETDDLPPLEGEGDDDEDKARMEEVD*

>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)

MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN

>TRINITY_DN785_c0_g1_i1.p1 type:complete len:289 gc:universal TRINITY_DN785_c0_g1_i1:1062-196(-)

MIIESKMLSSIMLKMIFVVVFLCGITLSEGIEKCDLQLEPIGCFKDDVWKRTMPEQILNERDPLNKV
YNNRMINWKKFDTYLPGFICRCAEAAFKKGYRVIGMQFWGECWSGPEAHLHFDSLGAADTCSN
QKFEREYDNITQCVSAIGMDSTNYVYRIAPTVCDTHYEPVGCFKDEQKVPRPMPHYISTDRDYSL
KIFSGKTIDWRNWNTYSPEMICRCATLAKSKGHALFSIQFWGECWSGPETNGYMRDGVTTDCRG
KDFEMCPCNGYHCVGKAYTNYVYRLGHHH*

>TRINITY_DN7659_c0_g1_i2.p1 type:complete len:359 gc:universal TRINITY_DN7659_c0_g1_i2:82-1158(+)

MASAATDNRKVALITGVTGQDGSYLAEFLLDKGYEVHGIIRRSSSFNTGRIQHLYKDRTAHLEGN
LHLHYGDLTDSSCLLHVVSKAQPTEIYNLGAQSHVKVSFDLAEYTADVDAMGTLRLLEAVKICGL
MHKVKFYQASTSELYGKVHEIPQTETTPFHPRSPYGAAKLYAYWIVQNYRESYNLFGCNGILFNH
ESPRRGETFVTRKITRAVAKIHLGLQEELVLGNIDSVRDWGHARDYVEAMWLMLQQEQPETYVIA
TGETHTVREFVEKSFGLIDVKIRWEGTGENEIGYDAASNKVRVRISSKYYRPAEVEYLHGNPAKAE
KELGWKRKVSFDELVKEMIDSDIALMKKDPEA*

>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)

MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI

GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*

>TRINITY_DN57_c0_g1_i1.p1 type:complete len:712 gc:universal TRINITY_DN57_c0_g1_i1:140-2275(+)

MGHDGSTLPSFLPKMSFERQTTLLKLLILSIAAILSFSTRLFSVLRFESVIHEFDPYFNYRTTRFLAEEG
FYEFHNWFDDRAWYPLGRIIGGTIYPGLMITSAVLYHFMHFFHVTIEVRNVCVFLAPLFSSLTALVT
YQLTKELKDAGAGLIAASMIAIVPGYISRSVAGSYDNEGIAIFCMLLTYYLWIKSVKTGSLFWSTFCS
IAYFYMVSSWGGYVFLINLIPMHVFALILTGRFSHRIYVAYSTVYCIGTILSMQISFVGFQPVQTSEH
MAALGIFGLCQIHAFVDYLRYRLTPSYFEILFKSLVIISATIAGIIGAILTVTGKVAPWTGRFYSLLDPS
YAKNNIPIIASVSEHQPTTWSSFYFDLQMLVFMFPVGLYYCFAKLTDANIFIIIYGVTSIYFAGVMVR
LMLVLAPVACILAGIGISSVLTTYMRNIELSNDKPKPIKKAKQADPSYPIKSEVARCMVALITFFLITY
TFHCTWVTSEAYSSPSIVLSAKQSDGSRVIFDDFREAYYWLRQNTPEDAKVMSWWDYGYQITAM
ANRTILVDNNTWNNTHISRVGQAMASPEDKAYDIMRELDVDYVLVIFGGLTGYASDDINKFLWM
VRIGGSTDTGRHIKEHDYYTPAGEFRIDKDGSPVLLNCMMYKMCFYRFGSVYTEQGQPSGYDRVR
NAEIGNKEFELDVLEEAYTTEHWLVRIYKVKDLDNRGQ*

>TRINITY_DN140696_c0_g1_i1.p1 type:complete len:260 gc:universal TRINITY_DN140696_c0_g1_i1:43-822(+)

MPRGPKKHLKRLNAPKHWMLDKLSGNFAPRPSSGPHKLRESLPLVIFLRNRLKYALNYTEVMKI
MKQRLIKVDGKVRTDICYPAGFMDVITIEKTGEFFRLLYDVKGRFVCHRISSDESLYKLGKVKRVAF
GKNSVPYLVTHDARTINYPDPSVNVNDTVVIDIKTGKINDFIKFDTGNTVMVIGGRNTGRVGIITH
RERHASSYDIVHIKDAAGNQFATRLSNIFLVGKGNKAMVTLPRGKGVRLTIAEERDRRLASK*

>TRINITY_DN98968_c0_g1_i1.p1 type:3prime_partial len:424 gc:universal TRINITY_DN98968_c0_g1_i1:1269-1(-)

MEYKNILTSCIFLISVITNTQQTSYVNYFNDQSDLLRSFNIPVKPERSFNTGLPASYMKYARTNDFY
HLYARLFNENQDGKQMAFLTKPISFPSNIETVCVYFEYWMHNLGNTQLYIVGDTTDSTQMQNIN
VNNLVNTENRKERLVQTANEPNSCWREVNSCFNVKGKTKFTLHIQLVPPSTGIVSTNGAIALDSVI
VTTDKRIESTACTRRVGRRIKRDVSFTNLVSNPAAIPGMNLIFHNYDASKTTQDFECGDDLGLCGN
KYLGWTLTNQCSSSCGNGFIIESRTYRGQAIIAQYRQNFQQACNRGSCSTGPPQPPGNNLGPEQL
ATCSVDQCGVNTGTQVVFRVCNAALCQYQGTDYSLNQQVTIRVQSCTVACDYTAWQDTSACSK
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQA

>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-7928(+)

MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL

CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-289(-)
MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*
>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)
MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN1355_c0_g1_i1.p1   type:complete   len:333   gc:universal
TRINITY_DN1355_c0_g1_i1:132-1130(+)

MGDGENSVLNIDSIITRLLEARGRPGKTVQMSEAEVRGLCVKSRELFLSQPILLELEAPLKICGDIH
GQYSDLLRLFEYGGFPPEANYLFLGDYVDRGKQSLETICLLLAYKIKYPENFFLLRGNHECASINRI
YGFYDECKRRFNIKIWKTFTDCFNCLPIAAIVDEKIFCCHGGLSPDLQSMEQIRRIMRPTDVPDTGL
LCDLLWSDPDKEIQGWGENDRGVSFTFGVDVVARFLNRHDLDLICRAHQVVEDGYEFFAKRQLV
TLFSAPNYCGEFDNAGGMMSVDDTLMCSFQILKPAEKKAKYQYGGLNAGRPITPPRNQQQNKK
AKGK*

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-
559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-
44(-)

MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*

>TRINITY_DN1819_c0_g1_i5.p1 type:complete len:432 gc:universal TRINITY_DN1819_c0_g1_i5:79-
1374(+)

MILQLLLILSIWNVAEGLDNGLALTPPMGWLQWERFRCITDCKKYPKQCISDSLFKRTADRLVSDG
YRDVGYEYVNIDDCWAELQRTKKGEMVANHERFSQGIKALADYIHSQDLKMGIYTDFGTKTCG
GYPGSIFYMKEDTMSFADWGIDMIKVDGCYVCGDLYADGYKAFGFHMNQTARPMLYSCSWPAY
LNDKGKPYKEIAEHCNIWRNWADIQDSWDSVLSIINYNGEHQDEIVPYVGPGNFNDIDMLLIGD
FGLSQEQCKTQFALWAILAAPLFISADLDTMQDWQKEILLNKEIIDVNQDVLGKMGKRYYNENN
QQTWMRPLSNGEMAVAMMSTRTDIPVQMGFTLQQLSLNGIYNVRDLYTHEDKGNITQGYEAEV
NPTGVVMLKLTPVKSEEVEPAVIHSGYENAEVNEIKEKIEEMYEYIIY*

>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-
2869(+)

MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*

>TRINITY_DN11248_c0_g1_i1.p1   type:3prime_partial   len:1700   gc:universal
TRINITY_DN11248_c0_g1_i1:111-5207(+)

MEIRSLFVAFIYIVHSINAQCSSPWKSYKDSCYLFTAVSTVSPGHTWEDSRFICQRYGGDLLKLDND
NETKYINSQFDDLKIKYNHYWIGLNDIKKEGDWRWADQAPLNVTTQWRVSRGEPNNWQGNED
CIETTYDGQWNDNECSRMFGYICERSKDAVIPVTPTLPPFPTATDKPTTCEAGWIPWGTSCYGIIRG
LAKNFQDAQADCLRRFGDLVVINDQAENDFISNEISRSVGGLWIGLSDTYKEGTFYWVDKSELNF
TSWRAGEPSNDYGNEDCVEIYGRWGPGQWNDNHCTALRDYICEKPGGVHNCPRDWVSYKNY
CYQINAHPGQKVTWEDARKNCLDFNKAWRKSVNVAQADLVSITNLEEQKMLQKEFSKVNIKN
DNGFYYWIGLTDKNSTGGFYWTDGSTYKYSNWIGSPQFASQCVRSNVIGYQGGSWSKGDCSEAY

NYVCKVGRGQDRCYNPLGIQSFAVPNKAMTSNSVLGPSTPALAGRLYMKAGNSLDGAWCAGN
NTKTPYLQIDFGKMQKLTYMGHQGKSNSDAMVTSYYIKYSQDGIVWDTYGYIPPAQYYKFKIYIG
WRTNYEKVMNLPLPAPFIARYVRVYPLEWNIAPCMRIDFYGCQEEVDNQRCGLGWREDKKTKN
CYKFHNQITTWDSAQELCSIQGANLATIATPDEREFLSEQLGEFKSLVSEFWIGLNDLDYEGVFKW
VDGTPYQLSNWYYGNPKVRNEKSNCVVVRTTDSAWVNTECTVFRKFICKRNYISPYTPKESYNG
YVYSKTDYFWPLDSATDFEGSLPLTLNGNVDRVPFPIDYDVGVSRYALNVSGSSGFFKIDVANDVC
IHHPDADSCPHGITVSFVFKMSKKSSSKRQVIIDTTEKNKPLGYKVYTEFGSIYVNLRGHQKSYSGS
TVYNAHIFNHMTFTWSSLKGLSLYMNGKSRVFDLLGSYAKDYPKVDYGKSLLIGISGDSQDPAEL
MIRSLGIFKQVLDAKSIEAIYLGEFGTCKSHQFAHGSYCYEYNSTEVSWSNALSTCRDNGGDLISIH
SPVEQAFFNLKIAQYNYQRTNWIGLNAKSKNSFFKWADSSRLEYSYWAPLEPNNNNGRREDCVE
TFANGGWNDALCYLRNPFVCKYSRALHIMGSENTDDKEYKVFFSPYQTLTFGCPLGRSIEILTASY
GSVKDGCVKDVKDKVSNACVKEHCVRVQASDFFFNKINPCKDKNRFALKRLKVTYKCNLATPE
FDSTGCSNGKDSENSYRVFDKSNICYKLYRKPKTFKEAQKVCKDDNGDLVRINSRETQVYLTSLLH
TMYQKTDIWIGMMYNSTTQNYEWLDGSHVYYTNWVNRQPDPRNGDYVKVGLEEGAKNFLFW
KNGEANETLPFFCQRVKVGKTTQAPPTTQPRTGTCPKGWFTYNKNCYYVNTNRLSFPDAQAEC
QKYGKSSHLASVLSYEENRAVFYDVVNATVDFAWFGLTNEAIVTGFRWVDDQPVSFVNWYTNEP
HKINRHLCVGMGSGGKWIDLACYLKYPSICKLPLGEVIPTTTPLPTIPPTQASGLCEPDWIHYNGS
CYNFANRTSYADFHNARVTCNKMGAHVATIHYQKENDFISAQLKRMYIPNAYIGLTDFSIEGQW
QWEDESVVSYINFGEGEPKNWHGMEDCVVVKSIGEWNDIPCNLKRSFVCKKNNGTVVKTVNTT
AAPDSGYCPSGWKLYGNKCYYFRYGE
>TRINITY_DN151_c0_g1_i4.p1 type:complete len:317 gc:universal TRINITY_DN151_c0_g1_i4:106-1056(+)
MQLANIIVSSFCFFGLAYSADWGYVEGTVEGPSNWKNDFPKCGGKQQSPIDIVTSDVEYSELPKIE
MGTNWDMLLADTNMTIHNNGHAVGCDIIGPRPITTRQGDKTWNLAQFHIHWGANSVTGSEHT
IDGKHYPAEIHFVHYQSTYNSLGEALPHSDGLMVLGFFIKVDDSALISSTTQLIFRFFKEIQYKGDTK
LLFTIRRSLFDIFHSKSTSKYFHYPGSLTTPTCDESVTWNVMHPENALIITSDMMKVLQGLSGKENG
EPVKSMSGNYRPVLPLNGRVVKRNFDESSASTIIVSLMSVTIPMLTIALIISN*
>TRINITY_DN6397_c0_g2_i4.p1 type:internal len:115 gc:universal TRINITY_DN6397_c0_g2_i4:343-2(-)
LTSSDQAELTKKLSAEVANGRLAMMAIIGMFFQDGLTGSAWGDWSLYTASPLRAFENELGVQDP
VGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLATMGYITPELTGKLPG
>TRINITY_DN123301_c0_g1_i1.p1 type:complete len:272 gc:universal
TRINITY_DN123301_c0_g1_i1:90-905(+)
MAQSASYQKMDVKKEEYHAVSGASYGEEKIPQAITSQPTAVSGVESYVLDLDASQVATWTEQDVI
NNFVERVGLGYANELFMANKINGKSLMLLREDHLKEMGIQAIGDRVFLLDMIQMLKKKKKEMQ
TTAALWSGETPADGCEYSDSCGHCIRRYLCPCCISRTYWKVTGQGVFYRKVPPCRQYFGTVSTDY
MDYRFFKDLELKEEHQCCCFCPRYRLELYVDDKDHNASAKSDEANPSFPIPHELLHPEAPKVEKII
RNAWNEARLVSE*
>TRINITY_DN585_c0_g1_i10.p1 type:3prime_partial len:236 gc:universal
TRINITY_DN585_c0_g1_i10:705-1(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKES
TLHLVLRLRGGMQIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRG
GMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN3589_c0_g1_i1.p1 type:3prime_partial len:548 gc:universal
TRINITY_DN3589_c0_g1_i1:63-1703(+)
MDVTKVETKPFEGQKPGTSGLRKPVMTFFQENYTENFIQSVFNAVGPQLYGRTLIVGGDGRFFMS
EAIKVIVQMAAANKVGKLIIGLNGILSTPAVSCLIRKRKAIGGIILTASHNPGGKDGDFGIKYNTSN
GGPAPETITNDIYNETTKITEYELCKDVTVDLSKSGYSNFDVNGKKFYVEVIDSVKDYLGMMKRVF
DFKLLKEFLSQEDFKFVASGMNGVTGPYLKRIFCVELGAPETSLMNAEPLEDFGGEHPDPNMTYA
ASFVDKMRTGEYNIGAAFDGDGDRNMILGHKGFFVNPSDSVAVIAAHHSIIPYFKKTGLKGLARS
MPTSGALDRVAEKLEIKLYEVPTGWKFFGNLMDSGKISICGEESFGTGSYHVREKDGIWAFLAWLS

ILASTKKSVEQILEDHWATYGRNFFTRYDYENVEDESGNKMMTKLRELICTNELKGQQLGAYVVD
TLDEFKYVDPVDESVTEKQGVRLLFTDGSRIVFRLSGTGSQGTTIRLYIESYVTDAIKIKENTQSALK
PLIDIALKISNLPSLTGREK
>TRINITY_DN384_c0_g1_i2.p1 type:complete len:314 gc:universal TRINITY_DN384_c0_g1_i2:1018-77(-)
MRIAVALFLVFYLYPTEACKDYLNPTVCRIGVKQKGDCEYYKRLCMKTCGGCGGVIRPTQGPGPG
PVIPAGDCGVSSFQGGRIISGTTAREGAWPWQILLKANGRAGCGGSLISANWVLTAAHCITGGSYS
VVLGEHDRRRRSGHEQEIRVSRAIVHPRWNKRSFEYDYALLRLSQPARMNQYVKPVCLPTGEPRP
GQSCYITGWGKTSSRGQMHYILQQAPMQVIDSNTCNRKNYRAIRIAIRPSMVCGGGSGRISGCQG
DSGGPFVCNEGGKFVLHGDVSHGSRECSSSKTYTVFGRVNHVRSWIRQTANV*
>TRINITY_DN146208_c0_g1_i1.p1   type:5prime_partial   len:284   gc:universal
TRINITY_DN146208_c0_g1_i1:876-25(-)
TDSHIRTTSAFIPCAKPSKMPPKTKKIKVKKVAAAPFQTSKPAPKKSVNVLIERRPRNFGIGADVQP
KRDLTRFVRWPKYVRLQRQKRILYQRLKVPPSINQFTQTLDQQTATQLFKLLHKYRPETKAEKKQ
RLTQLAETKAAGKQESSRKKPVTIKYGINHITNLVESKRAQLVVIAHDVDPIEIVVWLPALCRKMG
VPYCIVKGKARLGKLVHKKTATAVCLTAVRQEDRHSLEKVSDAVRTNYNERFDEIRRHWGGGIM
GGKSQAKVAKAERAKAKELRV*
>TRINITY_DN852_c0_g1_i1.p1 type:complete len:589 gc:universal TRINITY_DN852_c0_g1_i1:92-1858(+)
MAATENQDDSLYPIAVLIDELRNEDVQLRLNSIKKLSTIALALGVERTKTELIPFLTDTIYDEDEVLL
ALAEQLAGFSPLVGGPEHVHCLLPPLESLASVEETVVRDKAVESLRQVANDHSEQDLENHFVPLV
KRLAQGDWFTSRTSACGLFASCYPRVGSNTRGELRGAFKTLCCDDTPMVRRAAAGKLGEFSKTV
EMEYLKSDLIPSFTSLANDDQDSVRTLTVEACVSIAGILPDADKETLVLPILRNAAQDKSWRVRYM
VAQKVVDLQKALGPDLSKQDLVPAYAALLKDCEAEVKTASAERVKDFSENLPEDIREDAIMKNLL
PCVKDLVIDPNMHVKSALAGVIMGLAPMLGKDNTIEHLLPLFLTMLKDEYPDVRLNIISNLDSVN
KVIGIHQLSQSLLPAIMELAEDPKWRVRLAIIEYMPLLAGQLGVQFFDEKLSSLCMGWLVDHVYAI
REAAAINLKNLVEKFGLEWAQKNVIPQVLQMAKGANYLHRMTTLFAINTMIDVCGPDITTKLILP
TVISLSKDNVANVRFNVAKTLQKIAPLIDVQIIQRDVKPCLNQLNNDADVDVKYFASVALSACG*
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)
MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN

NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*
>TRINITY_DN4726_c0_g1_i1.p1   type:5prime_partial   len:670   gc:universal
TRINITY_DN4726_c0_g1_i1:2906-897(-)
DDGNETNRTIADDTTNNDKSNSLKRVQLPSLPAFSFTEAIDKVETMFKSSVQASPVATPQEKTKET
EKKKGTFSKLKTKARSIDNDKATSIKDGVTGAATGMIKFVKGIQAGKWTDIVQGSLDVIGSIAGM
LGPAGIMVSTVLSVLSTVIGLFGGPTGKKESQEGMMERVIKTALLDARNDELTSQVNGAKEIFNTIS
DTINIFREMEEKNLPDILSFYELSFEGIEIFGILEHYIKKWCAIGDVLSKAERDKLTDDAEKNKQSDK
RDMAARCLRITNLYCDLSIYRQILIADMAGVLSNANITTTSDAFLKLIEKERQKDGVILKFLWDPL
NFRDRRFVVSKYYSEIHNFPTITTYMNTVVKANKEFQEIVQNTKYGVGLMDKPNNEKFKKTLPM
ALECQKQELQGNCVQVPFSRIAFSHGTNPVYMYNSAGSIYVSDGFYLQVRINGTTNAEMKFYGPS
VYYIGIQKDNGNTFKYILTESSAKDFVRVCEHRNMAMNGKCLTLERRDYQFSELDRIGWNDKISS
LYVPEGIKLIAYEHSSFKAKVPIDYYGPATYNMISKEKTWSSIKMELTELRTTDMIKLCSNYKLGGIC
FYFEAKAGKFTKDDLISTKKDIHQIRSMEVPGNVTVIAYTDPMMQPKHFLAVYKGPKVVSETEQA
DPHLEIELKI*
>TRINITY_DN803_c0_g1_i1.p1 type:complete len:330 gc:universal TRINITY_DN803_c0_g1_i1:1049-
60(-)
MKFLLISIVVLSFASTVENRPNKRFLKCDDVLATTVCDKFRNAASKVQLTANNVEDFVKDAYDKG
LTKAEDIKSYVEKQLEEKLLSKSCEELTGGKAFCDQLEKLGLFLRKTKDDLKPYIVKAILKGKQTA
DSIKQEVEDFLKNDLMNMECEDVLTTDQCNRMKEVGAALKLKKDEIKQAMIDSAIKGFNKIEDG
IKDTFENMKKMAEKFDCEDLLNPDVCVSIRHYSQKLRIGMPKMMRAVRTAIVMGYKVGKGFTK
VVFKLADAFIDCEDFLSAESCGKIKEAAAKIGAKIPEVNAAIKDAVIKGMTQAETIYKNTLDYLKN
IFGKK*
>TRINITY_DN13813_c0_g1_i6.p2   type:5prime_partial   len:370   gc:universal
TRINITY_DN13813_c0_g1_i6:1389-280(-)
GRGSLGMSDCAPPTDGGPTKLGACNPRARIHCADAAGDKNWSWCGHKAKEKRRRASGAPSA
NPFDSSAEERLAKLFERPVRPGEAVPQLVRLDDQRWRAMEHRRPHEAVQAVLAQGRAEGRDGP
RMRALRAIEVLYRRAGARVDEVDAAEGAESAPARHDVVLLHEARDLLLHDRLDDLLRIANELAL
HHELQALVAGGQRHRVRMERGAPAQRLCLEVLLDVAPHRHHGQGQIRARQPLGTRHNVGHD
VVMLEAPELARAPEAHHDLVANHQDTVLVAQSPHTLHVPLRCLVHAARPDHRLEHDCRDGPG
PLASDLLLQMRQRLRRAFLLRSAEREAVGVRGVHRLHETNRRAGALDEAAAEVARGCQ*
>TRINITY_DN69276_c0_g1_i1.p1   type:internal   len:887   gc:universal
TRINITY_DN69276_c0_g1_i1:2659-2(-)

FDRPKYQYSVFENANIGEAIDTVVVTQNTEINVNYSFYKPNSLFTINSMTGEISIAANLDYEEKTQH
FFHVEAKCISGSNIFTAYTSVKININDVNDEAPVFFGTNEAVVPENSLVGTPVLIVQASDADTGNN
GRVRYDIIDEVENLPLAINSDTGVIFVSGNLDYELKKSYSLPVSATDLGSPSRRAISMIKISVMDKND
NSPVFSKNYYELAIAEDQPSQLIACLAASDSDSDENGKLSYSIFLSDNSLAETFFINGTGCLSTLKKL
DRESKDSYSFTVVANDNGNPSLKGIAEVHVKVIDINDNIPIFSKSQYLLRISKNTLVGSTIISLDAVD
NDEGINGTVNYSITDGNIGSSFDIDSGGTVHLVRELSNTIAKYVLTIQAKDQGMVTSFLSTTKVEIE
VIGNSTSSGCYPLFTSSIYDVEISENIAINSNIITISANCPNNSNILYSLIESSINSGGKFAINGNGEIFVV
GTIDFEQTKFHSLIIKAYAESTPNMFSTSIVRIKLSDINDNRPIFSRTSMVIFLARNSKAKSIISTVYATD
KDSGSNQEISYQIQPNIQPSDLFEINALTGDVILSREILFKDIKNYRLQVLANDRGTPSLSSPQLTIIDI
KIYPDNMHTPQLQPSNHVKFPENSGINQLVYQAQASDLDIDLSIEALQNRPEAGNFGKFTYHLRN
TTGSQFFSISETNGRIENLISFDREKKESYDLIVEARDGGSPPRKSIQTVVVKISDVNEIPLFELSSYVF
YVSESSKIGLSIAQIMAKDNDAGQLGTLKYFIKGGNVGNKFSIKENNGILILSDFLNYMEQSVYNL
RIYAEDISNRPLGNNADVVINVLQVNASQIPVFDLSLYTYQVPEEQTSTLGTITARLGANRQTEIIYT
>TRINITY_DN876_c0_g1_i2.p1 type:complete len:225 gc:universal TRINITY_DN876_c0_g1_i2:1136-462(-)

MLLSIVITLFSSTLVASSVQRDCSWMKRRLISLEPRFASASEYEGQINVIFPYSKVLNSLINYQIKIEMN
AFYSYLSMSHFFGQEDNYLEGFAKFYHKAAMEELEHAEKFMTYQAKRGGRVNLHEISRPDQKW
ENAYHTLKASLTLERNVTKEVLCLHHFAEKFEDVDLVNFLEGEVIPEQYASMKEFQSNIKTLSRMS
SGKGEDDFMNYGVAEARFDKELLGK*
>TRINITY_DN16079_c0_g2_i1.p1   type:5prime_partial   len:396   gc:universal
TRINITY_DN16079_c0_g2_i1:1686-499(-)
GENETTIVSAITKQYENMLELRNISKEFEEIIKTLNIKERYRYFGPQKSFFDFENSKLFADELMTNINR
CEKENCSSFFSNHSVCMKHENYGSICQCNNYTYYDNETRKCEDIDECVVNNPCNLTTQYCVNVI
NYPAICGCKDGWGGEGCKIKRTCEDQRLICGVNSDCIIKENDLTSCVCHAGYYHGRFHECTKAS
NVLTAKGMKLKKNFTNELLNPESAAYKDLALEVEVTTKTELKKRIVDLADVLVNKFRRGSIEVDL
DIYLSGTSKPNEVLTELNDAIASGDMKGLDIDTQALASIEVTRTCALGNDECPTNSKCISGDGFDY
TCQCEDGYEKDGNECVKESNYKTTLAIVIPIVVVVLIILVGLFLYKCQTANRKSNEQNYGLEIRHKR
*
>TRINITY_DN140996_c0_g1_i1.p1   type:internal   len:109   gc:universal
TRINITY_DN140996_c0_g1_i1:326-3(-)
VPHQPEQCVTVKHQSCSKPDRVCLPHDHHCTFSQLCRPFNVRKCCTVVSVERRCQFVNRCVPKY
SYTRVCRHVQQCPPKCRNVCRQVDLGEHQVKSICEQKCDDSAHR
>TRINITY_DN1030_c0_g1_i2.p1   type:complete   len:1426   gc:universal
TRINITY_DN1030_c0_g1_i2:4483-206(-)
MAKVRVLALLMLICVTASNAQDGEEVFPFDVQKGEKGQPGDDGEPGNNGAPGRQGSEGPQGP
DGDVGFDGEEGDEGEVGPPGPPGRPGTNRTSVVVVYGPPGPSGPQGPDGQIGPKGYQGETGEPG
SPGARGPRGDAGAVGEAGVPGKNGANGPKGEQGSIGPSGATGIPGLPGPSGQRGPKGSKGEVGE
LGPKGAKGDAGRNGDEGESGLPGRKGEPGPRGQNGTVGFTGPAGQEGPMGPIGPAGPDGPAGP
QGPRGADGPPGTAGSPGESGAPGLPGPVGQVGARGEPGFPGARGIPGDRGQAGPAGQDGVDG
AVGARGSPGSPGIAGAAGPPGTRGEPGKPGPRGLQGGQGEQGSTGVQGSVGGRGEKGPRGLTG
QAGVPGPPGDSGTDGRPGPPGPPGNNGQRGLAGLPGSPGLPGFPGIKGHVGERGFNGPRGEKGS
RGESGRPGQRGIPGVRGPPGDIGLPGIDGKDGNRGQPGKDGIPGPPGQPGPRGIPGSQGAAGSKG
DKGAKGRTGDPGFDGAPGDKGIPGQAGDQGVPGPRGRQGDRGEPGEQGARGGQGLPGPPGA
QGPQGRQGKRGSPGLPGARGNDGLPGRQGERGFPGESGNPGAPGRPGASGRKGPSGRPGQKGS
RGDPGMPGDTGPPGQVGRPGLPGAQGNPGAAGDQGEIGEAGERGRDGKPGPRGAMGQRGAP
GPRGNPGQRGDPGLPGDDGKPGSTGAPGAPGAPGEPGQSGPRGPTGRPGQAGAPGESGLKGFK
GNRGARGRPGRAGKKGADGLKGQRGSKGEQGLTGLQGAPGLPGNQGPAGPIGLPGEQGPQGP
PGPDGKPGSKGDKGRSGPDGRPGSPGRPGPDGSNGLNGRPGKDGSRGPQGRPGPRGKQGPTGY
VGAPGAPGVPGLIGPRGPMGDNGKDGKNGADGDPGEAGPQGAQGPQGEPGADGADGLPGRN
GNPGLPGPRGEKGDRGTKGGKGAKGNKGTAGPVGQPGARGDRGPAGTPGADGEKGADGIKGE
TGFNGAEGAVGDRGDTGDRGSKGDTGFMGFKGAKGPRGSKGTRGLPGYMGPQGDIGDKGPIGP
PGPTGPAGISGPVGLPGRKGPSGDPGPKGYAGKNGRQGPPGPPGPPGLAGPSMLPPWMGGGLA

DGESKGPVVEREEPDAPEDENEELPPNEVNPFYRVYQFYSSKKTTPTDNDVNVMENKFKTKVEEL
KTEFSRIDKPDGTKDYPARTCRDIHAYHPEAKSGLFWIDPNQGCKDDAIQVTCTFSVNEDDEPTV
TTCVDPAEKQSVPQRTWASKMHSRAQKWFDEDHELAKLKYNANLSQLRYLGLLSKTATQDVKV
HCKKYVVWHDKMNRNFDRAMRFMGTQEQEFLYKDVDSKSSKSRFVPEVITDGCSANSNSVAHT
HLRFTSRKFIRLPIVDFAPTYPESPKSEFGIELGPVCFKV*

>TRINITY_DN1194_c0_g1_i1.p1   type:complete   len:555   gc:universal
TRINITY_DN1194_c0_g1_i1:101-1765(+)

MAARLGGGMMQPQIILLKEGTDSSQGIPQLISNINACEVVAEAIRTTLGPRGMDKLIVDKNGKSTI
SNDGATIVNLLDIVHPAARTLVDIAKSQDAEVGDGTTSVILLAVEFLHQIKSLVEENVHPQILIKGY
RKATKMALEKIKEINVQIKKDDQEEMRKLLQRCAETALSSKLVAGHKEFFGKMVCEAVMHLDEL
LPLNMIGIKKVKGGALEESQLITGVAFKKTFSYAGFEMQPKKYKDPKIALLNVELELKAEKENAEV
RVDNVEEYQKIVNAEWNILYEKLEKIVASGAKVVLSKLPIGDVATQYFADRDVFCAGRVVEEDLL
RTMKACGGSIQTSIHNLVDNVLGTCEDFEEVQIGCERYNLFQGCPRSKTVTLILRGGAEQFIEETER
SLHDAIMIVRRALKNDAVVAGGGAIEMELSKHLREHSRSIAGKEQLIIAAFAKALEIIPRQLCDNA
GFDSTTVLNKLRQKHAQGGKWFGVDILKEDIADNFEAFVWEPAIVRINALTAASEAACLVLSIDE
TVQNPKSDMSGDDNPITGKRGRMPQMGR*

>TRINITY_DN79_c1_g1_i1.p1   type:5prime_partial   len:450   gc:universal
TRINITY_DN79_c1_g1_i1:3268-1919(-)

EFYAPWCGHCKRLAPEYETAATKLKKNDPPVPLAKVDCVGEGKETCGKHGVSGYPTLKIFRGGQ
VSQDYDGPRDGAGIVNYMKKNSGPSSVEIKDNEHLEKKLNEAEDPLVVGYFKEENDLYKRFMKA
ADKQRASFAFAHSLNGDVNSKQGHENVIVLHRPNHMHSKHEDPKEFLSNENANTNQIIDFIKEK
QNGLVGQLTAANQESFTSPLLVTVYYKVDWKRNPKGSRYWRNRVLRVAKKFVGAATFAIAAKSE
FARQIGDWGFDVDNDDVYAIGTNAKKQVFKMEDKFSVNNLEKFVNEFKDGLLKPYIKSEPLPEN
NDGPVKVVVGENFDKIVNDPTKDVLIEFYAPWCGHCKSLEPKYTELGEKLTNNKDIVIAKMDAT
ANDVPHPYEVQGFPTIFWAPMGSKDNPKKYEGGREVSNFVDYIKREATNPVEIESKKKKKKKKEL
*

>TRINITY_DN310_c0_g1_i1.p1 type:complete len:298 gc:universal TRINITY_DN310_c0_g1_i1:1091-
198(-)

MFKIFNIYLILAVLILPTTVLFSGQAYAKEDAVEDEVVTDDVENDEDSKVETEEEVKEETAPSGKDA
EDEEEKTADGIRTSPDAETAVLFPDYPDKELPAGKPLHVLVGFNNKGSSEFVVDSIDASFRYPQDYS
YHIQNFTGTTFNRVVKPGEEATFRYSFHPHESYGGRPFGLTVMILYKDVDGNQYASGVFNETVTFK
EVDESFDGETFFLYVLLVAVALLVVFGLNYAFSNSKLKKAVTSKPTTEYGTQNGRHDVDYEWLPKE
TTTDFSKGSPSPRRSPRQRRVKRNAGSSGDE*

>TRINITY_DN2637_c0_g1_i7.p2 type:internal len:233 gc:universal TRINITY_DN2637_c0_g1_i7:3-
698(+)

GYCARDALVACRAQLSDAGVPSAEETDAHIEELKAAAQRLVAGAAAAVVFATTAAGDAFAYPIF
AQQNYKEPRDATGKIACANCHLASKLIEAKMPSEVLPDTIFKATIEIPAKYEKRYQPIADGSKAKM
NVGAIAIMPEGWKLAPRDRLPKSLKKEMKGLAWAPYSKEQPNILVAGPVPGERYETMVLPILAPD
PATNPNVVFDKASIFFGGNRGRGQVYPEGNQSNNNQF

>TRINITY_DN5584_c0_g1_i3.p1   type:complete   len:962   gc:universal
TRINITY_DN5584_c0_g1_i3:2920-35(-)

MASEMSSPFDEEETLLDEKRSKSNDYEGGFCKKNWPVVITGFGVVVLICLGVVIGTAFKSDINSSN
SRLAREEKFPYKNIRLPGNVIPIKYRIYLHPNISDNEFGFSGNVRILVNVLNKTNSVLLHSKDLNILK
VKIFSNSAAFNQKSESLATEIPTQEFLHSKKLEMLHIALNENEYLDAGEYVIYISFKGSLSGGLEGFY
KSSYTTRSGEKRYLATSHFEPTAARAAFPCFDEPAMKANFIIIIVRDPQHVALSNMPIERNVTRRDG
KVTVHFQESVKMSTYLVAFVVCDFAYVSAKTKKNNIEVRVWAPKELIAQAEFAIQVAPNILNYYEE
FFKVDFPLPKQDLIAIPDFGAGAMENWGLITYRLTSLLYDENESSSANKQWVAVVIAHELAHQWF
GNLVTMEWWNDLWLNEGFAAFVEYIGSDYHDKSWRMMDQFIIDDVQNSLALDSHANSHPISVP
VVHDPAQINEIFDSISYDKGASIIRMMKNFIGSDAFHTGLTNYLTKYKFKNAKSDDLWACLTDAAK
DKDIDVKRVMDTWTLQMGYPVLNVKRDGEKVTLTQTHFLKDQDKPAKSIYNYKWDVPVTYFT
NGENTTQFDWFYKDNKSIVIKIDENADWFKINRDEIGFYRVNYDKDTWAALKAQLLNDHMKLS
ASDRSNLMDDAFELARAGQLDQIEALNMTEYLHKEKEYVPWITALSGIAFCGKMLQGREGYKYY

EKYIVQQVKPLVDELGWEDKGTHLQKYLRGSVLRSAVDHNYTKAKNQALEIFKDFKENNKAIKP
NIRSAVYLAGIKYGTKDDWDFMYNRYKTSQFPSEQRKIMFALTDTEDKNILKKYLSWTLDNDKIR
SQDSCGVIEHISMNPKGTEMAFKFVKKNWPEIYKRYGTSSFDMSSLIKTIIGTRKTKSGKEEAKEFL
DTHKLGSGRLAGKQALASVQNHINWLEKNEKKVVEWLKNNINNKKITK*

>TRINITY_DN1821_c0_g1_i6.p1   type:complete   len:638   gc:universal
TRINITY_DN1821_c0_g1_i6:297-2210(+)
MMKLLIKFIVVFIFYDFALATTPEEFLKEYNAKIGQQGWPSSDASFAKATNISDENSEKAQEESKKY
TKIAQAWRANASLINLDGADADTKRQFKLLLTSATPKCESVIADISKVGSDLENIYSLGRIPNDRTK
IKTINSDKASLSLDEHLYLILANSRDPDELLYAWKGWRDAVGPKLKDKYTKYVELNNIGARENGF
KDKGEYKRKVYEVDNLKEIAEKFWDELKPFYQEVHAYVRYRLSNVYKDLVKDGEPIPAHLLGNM
WAQSWDNIFPLVKPFKDKPALDVTSTLKKKYSVKKMFEVAEEFFKSIGWEELPPSFWTKTLFEKPA
DRNVTCHASAWDFSIVKDGSKDVRVKMCTVINQEDFITIHHELGHIYYYLLYWDLPSVYRTGANP
GFHEAVGDTLVLSVQTPDHLHKIGLLEKVEDSKESDINFLLKTAMERIAFLPFGYLMDQWMWGV
YSGDILPNEYNKRWWEMRLKYQGIKPPVSRSENDFDPGAKYHIPADTPYIRYFFAHILQFTFHKYA
CKAAGNTKPLHKCSIYQSKEAGKALGDMLRLGKSKRWPLALKNLTGSEELSADPIKEYFQPLLVF
LKEQRKEHKYTLGWSGTDDNSNSSPNCQVSIALFIMCILFFLFGNKHF*

>TRINITY_DN71276_c0_g1_i1.p1   type:5prime_partial   len:1201   gc:universal
TRINITY_DN71276_c0_g1_i1:1-3603(+)
LTFIESLRLSSIKNIFKMMISFETFVPSTTPYAEDYNTNPQVMMLSNKIKETIDTSLNPLASQIDRQKA
FQVQEEFKSSSPHCAEVGLYLYSVERKNSDAVRLCALKFVDHFIETKWNDLTYERKTFYKKESLKL
VEQMTFENETYLKEAAAQIVVEIIKRTWPQSWADLFKNLEELQAKGDAQLELVLIILMRLSEDVN
GLDERLTTQRKRDMMTTFQDNANELFEFFIKTIRDKVTALKTESSSLLIRLSEATLFTMMEFVSWA
HFDCLFNNEKIIFQILFWLLEVKYLRYYAAACLDNIFQRKGTPEKRIEFMVVLSDDVLNIVENVVRS
LKKTPENVLPEEGYKFLKKLAEMLVSFGKIQILSLWGDERGFNEKPVGYDRYLRLMLLLFQHESM
KLTYDVSKFWHALSIHPHGKLDDTFKELMPDLLDCAIMKIAKISDPKIPNNPSSHYSTMDFDDKE
NYAEYFANCRGHMTDVCRKITIISYTVVLDHCLAKIKQATSKPPPDVSGIPKNQIQITQHYLYWDA
LVHFLKNGFAGVFFRANKEISEDTISKCNEIITLLIHYKCEVPLFTIPVINLLESVFPIFKHSRDHLLPT
MQLLFSIIRLPQNDEDPLRDHVFKLKRHVCEAYAALCKEIPHCLVDYFKQLEEFAVYQMMHNASL
TGQEKCRLIEGVLRISKHVTVKEEQDHCINAIFDMIDSMFDKEPVRRACESPISLIQYIGLDQEGTV
AADSELRTRELLFAINLWTAACKALAMSKEEEVKDEITEEEMRTQIETYGWIKRMVTMLPKMLSL
LQSYSLIWQHQDKICDKRILVHKIITEINPTIQVFQPKCADEVNEKRGLGQYYLCTFYESAYTSLGSV
SKSVGPSLFSIGGLAEAMNEKLVQHWNNLPNYRLGRITRTFIKDICLACPKKYFETFIGPFVSQVLR
LYFERISNEWAKLAQLKENPREVTDKLQEQIEIAEERMIYLMSKDLLDLLLSLLTFKRKHLRSTTKP
ADGSLETFGELGHFLLDCEETNFIIVQIIFTSLTWPDTSAAIKVSQIILAVLKKIFTDTSKLNPELPKQL
LLLILQGLNIHGGDEFGRAALTNNVLQFYLHLRMQYRGIVQVMLMIPTCEEQHLREFDLAVFVQE
LPLTEQQQKKIFRRFVAGACGTVISKLHEKDVVIQDLPALMPRQKEKTLNKNGDADDDLGLCSLF
GV*

>TRINITY_DN6428_c0_g1_i2.p1   type:3prime_partial   len:303   gc:universal
TRINITY_DN6428_c0_g1_i2:906-1(-)
MLSSLKLERNKNLRYYRYRYSCCNIRVPSTSQKILNPFTLVVGGNAIYLDRQNVQCPGSAVITQLLL
RRYKSTIRYTYSCSTIPRKMECQNMKTPLNFDGKGDARYLDRHPVSCPNDYGLNKMRLQRGSNL
KTYAYHYRCCKPLYSVQFQENKVDGGFTNWSKYGTCTKSCGGGIQERSRSCENPKPLNGGKQCI
GVSVETRSCNTDPCPVDGGFSNWSNYGTCTKSCGGGIQERSRTCTNPKPMNGGKQCVGVSVETR
SCNTNTCLGPKQCKLKFTAYNKDGKGQVFYLDRHNVACKPDEM

>TRINITY_DN1272_c0_g1_i1.p1   type:complete   len:262   gc:universal
TRINITY_DN1272_c0_g1_i1:957-172(-)
MRCQLFLLVACMAIATCSAYDWRNKVQNMLKYAKVNIFDRAAYILGDKRQHQLGKPWFCHKL
DCPAFQVVGNYTNKKDGFEERCYPETAWVMTSKEVDANENDIETRDMFMKLFKYIQGENEKQE
KIEMTVPVFTYSQLKKDDPSKRYISMHFFVPPSQEKNIPKPTRDDVTIMDVKADCYYVRSFGGYV
MSFGSKIMNEEKKIHAALEKNNLDFEARKTMAAGYDSPFRLFNRHNEVWVAKRKTMDSGCCTP
RKSTNVMY*

>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-2701(+)

MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*

>TRINITY_DN16120_c0_g1_i2.p1   type:5prime_partial   len:232   gc:universal
TRINITY_DN16120_c0_g1_i2:734-39(-)

GFFLKGLNGPPGPPGPPGPSGEPGPPGLPGAPGAPGHVGEDGAPGPMGPPGPPGPGGPPGFPGE
KGDPGVAGLPGSAGLPGAPGLPGPQGPPGIAGPEPITPNFTVICEGEKGWVQCKQYELIKITKAF
WGRDDYETCPKVPAGLTAGRLCETNTANTEAKVNGQCKNEQGCEVVASNIFFDDNSCGNVYKY
LKIGYECIPDESNAVDVLREGGRRKRKRATKDKRSFRDS*

>TRINITY_DN2217_c0_g1_i2.p1   type:complete   len:254   gc:universal
TRINITY_DN2217_c0_g1_i2:884-123(-)

MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*

>TRINITY_DN730_c0_g2_i3.p1 type:complete len:235 gc:universal TRINITY_DN730_c0_g2_i3:1019-315(-)

MPKKDRTELNRELEAFAVQIPSANSGFRMQLGETFIQNVKDGKIKGFEYKVRDPYRNDLFHDTSR
IDLYTDYELIMDNLYVKNRSSYKVEVEDEKGLLAFKEKLLSKPFMCHAKLHLMLKEDLTQKLSND
FFVTVFPENPDVKAAIEKGFQHALDCVKNKKHYKVWFTPEIWFWYKDFVTNATKTQFEFGDLRY
SKIELNDKKGFFSSSKDLNCPIKPSIIELVTTEAIMPDGY*

>TRINITY_DN187147_c0_g1_i1.p1   type:complete   len:1223   gc:universal
TRINITY_DN187147_c0_g1_i1:3708-40(-)

MLTKFETKSARVKGLTFHSKRPWVLASLHNGVIQLWDYRMCTLLERFDEHDGPVRGIDFHENQP
LFVSGGDDYKIKVWNYKQKKCIFTLLGHLDYIRTSFFHKEHPWIISCSDDQTIRIWNWQSRNCISV
LTGHNHYVMCAQFHAVEDYIVSASLDQTVRVWDISGLRKKYCAPGAKPKEDITAPKTPGQMDLF
GHSDAIVKHVLEGHDRGVNWVTFHPTMPLIVSAADDRQVKLWRMNDSKAWEVDTCRGHYNN
VSSVIFHPRLELILSNSEDKSIRVWDMSKRTGVQTFRREHDRFWILGAHPTLNLFAAGHDSGMIVF
KLQKERPAYAVHQNTLYYIKERYLRMYELGTSKDIPIMQLRKSSGRSTPLKLIFNPAERCILITYNND
TSAGESQVYELHTLPKDIRSTDPEQSEGRRAAGTAAVWVARNRFAVLDKQQNVVIKNLKNEVTK
KVQTPACDMLFYAGTGSLLLRDAEQVMLFDVQQKRVMATVKIAKAKNVIWSSDMSYAAILAKH
SIAICNRKMENLCTVHESVKVKSGGWDDSGVFVYTTSNHIKYTLTNGDAGIIRTLDLPIYITRVKGS
NVYCLDRECKTKVLNIDPTEFKFKLALVNHRYDEVLYMVRNAKLVGQSIISYLQKKGYPEVALHF
VKDEKTRFGLALECGNLEIALEAAKTLDDKACWEKLSEMALLQGNHQIVEMCYQRTKNFDRLS
FLYLTTGNSDKLRKMLKISEIRKDVSGHLHNALYCGDVEERIKVLKQVGQGSLAYLTAATHGLVEE
CEEIKATFDLNPEKLPPINPNAKLLRPAVPILKNEGNWPLLSVSKTLFEGAAAMKDAGTSNMAAA
VDMDDEGEGWGDSDLVLEEDAGFVDPEEKLDIDEEGGGWDVDDDDLELPPDLDVGPVSSGGED
YYVPPTRGNSQAQVWCTNSQIPVDHLVAGSFDSAARLLNEQLGVVSFEPYKQLFMLAYARGRVA

APGLPSTPPLFYYPHRNWKEAGAKAGLPAVAIKLNDLVQRLQTAYQLTTGGKFADAVERLHQILL
SVTLLSVESRQDVTEAQQLLGICREYILGLQMELNRKELPKQNAQQQKRICEMAAYFTHCNLQPV
HLVLTLRTALNLAFKIKNYKLASSFARRLLELGPKPEVSQQTRKILLACEKNPTNAVQFDYDELNP
FSICAVSYTPIYRGKPEEKCPLCQASYKPEYKGTICKICRVAEVGRPGSGLKISMGR*
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-
372(+)
MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*
>TRINITY_DN923_c0_g1_i1.p1 type:complete len:442 gc:universal TRINITY_DN923_c0_g1_i1:53-
1378(+)
MAEKYDLTYKVGAYLDRHMVFPLLEFLSSKEIYDDTELLRGRLELLQGTNMLDFVKDEYQRLHQT
DEVPDELANKRQEVIRQMRELEAATESITAAFEDPDFQKEASSARDGAQLFKYLNETFGIRSENLD
TLYQYAKFQYECGNYNGASQYLYFYRVLVHDDDKNASAAIWGKLACEILTQNWDPALEEINRLK
EVIDGDHFSHPLQLLQQRTWLIHWSLFVFFNHAKGRDLLIDMFLYSPNYLNAIQTSCPHVLRYLTT
AVITNKRRKQILKDLVRVIQQESYTYRDPITEFLECLYVNFDFDGAQKKLLECETVLLNDFFLVACL
EDFIENARLFIFETFCRIHQCISIQMLAEKLNMTPEEAERWIVNLIRNARLDAKIDSKQGHVVMGT
QAAAVHQQVIERTRSIMFKTQAITTNIDKKLASLQKQPYTEPFGLAW*
>TRINITY_DN32270_c0_g1_i1.p2   type:5prime_partial   len:309   gc:universal
TRINITY_DN32270_c0_g1_i1:1-927(+)
AMSPEGGAPPAAPGAEPPLQFEMFSREWQQLSQQDNFDGFRIEAVTQVTKYLQAAHTLFLGTQL
RECGYIYQFGPVFQSEGGRTVMVARAGLDGGVSGRIIQKFGTGFEVKASSQTNLKNQQQNIHDA
AAEYTGKDWTCGAKLAWQGAWLAGGSFTQRLLPSLQLGGDLTCVAVNNLMTIWQLSARWTEG
KNVFTAGLNRQPDPKSPVGANLHEIRLQYVRKLSDRLSLGTEFKLSHPDKDSGLSMGYEYAFRNA
RVQGLLETDGRVSCCVSDYQGLGFSGMIDYVQGNYKFGVLMHVMPPEQGQPPQ*
>TRINITY_DN1936_c0_g1_i1.p1   type:3prime_partial   len:1224   gc:universal
TRINITY_DN1936_c0_g1_i1:3669-1(-)
MVCPAVITIFLFSVLGSSSSQNCDFEDVKSCKWTQYAADKFDWSRASGSTGSTGTGPVNDHTTLV
KTLKVNTTGGNANGASCVFPFIYQSKKYFKCLQYYNTEWCATVPNYDKQAKWGYCVPTGFYMF
IEASNPRKKGDNAILVSPFVPKGPKCLKFWYHMYGPHINRLNIYVMIGGHTGKPIWSRIGTQGNK
WNKGQVTLVGRQPFQVVVEALSGISYKGDIAVDDISVSSTKCTQPSSTTCSFEDSQCGYIDDTSSDV
QFQWTRSSLSTSSSGTGPKTDHTMQSETGFYMYTEATRKKTGSKARLMSPVNKATSGSCLQFWYH
MFGADMGTLSIYLKVNNKLQSTPLWSEQGDKGNEWKVATATITTQDSYQIVFEGKIGRGYRSDM
AVDDIKLTDGNCPPPGFCDFETGYCTYFNSKNDKFDWLIGSSRTPSRFTGPNFDHTYGNANGSYL
FLEVSQPIKAGDIAILESQQFNAVGGKTRCLNFWYHMFGSDIGSLQVVYKVFSGSQQERVLWNLT
GQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSGYKGDIAIDDVQFTSLACTIDPPEANPNG
KTTMKPPTTYPRTAPSTPVPTEFSCNFEKDLCKLTQDSKGTFNWTRIQGYTGSPGTGPSTDHTYGR
GFVPKYGPGSLRHAGGKCVHVLNGGFNKPKEGNPLVLYQGCGQTRLEFVFKYGYLKLTRLNMC
ATLEGSSTSSGTKVVLSNTCMNKWKMLDNNTIQDVKTGLCLSPFKGSDYPSNNSPLVVDKDCKP
KSRIFTFSPTMGHYAYIETSPPRQPNDTARLISPILKTPRCLNFWYHMYGAHVNMLNVYVKTSNGP
YVSPAWAKYGSHGDTWKAAYIYMNMTGPYVYAFEGVRGIGWQGDIAIDDITLSESCPAPVECSFE
ETSPIMCGWTNLKNDDFDWSIGQGKTASTKTGPKNDHTYGTSQGHYMYIETSNAPAKATAYMYS
PWYYNTGQKCVQFFYHMYGQQIGQLEVYIRYSNSRYLYRQFIRSGNQNNTWHMGQVTVKRNN
VYFQIIVRGTKGNGYQGDIAVDDFRIRDGACPAPGDCDFEHADFCSWMQEDNDDFDWIIGSGST
NSFLTGPSIDHTTQSNGGYYAFIEASSPRQPGHKARFKSMVFAPTTGSGRCFSFWYHMRGYSIGNL
TIYLRKVSNTKTLSEEVMWLLGGNQGKAWNQGRFTLKSSTLHEVRFIYLRLFHCKICLPCY
>TRINITY_DN81944_c0_g1_i1.p1   type:5prime_partial   len:222   gc:universal
TRINITY_DN81944_c0_g1_i1:3-668(+)

VHQVIARYSINMLPQILSTFVILTVSTALADKPWFCHDLDCPSYKVAGAFTEKKDGFEVRCYPKTV
WAMTQAEFSAKSSSYSTGSLFMKLFKYISGNNKEGKKVAMTAPVFTYSDLKKGDNSTRVIKMHFF
VPPAQESTIPAPSGDDIEIVTVPADCYVHSFGGFVFSMGRKIRRETGNLVKSLEKAGIKSYDLSKSM
YAGYDSPFRLFGRHNEVWLAKM*

>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)

MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN144181_c0_g1_i1.p1   type:5prime_partial   len:309   gc:universal
TRINITY_DN144181_c0_g1_i1:2-928(+)

INVLAKRFDVKVMQIDVTFPINSEKEVLELFENTLKENKHIKIAVFDHISSATAVKMPIHDIGRLCR
KYEVISIVDAAHAPGQIILDLDNIPVDIYVGNLHKWYYTPKSCAIMHVNPKLHDVMQPTVVSHG
CYGNFHWRFFKQATKNYSAQMTAGFAVQYMEKLGGIRHLHEYITPFVEWAVELFKRDWGTKELS
IPDSMKAPYMRVVYLPDIFTQVYGTDAAGADRLIIDLIKKYNLSMFVNPAQGKLATRVSAQIFSLK
SEYYYASRCIMDEAKILQEGVNVKIMNEAKILQEYENIKIKDEAKPL*

>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)

MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYQDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*

>TRINITY_DN7504_c0_g1_i1.p1 type:complete len:414 gc:universal TRINITY_DN7504_c0_g1_i1:87-1328(+)

MAKIPGGIVVEMDGDEMTRVIWDMIKTKLIFPFVDLDIKSYDLSIQNRDNTDDKVTVDAAEAML
KYNVGIKCATITPDEKRVEEFNLKKMWKSPNGTIRNILGGTVFREAIICKNIPKLVPGWTKPIVIGR
HAHADQYKATDFLVPEAGTLEMKFTPKGQTEPTISYVVNNFAGAGVAMGMYNTDKSIRDFAHSS
FQCALEKNYPLYLSTKNTILKKYDGRFKDIFQEIYDNEYKGKYEAKGIWYEHRLIDDMVAYALKVE
GGFVWACKNYDGDVQSDTVAQGYGSLGMMTSVLMCPDGKTIEAEAAHGTVTRHYRLHQKGQ
ETSTNPVASIFAWTRGLAHRGKLDGNERLMNFAKLLEEVCVATIENGSMTKDLAICIKGMKNVTR
ADYLNTTEFLQKIADNLTTKLNLSHL*

>TRINITY_DN1119_c0_g1_i1.p1   type:5prime_partial   len:949   gc:universal
TRINITY_DN1119_c0_g1_i1:2934-88(-)

FFFNPQTVMHEKKFSRMKFILLFSFFAISLGQNCNRMHKKIGCFWNDKNAKVLFNDRDSINNSTY
GALSDKLACKCNAVARSNGFKFFALRHFGICIGYNKITTGSKSIEHCIDTKSNGVCNLGDMNTCT
GTQNTADMMYQIVPEKCPSRHKKVGCYTEDRNATFLFNDRSNIDWPNFEKFLVELACKCNKVAL
EKGFNFFGIRFYGVCVGFKNISTEEKSAFHCKDPNYRPYRPCNMKDSNVCAGDHFLTDMIYKTER
QNVDKLFSEWSGWSTCSKSCGGGTQKRTRECKDKKSCSDAGGEEFKSCSNSFCKGSTGVAKAQE
VVETFLETFHKVEFPDIKPSGKYLKTIFEIQKAVGEEFNSVDPSVKGVPLEKRLTELEHFLKIAVEGG
SIDFARSTLGKGMFVFMKKKIKEGLPINDIDTAAKGFLNKLTGDIGSKKMNEILSSKGDATLMFTID
TTGSMAQEIAAAKAIAKQIISATREYEVDYILSPFNDPRTGPVRYRSTNDRANFVSDINKLLASGGG
DCPELSIKGMLNAFDKGPKYGSPMFVFTDASPKDATPSNMAALKAAASSNNAKITFFTNLKGCG
KELGIESYKEIASHTGGQVFPLKNEAELINFTEYVKSSLQQDTIIAAGGSLNSRISKRAAPRSHIFMV
DQSITRLIISVAFEKQNTGKHIKLLDPNNKNVDSSTMLAMSLIYDIKNPKVGLWGLSFPHIVGEFGY
NVQAVTENAIEFAHSFLHQHNVKGSDVTVSLENPIKGIRNMMVIRLGGADHIDLSTIKVHLVDHS
GNKLVSNVMTDRLDSDEIRNASIVPPTVQFKVLLTGKTKSGQQFQRMSQGSSTPVSAFMRTISAGY
DFTATMGKDWISIQIEIVNKGSAESFNFQAKTKYGTLKNPNQTKTVNKESMITFSYKPPNRHDLK
GKTDKVTVIAKRASGEKINHFISILLIK*

>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-2618(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*

>TRINITY_DN25375_c0_g1_i7.p1   type:complete   len:811   gc:universal
TRINITY_DN25375_c0_g1_i7:112-2544(+)

MNVNEKMNIYFCIGTLLFQSLLVLKVEGIFNDCQTKGSCGKCISSSPECAWCEDIIYKRSLNSKSYY
KKCDVLDNHKRQGCQNITNPPSSSTIDKDAELKGDTRVSPQEITVKLRPGQATTVDITVKTPKNFP
IDLYYLMDLSLSMKDDLEQIKDLGDILGEEMKNVTTNFRLGFGGFVDKPINPYTTIKPDEIEAYIRD
EDAQYTFTYKNYQPLDEDPSLFSKTLEQVNISFNIDGPESSLEALMQVIVCRNDIKWKDKRKARRI
VIITTDADFHYSGDGLLGGQVIPNDAQCYLSKGNYTAWNQFDYPSLSQIRSVMIENQIVPIFAITGN
FELYKKVAEFFGAGSGAVADRLSKNSDNVVPLIKEAYEKIAKIVNINSDAPKGIDMKYTAICGTGK
NVEAREGTDFCDDVEIGETVVFKVEMTAKDCELVGEDLKFKIKTNFDDVNVAVKLLCECPCEQD
KSKIVIDSEHCNSRGNLTCGQCQCDLDFYRGRFCQCTVEEAKNQTLCRLPGEVGPVCSDQGFCEC
GECICDEPKLNRFGEIEYIYGDQCQCSNTSCGRTTNENLLCGGPSHGRCDCGECTCFSDWQGPTC

EVECVKSSAACIDEEGIECSGKGKCVCNRCVCDPGYIGDLCQECVSNCPDPCQDYRECVKCRVFK
MSDLSDEECKSECLKHNITSHIVTDKVPEDKRCIARDEDDCSFVFTFVKSNITDEVQLIVQQEKICP
AEPDILAIILGVIAGIVGIGLALLLIWKLLATIQDRREFAQFQKDRQDPKWDSGVNPIYQQATSTFQ
NPLYGNKGEETEKILDSQ*

>TRINITY_DN124859_c0_g1_i1.p3   type:5prime_partial   len:237   gc:universal
TRINITY_DN124859_c0_g1_i1:884-174(-)

HRLEEDMRCVHHHEPRVRGPVRVAGQSEGLVPAGGDDGARLGHDHGDHVFGRLQGLQGVG
EEDVHVVHDDAATDVEAAPLRFRFAQYQVGFGLRWCIEAEGARNARADPSDAGNQRHERTQV
GLAGRAALQRSAGRHLPRLRIARAGLREARGDDQRGPFGIRLPEGAALHRQMHQHLRDEDHA
ARQHVGRRNAGRQKHLLEDFGEGKDSLEGVWAGRHGESGAPGHQPKVHHHE*

>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)

MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID

>TRINITY_DN3452_c0_g1_i1.p1   type:complete   len:466   gc:universal
TRINITY_DN3452_c0_g1_i1:139-1536(+)

MDVACFRFRMILSIISFTLLTFDLPAVNSEALHLTEENYQDTLDKNKLVLVNFYADWCMFSQQLAP
IFHQTADIIHEEYSNVKLGRVDCEEQQKIALDNMVSKYPTIKIFRNGKALRKEYRGQRSVDAFAQF
IKEHLKPVVQDITTSPNDMKINENRNTIVGYLESKDSPGYQSFAKIAEDLGETTDFFALLGDASHK
ERAVGESVVFKPKKSYGESESTYSGSVSNLDRLKAWATEKGNPLVREITFENGEELTEEGLPFLLLFY
KPGDTTSIQRFKNGVMRELLPERPRINFLIADGTTFSHPLHHLGKSLDDLPLICIDSFRHMYLFKKF
DEVDVPGKLIAFINDLHSGKLHQDFHNPSPDDQAAQGHHHGGQAQIDNNAQQPPQEQQPDQ

KQPDQKGEDTIQNTDQPPSGSGNKGSGKKPASGSGSGQSPPETVFHKLAPSENRYTLLHWRDYS
GNYRDEL*

>TRINITY_DN15151_c0_g1_i3.p1 type:internal len:560 gc:universal TRINITY_DN15151_c0_g1_i3:1-1677(+)

LDGAERPRILAAMLSTLRRAPRLAARAPLAAPAAARAFAAAKDIRHGSEARALMLEGCNRLAD
AVAVTMGPKGRNVVIEQPFGAPKVTKDGVTVAKSIDLKAAPMINVGAQLVKQVASKTNDVAGD
GTTTATVLARAIFREGCKAVAAGMNPMDIKRGMDAAAKVVLEDLAAQATTIESPTSIRNVATIAA
NGDAQIGEMITDAFEKVGKDGTITVQDGKTLEHELEVVEGMKLDRGFISPYFITNVKAQKVELEN
PLVLLYEKKISSVQAILPVLEQVAKVQKPLLLIAEDIDGEALAMLIVNKLRGGLKVAAVKAPGFGD
NRKEILKDLAVLTGAELLSDELGDKLEDLQITQLGTVGSATITKDDTVLLDGSGNKSAIDERCEAIR
DAIELSTSEYEKDKLKERLAKLSGGVAVIKVGGASEVEVNEVKDRLNDALCATKAALEEGIVPGG
GTALLYSAQKLEALTLDSLDQQVGVDAIKAALSQPCVQIAQNAGEEGAVVVRALLQEGNAARGF
NAATGQYVDMVEAGIIDPTKVVRTALADAVSVASLMTTTEA

>TRINITY_DN38657_c0_g1_i4.p1   type:3prime_partial   len:302   gc:universal
TRINITY_DN38657_c0_g1_i4:181-1083(+)

MAIDNSRFRSPLPFILILGVIGSIILYLFISYRNENTILKDKVEYYVYKSTSQGQALTKTKNSLDTCIAQ
EQSFQQGIQNLQVQVKDKEKEIGTLKGDIDACNLRRDLGNKFYTNVKQILGKLEALQELEKGQS
RIPDEAYDLLKDEIGRIKENGEKVKILEKEKKIVEEKLLKQEETGKSLETQMKDYQSQFEELTEKNR
KLSAQIKVVENDIAKDKARGFQVKQISNETNVQKIILGDAPASDHDAPASDNDAPASNGAPASD
DAPASENSDDDAPASENSDDDAPASENSDDDAPASE

>TRINITY_DN9413_c0_g1_i1.p1   type:complete   len:419   gc:universal
TRINITY_DN9413_c0_g1_i1:1414-158(-)

MKCEILLIFYVFFGSANSRKSAMFQDQFTSASFWNRLKANATLYMSPQNSAYSTGRGRSGYSTDTD
MCDRVTGVPRHLTFITRYNHYRKYTHAYNIPIISTSRVQDAALKRACYVLKFLLADRKVLRDSLYR
NFGRVGIMAVNEGTTSIPEHRWLGPSWDQRARGLGGTLSVPISTGGEENLLCWKSRDRYPREDIF
LHEFSHGIQEVAVRGGGIPGYFSRLTSAYNYARSRGLWRSTYAMSTVQEYFAEGVQSFFNVNDYSR
TPNGIHGPVNTRSKLRTYDPTLFRLIKEVFPCMNIIKDRCDKSSTTASFRMNCDGSRPVRTVRPPSG
KTTTTTPSTKSGCQDLKPASCVGWKVYCSNPSHLKSMQYYCKKTCGFCGRPSNCNDNNTLCGS
WASRNECTRNPKYMLVNCKKSCNRC*

>TRINITY_DN119684_c0_g1_i1.p1   type:complete   len:662   gc:universal
TRINITY_DN119684_c0_g1_i1:2182-197(-)

MKLEIILFTLLVALTVHCSEKKDDSKKDVGTVIGIDLGTTYSCVGVFKNGRVEIIPNDQGNRITPSYV
AFTEEGERLIGDAAKNQLTSNPENTVFDAKRLIGREWGDKAVVHDMKFFPFKVVEKGKKPHVQ
VNVKENEKKTFAAEEISAMVLVKMKEIAEAYLGKKVTHAVVTPAYFNDAQRQATKDAGVIAGL
NVMRIINEPTAAAIAYGLDKKEGEKNILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDF
DQRVMDHFIKLYKKKKSKDIRKDNRAVQKLRREVEKAKRALSTQHQARIEVESLFDGEDFSETLT
RAKFEELNSDLFKSTMKPVQKVIDDSGLKKKEIHEIVLVGGSTRIPKVQQLVKDFFGGKEPSRGINP
DEAVAYGAAVQGGVLGGEEDTGEIVLLDVNPLTMGIETVGGVMTKLIGRNTVVPTKKSQIFSTAA
DNQQTVTIQVFEGERPMTKDNHLLGKFDLNGIPPAPRGVPQIEVTFEIDVNGILRVSAEDKGTGK
KEKITITNDQNRLSPEDIERMVNDAEKFADEDKKVKEKVDAKNEFESYAYSLKNQISEKDKLGGK
LSEEDKGVLEKAVDEAISWMDSHQDASVDELKEAKKKLEDVATPIVSKIYQQQGGAPPPPGGEG
GEEKEDKEEL*

>TRINITY_DN1335_c0_g1_i1.p1   type:5prime_partial   len:651   gc:universal
TRINITY_DN1335_c0_g1_i1:2201-249(-)

LSRKSYTMKAACLFLSALSAIFCINASTLTKTLTHLEQQKLVKSLDKSYNDLESLHYAAVSLNALGK
SLSNTDQHCQKALDKVNQENTESVFRFSEVMKVLKCKKVPSLKLQTLINDNTDSVGYSHVIAAM
VNLGQKVDAETLKKFVSVAKDNDNPASAAETFYAASLLPNSEVMKPIYSMVEDIIAQADEVNGDI
LQYEGGLGVTSGVVRGIILLGEKNGAPLLKVGQSVKFAQYLINRKFVYKVKDIYHLVVALNALSA
NQQQVPLVVSVHASSSITRDNNMLKVRVTNVLDQSIPDVSVTAESFSTSDDSVTLFENRPFSKSSDK
DDYLVLEGEVGVGYIAAHSFGLDIMAADPSKGLYNCKVNVKSPKNSKRYAMGGAFQIPVKVLAR
VMVEDVEVAAGDKDHTLTRTTQLAYPNKLSSKIEADYHQKIVMTFNLKDVHTKELVTAHQTFIR
LVHEKTGQEIFFVAEPDEKDNYKFTLDVGATAKDSFNSLSGQYKMSLIVGDATMQVPINWDLGD

VVLTFAGEPKKTKRQERITQPKPTIDHMFRVPEKRPPKVVSTAFTILVLSPLLIMFAMWVKIGANIS
NFTFSLSTLLFHVGLCGIFVLYYFFWTKLNMFETLKLLAVVGGMTFLGGNKMLADMAAAKYRS*
>TRINITY_DN941_c0_g1_i10.p1   type:5prime_partial   len:114   gc:universal
TRINITY_DN941_c0_g1_i10:3-344(+)
IDVTKRGKPVKGSPFEVVVGSPESKPSVGSKCDLDFDIPDIDLPKDLKVLKADLTRPTGKKEPIECT
VTPENTLGLEFTPSEPGKHYKARKTSKRQSIRSCGRKPRIKTFSWK*
>TRINITY_DN34481_c0_g1_i1.p1   type:complete   len:802   gc:universal
TRINITY_DN34481_c0_g1_i1:2487-82(-)
MTTPHMSPQEEQEKLLEEALQIVKNQAFQMKRCLDKAKIMDALKHASNMLGELRTSLLSPKSYY
ELYMGVSDELRHLETFLLDEFDKGRKVNDLFELVQYAGNIVPRLYLLITVGIVYIKVGDVPKKDIIK
DLVEMCRGVQHPLRGLFLRNYLLQSTRGQLPDSETEESEGTIKDSIDFILLNFAEMNKLWVRMQH
QGHSKYKEKRERERQELRILVGTNLVRLSQLEGIDVETYKKDVLPGILEQCICCRDPIAQEYLMECII
QVFPDEFHLQTLNAFLKACAELHQDVNVKNIIIALIDRLAMFAHRGDGPGIPNDIRLFEIFSQQVA
HVIQSRSDMPTEDVVALQVSLINLALKCYPDRVDYVDKVLEYTEEIFSKLNLAYIDKNNAVSKELM
RLLRIPVDIYNNVLTILKLKHFAPLFDYFDYATRKEMAMYVINNALDNETLIPSQEEVDSVLQLAA
PLIMDQDDQPTEPEDPEDFAEEQGLMGRFVQLLYSDNPDQQYLILTTARKHFGNGGEQRIKLTLP
PLVFAAFRLAFIYRDAQEQDDKWDKKCQKIFQFCHQTICALSKAEYADLSLRLFLQGALAADQQ
KFTNAETVAYEFMSQAFAIYEDEISDSKAQLAAITLIIGTFEKTSCFTEENHEPLRTQCALAASKLLK
KPDQCRGVSVCSHLFWSGRVNEGESEEKDAASNECRDGKRVMECLKKSLRIANQCMDPTVQVQ
LFVEILNRYLYYFERGNEAVNSTILNQLIDKIREDLPSLEVNDEMEQINKHFQNTLSHIQSKKDSAD
ENEAAIYKDFIL*
>TRINITY_DN8008_c0_g1_i2.p1   type:5prime_partial   len:1298   gc:universal
TRINITY_DN8008_c0_g1_i2:4205-312(-)
IMSPKERTCPLTQYLFTPIYTGSCKISDAEQRANDRQVKSAVQMAGSAIGTVVGTIFGGGIGGAIGG
FIGGAIGSLIGGIIGLFSSCDKSYEVVTRSWVEERKCILLEPDVRSITRPYSECFDAKIKANTGFKVPY
TCNCKVNDCIVKSPSPDCLLQNQQCERKRKDFLERTKTVPPTFSKLYKSLKQCQDSVGASILKVQS
AKKTVQFYEKEHTRIKNMLLALEEENKFSKQALSDATSILQDDLCVSNAFMNNKNINELIDIKNV
QFDTLLPLVNNIRINAHVKVKGNDVLVPFVHELSNDNKVSLNAFGRKIIMNTICKKIRKRRSLDL
NEDEKNDLAFVPWINNVNGTATVADLSCVSLDKTLEFIRHTVKTLNKKSSYANDLLMQLQYSTN
KLNPSLYTAFTAYSGITTEKNDIIKANEALLMSANNELNKIQDQVSVSNVLDIWGNEAEIVTGFNN
VSVCLNYKDCIISAIDTLKNLPTMFRNSREAYMKEVMELEKELTKIYEEKNLIGLSAKAQSVERIVS
RIKYMSFHCSKRPIVTLKEVKDMDVEKGKNITLRCIVRSARAIKYYWQFNDDILDEENSHSLTIPVS
NETSGIYRCIAKNLVGNGTSNQIRITTYTKPSFIEEPKDQIYILPSHPQSNLVLTCNVTNNYDTTIAW
YYRSFTIGKRPNIINGQTSILLDLDGTKQENSGYYFCQAFNKHGRIKSREARVNILNSNIARLEVNIS
LDILQTDEISSNSFKKISGDMLSEIKDLGRTLTTTVIKSKTKTRVTFNLKVKPITDNVKSLSESFNISSR
MRQNLGSAAAVLLGKLSENSFKLPINDGEFAKVDNDTMTYGMKLNICQEGYKLHKNGFLCVQC
PFGTAGKDCKKCPLNTYADAPGLGICKKCETSKITEQIGSTSKSQCIGTTERKVDIIFAVDVSKRFLE
QINGLQKIRELLSKFIKTYSGTKYNTRFALLTYYKYVDVYLSLTEYYHSDDILGLLEILGEGSRMPDT
KLALVEIETMFDEESSSDRKKVAVFITNGGTSDSYYLMELFKYKRQAITLQNKGVHIISVGLGTVDH
RGLRALASYPKLENAIFPSSNSVAVQKMIYSIGNELKDNCYTPAVDFGIIYHPNHKESLVQITKEQF
LRNANWLSKLLLPIYRMFKQQSYYFMYKHSVPSNSFGSFSETGFQERIVSYLQQQTSGFDIYKKIST
AINVDMTEIYRSFSKVKVLIIITEEPLDEAVLKQYEISVHGEKIDIYNFVKDASSIEKFEGPFSDKPRA
HRLVYGIDEVNFLVNAINCNRTKICG*
>TRINITY_DN1320_c0_g1_i1.p1   type:complete   len:229   gc:universal
TRINITY_DN1320_c0_g1_i1:105-791(+)
MRCLSIILTILLVHLFDQASSRSCRDYLNNQCKKYLCNVPKYHHFIKSFCKATCGLCPVIHGLQMS
TMSTPTTTTTTATTTKAPEIVLLSSGKTITGNAFDTPGPANQCNDGNAASLCITLQNETAFIQVDLG
SAKKISRMELKKYYHYENQLEINFLVSNDATFSASTVCDIWNVRSVNEGDIQDKRRDCNSNASSQ
TFRYARVQTVNNKGAREHLRVGEFEVYGVL*
>TRINITY_DN945_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN945_c0_g1_i1:151-
1554(+)

MKLPQSFSHIIRNGTKTHNVVRSMFTRCQSTQVQTTDLKARLEEIIPDKRKEVAEFRKEHGNTKIG
EVTVGMAYGGMRGIKGLVTETSVLDPEEGIRFRGYTIPECQEVLPSAPGGEEPLPEGIFWLLCTGEIP
NKAQVDALSKEWAARAELPQHVVMMLKNFPEDLHPMTQFLTAIAALNKDSKFAKAYADGVPK
TDYWMHTFEDSMDLIAKLPVLAACIYRNLYRDGKVPPINPEKDWGANLADMLGYDNPKFTELM
RLYLTIHSDHEGGNVSAHATHLIGSALSDPYLSAAGICGLAGPLHGLANQEVLVWLHKLTSEIGF
DVSKEQMQEYIRETVKTSVVPGYGHAVLRKTDPRYTCQREFALKHLPDDPLFKVVGRLYEVVPDE
LLALGKVANPWPNVDAHSGVLLQHYGMTEMNYYTVLFGVSRALGVLSSLVWDRAFGLPIERPK
SMSTAGLKKLVGSS*

>TRINITY_DN1653_c0_g1_i3.p1   type:complete   len:1023   gc:universal
TRINITY_DN1653_c0_g1_i3:180-3248(+)

MMRRSIKGSEDNWVEMQNDTFKNWVNANLKSRGLEVDNFETDFEDGVRLINLFEAVSKKSIGK
YAKQPKFANQKLENVSLVLRAMESDGVKLVSIDSDHVVNGNSKMILGLIWQLILRYQISGSDDKSF
KIALKKLLLIWLQHVIPEQGIRNLTTNWNNGIALCNLINVLKPGIFPEYNNLDKRTPVENLAKGM
QLAESELDIPQIISPENMASPNVDELSMMTYLSYFTQDGGIGESWTVDLVNFWNSSLSVTNFNTD
WNDGMRLGRLVETFLPGAMPIMESTDNLDNCRIAMDVAHEKLGISKIITAEEMSNPQIPELAVMS
YIVQFTKVKRVERASDKFSASGPGLVEPKIGIVNEFYVRSDAGYPLDGLQVTIIGPNNNYIPIEIDDS
DPQLRNYSYSCEEQGQYHINIIYEGEDIPRSPIIVTSQQDLNTIRVYGERLEDKHLYAELYERIGISVD
TSQSGDGRITSKTIGPDEKEIYSEVDAEGDGSYTVSFTPEVIGEYHTNVFWSGKPIHGSPFVVWVSD
PNKVFARGKCLYETRVGVESSFEVATNGAGPGHITGYAETNGVEYPINVRKREECLHDISFTANQV
GIYYVYINYNNVPIKDSPFQIKVGNPSLIEIEKHEEAIMESNQPQSFIVNVLKDAGFGDVLCVVRGP
AGEDVQCTIKDVNDSLKEIMFLPNYPGTYEVFVYYAGGLVERSPFIFAISEPKLAIYPENIRVSGNGL
SRAKLNELARFQVDTTNAGPGHLTVQIEDEKDDVEAGIRDNNNGTYDVTYTPKRSGKYRVIIKW
SDQHITDSPFEIIVDNRAEEVLVEGYGIKEGTAGQPVLFTLDGRNAGPGQLSCRCRAPSGKMTYVL
ISDNKDGTYTVDLNATEPGLHTVEVEWDNQAIPGSPFLVRIMQAPDVKKVRASGPGLRSGTLDSF
NGMFQVDSKGAGPGTLKVRIHGPKGAFKVEMSRENPKDRIINVRYNPTEPGTYTANIYWSDEHV
QGSPFEIFVGQNDQEVDRWDRNKEELSKSQVNVY*

>TRINITY_DN286_c0_g1_i4.p1 type:complete len:224 gc:universal TRINITY_DN286_c0_g1_i4:40-
711(+)

MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNSHKAMTDCEESLCKGHNCNSDVNDAEQVERKRVGPYENTLKCTTGL
QTKWPSIPFASANIPTAVEECFPGTKDCVTVEYDYIFQFESKIATLYNQFRLPTVQKMCNRPNVDQ
CYKWCTILSIHQNMDNCRVKCCQSDNCNA*

>TRINITY_DN14781_c0_g1_i1.p1   type:complete   len:1181   gc:universal
TRINITY_DN14781_c0_g1_i1:4332-790(-)

MVKMNSCILRSILITCFIATLQLQHVAATPVSPTVKPDGYATSASNSKLDVFATTPLCPNKMDIVLA
IDSSGSVTSVWSEMIDDAQIFTSNFQIGESMTRMAIIDFSAVSNVYTPLDANNTGESIYQKLEKMEN
QQQNGESWIELGFDRANDMFRSANPPRDDVRKVLVMYTDGDLTSGDHDSLKDMIKSQQSNNIE
HYIVKIKNGTQKVGMEMMKSSGCKVFQMQEPPAFGQPSVEDAVCFGSGGQPPIPVVQTTPPTPPI
SGSEKSTETTLSPGIKTTATSISIKNPREICLQKADTGVCYAYIQRYFYNASSEKCELFIYGGCGGNEN
NFGSKKDCYGQCEGVKLPTVIPTPPLSTSSTMHPPINKKCLTERSEAEALIRTKVPTLVQVFVPECD
EDGNYKAIQHHEGTNIYWCVDPETGDVVNGSKTEGSPPNCNITSPDESSQILSYPTPPPVEVNKLV
MTVPPIGAKTLPPKSEPLIGPQPTPEPEPMPAPSTDYEHPKNPCGEENDFLKQRNNFDRIKSDEEFY
FDCDGRDLYKPLQKRIRDNERWCVNQKTGAIIPGTKRTGFQPDPVCDGERAASGIQTTPNPDLFP
MPEPKDIPTPKPNDIFYPKNGCPEENDFISQRETTSHSKNGMILDKKYVFYYQCERNGDYKPMQR
NAGTGERWCVNTKNGNIIEGTSRPSGQQDPMCEEGMKSNVGITEVAGVGEIGEDIFNPKSSCDVE
NERFEEREKEISNKGDQVTLFKYGCDHKGNYKPLQYDGFKQVQWCVNPITGSLIKGKKLPTGQPI
DCSQENNLKSSESQNSSSTTNQAISSSSSIDQNNQNDKYHPNSFNCNNENAKTPPYKLGAMRYQ
CEDNGDFKPLQSHGSTGERWCVNDKSGNIIQGTLRMAGQPDPECLVNMNAKITTNDRNDTNIP
DMNGQQIQPITETLPFNQISPINMTIRKQNGSDNDDLMRTETASNVAKETESRLYGNHNITHSPPA
ISPEGEELLSLSNECEYKIGEKYGPQSNLKKLGCFNDIQQPPRPFPIMLLDETNVTVDVPYSKDEWV
KFIKGFVCKCAKETRNRGFFTFGIQNYAQCYSGPDEGRYAEDREAAEGMCINEDQEPCKTNDKQ

FCAGISKQDPHTNKTMHANFVYMIMTETHQEIKYIEYDRKKRSVNKRGKNHHVFNQRLVQRYR
QK*

>TRINITY_DN118520_c0_g1_i1.p1 type:complete len:581 gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)
MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*

>TRINITY_DN3271_c0_g1_i1.p1 type:complete len:399 gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)
MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR
AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*

>TRINITY_DN1043_c0_g1_i2.p1 type:complete len:700 gc:universal
TRINITY_DN1043_c0_g1_i2:2410-311(-)
MKESYLKRFALLFSVLILFQEGGALLRENLIVNHRLRRNVYSEEKVTAVDLPQSREKRFVGTALIIIS
AASAGLDIYKQVRGCKDITPDLDDKIAEGKALQQSLLNLRDQVNLAWVPAESREEYTRRLASNM
IIIREQVSTFDSLQADLVKLLDQKLLDKLNNVTKHLENQIDRNNETEIGSFEDLEGKYMDTTTFALT
LTAKLLPVGFLLGTKFLLPKITARFSKGVAKAFAADNPSRVQKMLSSFAEKQGKLANWKAEKINSF
KVSLNSKWNTFKLKFPRITAAMNRMSNSKIGKALGKAMGKVKGIAVGVGKGAVVAFFIAFEVW
NFVQFHGACTEKRNKAIEGIATMNANKKNMTDLLTEIHDMKAKADEYYNLMKSNVTNDEFLN
FLEDIADLGENAKEQTKVIVDATNQIKQYKAEIKNADDSRTDALNTMLVTAFSNINFKLDCLRSK
LAIIKGVVDDCGIGLGVYDDIYARALAKQKKITETCIEGSYMDKNEIKGLMVAAMDLDKKQSICV
RNNPTKKQLVCEKWYDDVSDADILAANPDLTKDDVTYFISTCPPAPVNDQTKTTICVKKNNELA
TLQSIQQTYQKYDQTAINSAYEECQLSSISVTTICTAKKEGQTVVYAQQKFPVFPASMVTNVYNSC
KKETNITPADKMMICLLKKNGFALDSPVMANYVKNYDYATLEAFYNQCS*

>TRINITY_DN729_c0_g1_i1.p1 type:5prime_partial len:723 gc:universal
TRINITY_DN729_c0_g1_i1:2179-11(-)
YFGHFPTRKMPDGVEVLVKNFLEKNVPSIDGELLEYIVDVTASSADDFESTEDIYDAVGAFLHEGT
ENENEKEIKKLCTGIIKLLKRDTISNENENVKILDAPIHLGKIAKEESNKSTEQNSIWLKQANDTSE
LKTVNLKKLEKAESKIKSKLEKRDKDGLPNGDLNCAGPTTNQVIQKKDLKSDQSGKLVDIRIENF
DLAYGSKILMQNCNLVMAFGRRYGFVGRNGMGKTTLLRAISRRELFIPSHVTVLHVEQEVIGDDT
LAVDSVLEADTVRASLLKEEAELAKNIEKSTNNAAAARLSEIYAKLSEIEADKAPAKASLILFGLGF
STEMQKMTTKEFSGGWRMRLALARALFTKPDLLLLDEPTNMLDVKAILWLENYLQTWSTTLLVV
SHDRMFLDAVATDIIFLHSKSLDCYKGNYTQFEKTREEKLKNQQREYEAQKQYRDHLQAYVDRW
RVNANRAAQAQSKLKILEKLPDLKPVEIDPEVVLRLPECDRVNATMLRFDEVTFGYTKDRNIYEK
VDLTANMDCRIAVLGENGSGKTTLLKILLGELEPTDGVKHVHRNLRMGYFSQHHVDSLSMNQTS
LGLFRDRFPGKQDVEYRTHLGRYGVSGELAMRPITSLSGGQKSRVAFAVMTWHEPNFFILDEPTN
HLDIETVEALGKALNKFNGGLILVSHNEQLIQMIAKETWLCGEKTVKKIEGGFPAYKKALEEEFRR
INAT*

>TRINITY_DN1907_c0_g1_i2.p1 type:complete len:210 gc:universal TRINITY_DN1907_c0_g1_i2:53-
682(+)

MDMDTTFPLVISLLFSILCCSFAVELTFELPDNARECFHEEIHNATKCTLEFQVVTGGHYDVDVSLK
DPHGKVLYDEKKKQYDSHTFEATVPGEYVFCFSNEFSSFTHKTVYFDFQSGDEPPLAPGMGKHHT
ALTLLESSAVTIHESLKVIIDYQTHHRLREGTSRDMAEYLNERVQYWSIGQSVIVVAMSIIQVYILRN
FFSEKRDRL*
>TRINITY_DN31399_c0_g1_i2.p1   type:complete   len:819   gc:universal
TRINITY_DN31399_c0_g1_i2:85-2541(+)
MAVNVSHVYTCPSDYLCSKAEQGTLLIPLINESEWGRGFRIFLYTLALLWCFMGIAIAADLFMCAI
EIITSKTKKIKVATEGDDKMGYEEIEIRVWNDTVANLTLMALGSSAPEILLSIIEIVGNNFESGELGPG
TIVGSAAFNLLVITACCVMAIPGGESKRINAFNVFLTTSFFAVFAYIWMFIVLTVSSKGILEVWEAAV
TLLLFGILVILAYIADKDLCVSVFTRKRRKKDIELDNFDLLNENVLKKHHPDLIEYMKEITANPSISE
QEAAKLIAIKIEASKRKNYGYYRVGALRSIGGGRKVVPAVTPKLQGIIDGGSTLNVNAETNVNDSV
PDNKATIEFTATAVSVMENNKVVQLGVERSGNMSSQVSVNFETIDGTAEAGSDYIAAKDTLVFEID
EIRKSIEIVIIDDYEWEPDETFFVKLHVPEGANDRVQIGHHSICEVTIINDDEPGTFSFNKPSNIVKES
CGQAELEVERVNGADGKVEVVWKTKDQSALHGKDFIGGEGTLVFEHGETLKSISIEIIDDHMFEK
DETFMVELLEVKNEGAKFGRLKRTVVTIVSDDEYQHMFDRVVNMAHMNLHFQLGSSTWGQQ
FREAMNVNGGDLESASFMDYVMHFITFFWKILFALVPPCTWYGGWLSFFIILGMIGCLTAVVGDIA
TIFGCLVGLRKDVTAITFVALGTSLPDLFASRNAAMNEKYADASIGNVTGSNGVNVFLGLGIPWLI
ASIYHEAKGKVFKTPTGSLATSVVTYSVCAIACILLLIIRRFVPFFGGGELGGPKGPMYASGIFMISL
WFIYVLISALVSYGHIAAL*
>TRINITY_DN1613_c1_g1_i2.p1   type:internal   len:1068   gc:universal
TRINITY_DN1613_c1_g1_i2:3201-1(-)
TKSCGGGIQESTRSCSNPSPAHGGKPCSGELSKTRACNEHECPVDGGYTPWSAYGKCSKVCGTGV
QFSTRTCTDPKPKFGGEPCTGLTKKSRNCNTHPCPVNGNWGAFGSFTTCTRTCGGGIQKRYRKC
DSPAAAHGGKKCPGLSFQFKACNTVHCPVDGGYTQWSSFGSCTATCGGGSQTSTRTCTNPSPKY
GGEGCVGPSEKTRTCGTKPCPVNGGYTEWGEYSKCSEECGGGIKTKSRSCTNPAPAHGGKGCQG
PSSESDVCNEQPCPVDGNWSAFGPLSVCSRTCGGGTSLSKRTCTSPSPKYGGKSCSGSRYRIVACN
TRICPIHGGFTAWSNYGVCSEKCGGGVQTATRSCTNPRPLFGGKACVGSSRKSRICNSQPCPVNG
GFSDWSAYGKCSKSCGSGIQVSSRTCTNPAPAHGGKSCAGPLQQSRVCNTLPCPVNGNWGSFGR
FEECSVSCGGGVQKRFRPCNNPSPAHGGKACRGLSFEIQACNTKHCPIDGKYGSWSSYSKCSVTC
GGGTQVKTRKCNSPAPAYGGKNCVGVASHIQACSTHHCPVNGGLTSWSSFDECSEECGGGIQER
SRSCTNPAPAHGGKSCVGALVDSRKCNTHKCPVDGGFTKWSSYGSCSKSCGGGSQTSTRSCTLPK
PAYGGDACVGPTIKTRGCNSQACPVNGNWGGFGVYGTCSKSCGGGTQKRYRRCNNPAAAHGG
KQCSGLSYQIKACNTHHCPVNGNWGSWGSFATCSKPCGKGVQKRVRKCNNPSAAYNGKACPG
LDYQLQACNTHHCPVNGNWGAFGPYEACSKSCGGGTQKRHRRCNSPSPAYRGKTCSGSSYQQR
SCNTQHCPVHGKWGTWGSYGACSARCGGGIQKRYRSCNKPSAAYGGKACPGASYNIKSCNTQ
HCPVNGNWGSWGSYTTCTKSCGGGTQKKSRSCNNPAAKYGGKACSGSNYYLKTCNTHHCPVN
GNWGSWGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHHCPVNGNWGS
WGSYTACTKSCGGGTQKKYRTCNSPTAKYGGKACSGSNYYLKTCNTHH
>TRINITY_DN3180_c0_g1_i1.p1   type:complete   len:1889   gc:universal
TRINITY_DN3180_c0_g1_i1:5857-191(-)
MGYLRVTWICVITLSTIVLSEFIFDDDEFGEKRTFGDPDSLVKRSSSGSTKKHVSTFTRTQRFSGGGST
CNYRVIKRSGRQYVVFRSSRHTRVANGCTKIHVQSFLNNHFGGKNLLTTFPNLNGDNFEVVQMM
YSLETRVAFMEAISKTSMAFFGGGNLEFGKSGDVPLTLKLQWTEDHDSSAWDPSDIQVELETTKV
VLSAASFHFKAKKSYHNPDHFMIEKFDTQGVGNFRVSAYTSAIAGLDNTAFGADFSQDKYGALT
WNDFRGYGFFDPAENFQLVLHPSTYVRNSRLFNNEETSQFIILSNPVSDDTTYVTLMAQFGQSTNI
KDTLNGIMTSVNADIGIIKRINSRAFCLTVSSGEYDFLFTPPYTKDRNLMNPCFPLEYQDARDNQN
DLSKQKKKMTADINIHVTINFKENVGSCNDDSSIDTSSLPPKMTINGNENWKGFSWSFPEQAKGP
MMAIMKCMWQNSAAFQGLPYSLPFGDSEVVSISDFLDSPTEKTIGLKITPPEQWRTIPGIDLTFNYL
EFTASYNIPDQTWELSGTADMRIDKFEVFLKLEYSRTTVEVEDDDDDDSSNEDDGEGPDKKAKKK
SDKKKKQSKNSKSSKSESKLMAKLRKRKSMDALLKSLPDTFQDDDFNNNHHVFYDNLIIPRSLPV
KNNQSANVSLNKDAGTNIVPAAVKNSSLATAATTSKRTTEVEKQWTFTILMPTLLVKDIYTIFSPQ
STLPAEYPKVFNNGIKNLQISWAWGNEFEVRFRGQLVIMGWDKILLETVFWKQMPSRSLKFGIGIY

274

FQKIDVDAILKHIFQDESISVPWLSNLDCKLVIGNSEGFKDVSKKKKKIKKIKKAKSNKKVSKKQR
KTSKSKSKTSAALTRSTRGMEEYIYADLAEKRQADDDDDGDDDDAEPDVKFTYGSLADNALIAG
AGFEMTWYRPTEEEKCLGNTLCKFIYEKVQSNTQFVLAGQVDTGGITISAEVKDAGIVLATDLKL
ENAKLEIDGRAGGGIKLSCQMIYTNSEIATNPLTFEGAIEIGFAGELTFRFTMGGTIDSAFGYNRIAL
GNILLGATIDFKAASFTIEFGVTVLMGLLNEDPITIRGYFGLSPTNWIDSWVYVKASKLTIGSLGKAF
DFSVPDTFKDEGFPEGFQFSLSRKVVNIESLGIEIPSGLYLVGKFKFKFFELSADCTIDPANKAFDVKL
EMNKQNWIGGMITISSYTDENKGPMFHIKVDENTPFYANIDGKLTVLGLSQEILVRIDENSGALIH
LRGTPFPFIFDAALDINAALDPNTKSFNGGTFKITVSSSEFIPTLARKIRDWLEGLKSEGTQAKQDG
MTAITKGEEDSETITGKKSLWDSALDTWKSNLQRRESELAAKQRAITGALQACIDECELVCVPFFD
WEEDCFTIFGWSAPCPWPNSCAKKVPNYFCYAGCALDQLGSAFLTWVESTLTKIGLALQSTAVFL
TDMVEGIAAALTKLGEYIVAAKDWLINQFQAALNWVADLLTKQIVLRKLVLEATVQPPFKYCFG
YDIDITLFTWHITDGGHVCLDTLIRDLIYSLFGYNQDSKKALGMKDQIEEAKSKTLSIKEAAEELEE
SAETTQAEVDMQTAKTFEEELKRKRTMPTKEMFKFIDEKSKNTKYSKAHQKIMDTPHGMPAYQI
HNNHMLENLEKRSPWVVVRSFKDGNRNLEPKRIADHEIVKRSLSFGDGSKPCSRLRRSLATYDTI
VNVLIRSARNLENMEKNHFAHKEFHGHGIRKLDKRIAELELKNMTDEQREDAYFWYDKANEGY
EDFHNKVRRNIDYHDNYALPLLHNQLNYILKKSGKEGGFLKRVEDMHSEALHDFKRSIKNEEDR
ADGQELLSKIKKSMLAIVTDENTPLSRYTRSINGMKNDITRMNKMVLAC*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN29322_c0_g1_i1.p1   type:5prime_partial   len:776   gc:universal
TRINITY_DN29322_c0_g1_i1:2-2329(+)
LTFIESLRLRIMSNIMKYILLLLALLLFVSAEEEKTAVTEREFPNYDIFRAIQKFSIKHEVDMNNFRHL
FLEKGNSNNTMDFSKVKNYNNFDREILKTLFHMYKSKDAAPPQVSTSCQMSILEFVKPFMNESSI
TPALIFKLLGSPLGKLLDSWGKPGSRILVGNIGWLGGYDECQVIQSTRYCLTNFTFLTMFSGGQYGS
CFPKTCTESDVLVIHKYLETTINPSLPGYLAFDQTICEEPTEYDTGTIITIVIFSIILLLCLVGSLTEILQD
LFTPLKEPEPKLGEANGAFQTNSEDVYLKHDVDDNVVLVGPKIIPQRGNAFTNFLLCFSILKNTRT
IFSTKLPKGAIGSINGIRTISMTWVILGHTFAFIQYTIAFDNRLLFTDHLRKLSFMAVGNAYVAVDTF
FMLSGLLVAYLMLKQIDKNGVMTLKQYLMYLLHRYIRLTPSLIALILFYVNINPLILSGPTAVYYQK
NPTGADPCIDHWWTNLLYINNVYPNDLGKECVGWTWYLANDTQFYIISPLLLIIMYQLERRISEK
YRFFAVFGFIGSVCSIFFIILAVLIAVNDYPTFVTGLFDPSNPRMKNAGGINKLYIKPYARVPAYLAGL
ILGYILSRKMEFRKRHRTVANIIGWCISIAVALSIIYGPYHVIRKSDHYFMTDVENVFFGTFHRFAFV
ACVGWVVYSCHNKMGLGLVNDFLSWKAWIPLSRLTYGAYLIHPVVIFFTNQTQENAYHFQLSNS
ATLFVSWVTLSYGLSYIICVFIEQPTKNLEMMIFK*

>TRINITY_DN123_c0_g1_i1.p1   type:5prime_partial   len:1231   gc:universal
TRINITY_DN123_c0_g1_i1:2-3694(+)
RGGFRPFGTGLMGSPMLGPYAFGPARSGALGGFGIAPLVRPPTRGGAAGANRGSRSNSNRGGKK
TTPVKNNKSTPEAKKDNNINAKNDKKEDKKDEKKDDKKDEKKDDKKDDKKGGKTPTGKEIKV
EPKDDMKNIKKNFFKDPKVEPKNEKKPDTKAVTVKPEIKKESGPQNVTLDKFNSELHLSIDADGL
SAGNMKGEGFQYMWGGVRGTHGVKKGKVCYEVYLLENIKVHCPGENNPHVLRVGWSVDNSD
YQLGEDKLSWGYGGTAKSSYDSKFLDYGKKYTVGDTITCYIDFESNPKAIFFMLNGEYLGVAFRFG

NELGDKAVFPHITSKNMRFRVNFGKEKPKHHVTNGFRMMQDIPVDQLVLPSPSPKTPKEAEIIM
MVGLPACGKSFWCEKYAKENPDKKYYILGTNNIIERMKVSGLTRKRNYHGRWEMLIKRASLVLN
KLFTVAKNNPRNYVLDQTNVYFTARRRKMESFAGYKKIAAVIINKPDVLASRTEKQQKIEGKMVP
EGAVMEMKFNFTLPEKGPSFNEVWYLEETLPKAQELAANYRREGSNFKTKSKRKPESSPSQPESSP
SSEKKPKLDPKIISRGFDKPFSKPNTNSPQQSTFKAPSPAQNNANKTPNQDRFSKNEKSTSKVETNS
DNSRSKAGNFNKGHDGNKSNERPFFSNTPDRGNASNRGNDSNRGNSSDRGNAPNKGNSSDRG
NAPNKGNFADKGNAPNKGNSSDRGNAPNKGNASDSANKNSKNEKPKEESKKTPKRAIRGTLD
QLNSIINSEARKTENNSGNIRDSAQSGKNEKMGSLMDIDRTPQRESDSYQNLQSRNRDALSNQG
GKNKESQSAGLMDIRNVPQGNQDYRGKAGILDSSRNTSQDYRGKPGILDSSRNTPQDYRGKPGIL
DSSRNTARRNEYESPVGRGNNSYSDSPARGVSTPRGRASFNDSPARGARGGRGQSDISRSGSLAKS
QGSGGNRGGRGRGRSKHLGDVNKYDPVGNMGGYYSALKALPSVKDLIGNRSSFSSYSTRIDEPSR
FDQLYSSYEPYSFGRTQNANDSRSLNYSFGQTDSYSSLERDGGYRDSQNSKDFLGSYQQRKDSSYS
DNRGSQGGQRGYQDSSYNADGLDAKDQYQNDDYQESYSSQKDKSSYDQNTQSSRSYNQETSYE
ESSDYGRSRNQEQDEYARSGTYERGDTSYGTDDANRSSRRYEDDLQESEPMDGNYSTQDYGRSSQ
SSQRARIW*

>TRINITY_DN2357_c1_g1_i1.p1   type:complete   len:1733   gc:universal
TRINITY_DN2357_c1_g1_i1:5452-254(-)
MLKLFLFLIGAGHLSLAFAAICSETNGEGNKKNLKEPCFFNQLIDVKQWNMKRFMDQTDRFFDF
GVMRCSSYEVEGSGKMKLTCYHTKLFYIMKNIMSFGTTERTEFIFKFSPLTENDYKSTDVEISGKLS
QALRNTFIRATKPEGFQDFSLSTSAVFPQIDMETFIDQRKPDGFKTLTNNDKLENFPPKVAVNAEM
SGMFSALVTDTDKQAYEFLISFLGPMKEQQFYIFQSLTENINDELVIAFYKENPSNAGTTVRDIMDS
LRGVKWRGNKANEFVVSKDFAPIFEVQSSAMSISDGEIVNINSEALRNIAIKYVSPSSEAFILEGALI
YWHVDDSSSLKMSADQVPGVENPPTPTNETSTVPQENKIKRHTKPKTMKPLKREKHPATNKLTL
NAHIIHQNKIEIRSPDYLKGTYEKQLSTFLPYHYFKHDSIKNTLYPVKMIFDKITIGFKRKELRLYCNI
TQKYDLVQNFIEGEGIAVYAKAKLTMRKDADGDSEEIRFKDIGMSGTIEVLQGLVNVNLQYAKDG
TLYVVGLFDIANMTQFINATGMKHYLPENLRKTYPRLTNFAITRLKIKSKLNENVLRIIGRCLIFSEP
KTDDNLEAEKRDGIEDESPASLLYESKLRVVLTNTSGDLKYSVGIIGEDIPLQVAMRELFNATITGTS
WVKFKFFVMVMSNNNEINVAQAIDERLFNSFNSETGLQIKTVLLPPVEEDCKMSRKEKLDPLNKE
ALVKNEANGKETVEIHRSPFIVDYTCMFVKDQELLMENFEYATATVTPTSYEIKSLTQERFFDFQSD
PVVSVGNFGYTIKSVKGWDSIFFIEGEFRFMVKNDRLIFKGLITFDDMKGKLVLQLKQLHSGRQNF
GDAALINSGYSVIGKDDTFSKFHFDAFLYVGTVKTKLVNFRKNVEVIYDLRTDDIFMKGARNNNG
NIGATNKKRNSLLELFDAFGTDASSHVLLKELHAISLTWLIYQQNEEVVKTKHGIRRIQPGLNFYG
TLAGKGDRDLLFNMHYNKGMGALIADIELPNYKLPLRKDAKYHPFELQRSTKKQDLGGILFVKA
STTFTSAQAQGYLRVVGLEYDVEFPIMADGQFHMDLPYSNEIAKLFNEAEVRYRVSQDIGVTDFN
LVDPKIKIDLAPSLEKISRAIRHAIEAMIANVDEYLVNSGSFINFVTIVDGEISTMKEVINEIRRGMGK
LQSTLKQLVQQISSDCAEQCKDSKVFIYGYDFQGGKFVGNEDAHDVANVTCIAECEMIKPVKND
ERRSLLSSLKEALVQFKREKKRASIMQIMLDEHYNSLSKMNDAMHKNARAASLILSKTGNLKNP
KISVASLVLENQISVINFKGAGSKCLSGFKMAFSYNDVVGETDIDLCFNGEFDQFAAYAFVLSYYGE
DKYNQFGDLLDDAAELKQSLKTKTIVTKLFKKIANARTTVELEEVQNEVEETILDYMDGLKKSQ
IPKHKIKAKKTKEAIGYITYGGKNVTLPGIDTEVLEALEIDQDYTIKNPKSKRVFMYSSPWAALNVL
HLHQNKSMESLPMITSIDNAGYCKRLTRLSSVLNSVRGSLSSYAASYVNAKKNFENVETNMKSGL
VELKKMHGSSIMHDDDKGNLQYWLTQYEKGVNRFSKLSNMKLHDHNNHGLARWKNEMDNS
LQHSGLGSIENVIEMLKKRSSSKRSNIDHDRWIRNASLMGKEISNLMKNSNKMRMADAELTVRS
MSQKFDNFFEALTKSCKASFKQF*

>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)
SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHR

>TRINITY_DN1614_c0_g1_i1.p1 type:complete len:218 gc:universal TRINITY_DN1614_c0_g1_i1:56-
709(+)

MHKTKICIWLVVRYRSNPFRGYNRRPDLKSAGAKMTKYSTEPENPSKSCKARGSYLRVHFKNTHE
TAQAIKKMHIRKAYRYLKDVVDMKQIIPFRRFNGGVGRKAQAKAHGCSQGRWPKKSAQFLLQL
LKNAESNADLKGLDVDSLVIDHIQVNRAPYMRRRTYRAHGRINPYMSSPCHIEMILAEKEQVVPR
AEEEVEVKKVSKKKLAREKLKSRE*

>TRINITY_DN1143_c0_g1_i1.p1　　　　　type:complete　　　　len:629　　　　gc:universal
TRINITY_DN1143_c0_g1_i1:2539-653(-)

MLRSRTIITNTLPKLKSINRLEPSFSCISNARCFSVSAANKDASESFAMGIFTGQANVSQIFPYPDVLT
DDQREFLSSLVDPVEKFMSEQNNAFNNDALEEIESETLEGLKEMGAFGLQVPAELDGVGLTNTQY
ARLVEVVGRYDLGVGIVLGAHQSIGFKGILLVGNEEQKKKYLPSLATGEKFAAFCLTEPSSGSDAA
SIRTNAKLSDDGKHWILNGGKLWISNGGIADVFTVFAQTPVLDEKSGETKNKVTAFIVERGFGGIS
SGPPEKKMGIKCSNTAEVHFEDVKIPVENILGGVGQGFKVAMHILNNGRFGMAAALSGTQKGLI
AQAIDHAASRTQFGQKINNFGVIQEKIARMAVRHYVTESMAYVICGMMDKGFKDFQLEAAISKI
YASEAAWEVADETIQVLGGMGYMKDCGAERVMRDLRIFRIFEGTNDILRLFVSLTGLQGAGKELR
KLQKSLSNPLSNMGTLLEQGLLRSKRAAGISSGPDLSSNVHPDLRKEADLASKGIGKFGSTSEALL
VKYKKSIIDQQMVCSRLSDSAIDLFGMVCVLSRATKSLNNNVPNAVHEALIAKTFCSEAYKRINTN
LESCKNEHNMATDKLKAQITSDITNHMGVVTTHPLGF*

>TRINITY_DN5229_c0_g1_i1.p1　　　　　type:complete　　　　len:728　　　　gc:universal
TRINITY_DN5229_c0_g1_i1:2363-180(-)

MFKSLTISISVLTFILLFQEGSSSPVVAANSTNNAANATILIEEDESNKRQETEPKSFSDDIEDVIKIKD
SMENAGLIRDNTGAVNKAKTSRIAGKLREKARSIDSDSADSATEGVSGAGEGLLTLVEGIKGGNW
VDIVTGGLDMISSVLGMLGPMSVIASSVLSLFSMAFGLFGGATGGEESTEDMMTRVIEKALLEAKA
EELRSEVNGIKRLLQSFSSSIANFRETNSLTQEQALTLYDQGFRGVAQFGVLEHYIEKWCAVGDPN
TYDTPVKKGELNDMVSRCLDMVNLYCDLSVFRQIMLADMASLIAEVGIEGTPEVFMHLLRKEQK
SDKKLLKFLMDPANNRDKRFVITKYFTSLTKYTTITAYLKKLSTLDLSDVETKKSARAEISKDEKFFD
KKFTLVCTDIELRGNCFQFSELGAKRDASLKGWKKKVVSLYVSDGVEVQGFHRPDLQGSLFGPYY
GPAVYGKVSGSKDWESMNILASETSALDLLRVCENENMDTEGVCEAIETKNYPNLGAMDKRGT
AMYYVSTIRKKAKCRYSKCDVWNTGKWWCERSKRRDWEECLIGRYWSERIKSMTIPKGYKIYGY
SETDYGGVEYGPLYGPSTVLKVHPSAAWKSLKMVKTTQSTTKMVQMCSEEGLKGFCDYFIANSG
QTDLSNVHGVNWDSDKRIKSMMVPGSITVYTYSEKSYGGMEMGPYDGPVTITKVDGADGEEQIK
SFKIMRRY*

>TRINITY_DN11097_c0_g1_i1.p1　　　　　type:complete　　　　len:730　　　　gc:universal
TRINITY_DN11097_c0_g1_i1:2348-159(-)

MVRPQGVTQEHSSKPSTSERNSFVFSALSKSGCFETLPSIYDSIIIQRSHWLHTEGFSMRTSSTGSQQ
TSRRAFYEELQAFSSTIPFYESLSWALLSLSGCLNPVSTPNIREEILADLEGRSVDESREVLLVFATLFD
VYKSYQNSIVVEISAILPGGILRCISLGQTEGFNSYNTVGLINYQPIVYPVGRNVLGRLFNVTGSCID
LYNEVTMDMPFVRSVSTEETHTPQKTTLIKTGANADTSSDSDCVKANALFKECTSHINVKETSLD
HLISLYCGCYMGMTSAPIAPISRLPIEAESSRAPEHMVQKLQECMGTYSGSADPSTPNQIGSKKQPF
WLSKEALESGVSPIHSTPLPISKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFI
RNLAIEHKGISIFCGVGERTREGNDLYSEMAEAGIICKDYTTMKPSDPSSNGGPTGSIDQHSVTFTR
SSVTLVYGQMNESPGCRMRVAHAGLTVAEFFRDVFKQDVLVFVDNVFRFLQAGSELSTLLGRMPS
AVGYQPTLATEMGAFQERIIAALWGSITSIQAIYVPADDLTDPAPVTIFTHLDAVSSLSRELAAKGIY
PAVDPFNSTSRMLDPQCLTSEHFRVALEVQQILQRYRELQDVIAILGIEELSEEDLKTVERARKIERF
LSQPFSVAEVFTKIKGIFVPLEATIRSFAMVLSGALDDVPEGNFYMKGGLDTLKL*

>TRINITY_DN61_c0_g1_i1.p1 type:complete len:625 gc:universal TRINITY_DN61_c0_g1_i1:2929-
1055(-)

MRAVILLCIAMCTMVYADVYFHNIRGSNNRLKGQNRNRDNAYRMFDSQNNDRGGYNVGPTPM
YFYTGSILTLEWTNQHQCGGPNANCDLILQYMCSENLRDGLEERTIPERNKDCKDDDCNTDIRY
GMHEDYDYYMNCKNRQRNPGLFLADQELEGTSAKYTRQNPDGDRYGYECPEERDHYPYWLPT
PWIDIAIMTRDLRRCNYYRENSQNNNAKYYCKPPQKYLDELKKRDPPSNLPRIPISQDDCERFHY
PANDKTDRGVWTRHDSWNVDPPECIAAPPSRDNHNGNGEDGYFNSYNFTIPNAPHKNCAIRM
RYNISTSDYDVNLDADGNGDPARAINIHDLVGIDTKKEATERGYVFKDYPKVYPMKGEIGKKLGL
ALAINTAQYFRTFEDRSHRTSFKARTPELEGVEIRNLNVKGKRGNIVQVYPAVEYGFVPDRMLAE

VGDMIHIQWTGSDRNPRNNDGEGPAGEDRSNIAELDQPRVAQVVADYNEYGDLTRSYPAHLDN
ATFLGLSRDELISLALAKGDCEFDRQGARSRTPYFDMGPVALTKKGIYNYLCTINNNFTNRSQKGT
AIITEKSKAGGGSKATASASKSASFRSVNGKDQEKRKYHAYNYFEQYKKK*
>TRINITY_DN1366_c0_g1_i1.p1   type:3prime_partial   len:4702   gc:universal
TRINITY_DN1366_c0_g1_i1:236-14338(+)
MMEQDRQRPSRQEYNNRSLSRERIGSRDGSRDRNLSRDRDLSQTRDLSHTRDGSRDRSNLRTRDG
SQDRSFANRSDLYSSPYSSNSQAMPQTSATVEIENLELQATVSSQEELINQLAEDLRNVRKARDFSA
EVEILQKEQQCMDFKEQLEGKEMTIQHLKTELVQSQTVTEEVYKKYESIRSNRDAKDKSIRRYQQE
LHQVHDLLETAQKDKLACVDKMRQIQNEKSALEFDYQWLFDKIKNYEEHGEVFDMSSVSKSTTT
IKRTTTVYEDGQKIRVEDYQSDDSIMPLQNKFQQAQKGYRKAIGMQDDQLMRDKENLMNEFRS
MQSQMHDLKRIHENFMRESKEKDTLIERLKEAKMALDQELDHLTRENENLRQTNDKLENENSD
LRTELNSARNQVSKIEVQYDNCMKQRNYMKEQMEIITQNSAKGRDDYNSIEATMRDSQRKMDS
MQRDLTNKENLNKQLKNKIKILEEDFEQCRQDYNQCMVSRESLQQQKLDVERELKERHDRMDE
VETSYEDIQRRKADLQQELASLKKNLTRFINEEDSSNQMKSHLQNEVLAANKRISRLEAAYEASQ
QEKLELQQELAPATQRLSMMRAAYETLQQKKEQIQTDLIASQKRCAEYQAMNERLKQDRGEILN
EIQACKRRAAQADVDLDEAAKQYAILKGKLEDANRRAQSASEDLVTRQRTIEELRHKLEVSGRET
IQRESYYERIKQERRSLEDELRGCVTDLERVQNEARDVQRDNEKLRQDLGTAQQRLHETEAYWQ
KTKMENAKLQRDYANMERTVQELRDLSHKLQQDKEDCEKILYSTHKKYANLDKENERLGRENT
DLERELQSSKNKQSKLDAVIQDLKRKEAQLKAQLDDALKNRDELNRVKIVMNDLQKRLDGVTK
DGEQKDNLIAQLRNEKDNYKRDCDKFGRDYEGCRTMLETANREKDRLGKELNAANRRIADSD
VLVKRLQDENMRVRKDANSFEARIPILEDALQKSKANESKWALEANTYKTNVIRIEKELLVFKEE
HHSLVSHVSQNEDKNDGLAKKLDDALRKIFELEATNEMVSRENDELKRDIDNKTRQLEEQLTTV
ERANNDLKNQLNELRGRNKKQQDDYNRMQIDYNEFQSKWDGLSSDGQGKDRLIEQLRSELQN
STHEINQQHTDNENKKAYIERLTEEKQDLLNDVNTVNQRIYELEGLYKSSEDDKEGLQKEITELNR
KLNDVESDYDTLQRESDKEIRALKSKLGKVESQVDMILKDRDYIQDQLDAERLLSQKYKDEFERV
QREFLEHQKICERYADQILERDRIIDDLKNQMYKMETEIDTLKEQLRKAQTDQKVAEQQRDKAVE
KLNQAEMKIKDLENENDYLRKRLAELEREISVLEMKLNDAETENKNLRNKIKDLEDLIKTLRAKL
SNTETELQSIRHIISDRDVMIERLQKELDDANDQAHQLRRQVSELESQIELGDQERDDLRSRLANS
ERTIIELRKNLDKVIHDGQDLEAELAALKQKLIKMEPQMKQAQKQRDDYKTAYDNLKGKYQDL
KDELLANQRQLTDAKRAAEQYKKELRHKDHLLEEARGKILALAGQLQSARDELVKKQQENEQL
LDEKRLIQEELLRLRQKLGDLESANQILAMEKERLNEELISFNSKYTELRIKLEKSEQDRLESQRQA
MAYEQRLAKLEPQLQQILRENSELHLQVDRLADELRNALDENRHLKNDVEELQRIRDMQLKELY
EKDTIIEQLKAKLSNLENTVNHLQQENDKLHNLNDALEQEKHSLAHRLDNANSRIKELDDLYEQ
ERQKRDQLQNDLHDLQKKFVTLENAYKKSQERERDLKKKIDDLLGRIKDLEDQLAAEKKKNSDL
EAENDRLKDLIHDLEGVIDDLRRKLTEQENENDRLRAENDDLKQQIMNLQRRIDELEGVIAGLEQ
EKNFLEEELNSLRQTVNKLEAEIDNLTKQRDGLQGGLEDLRREIMRLKEVIMKLEGTNRELQRTID
ALKQEIYRKDRIIETLEAKRKQYELEIDNLKNEIIKRDVIIDSGDESKRDLEIQIKNYEGRIAIMDGRI
DKITLEKTEIERNYHNAVNRAKGLESQVLILNREKAELKGDIDQHFGKIRDDNEVVNKTQGELRE
KVRIIETYKKEIIEKTTIIERLTVIRQTVESERDQLKKDNATLKITVNQYKDNDKGMNDEIQKFTFKIT
TLEKDIINMKNERDEFKVADNATSKLVEVETQLKRSIERETRLRGELDTLHNKYQNLETIYNELL
REKNDVDRKYKDLLQKHRELDSKYNKLLANFNDLKDQLQQANNKIADLKAKLDKEIYENRDL
RDQLDNLKNQYNKLRDDNQRLEQELADYKYKYEDAMKELAEKNDLIDELKAKIANQDRQINA
LKGTVNQLRADYERSMREQARLQDEIVKLQAVVADLEGKLHRLELENEKLRKENNELQAKIPAL
ENEIENLKDKLENLIKENRDLRNDNMNLKQENVQLEKEVDDLKDDIEKLKDEIRNKDNIIADLR
KVRQELEEEIDQLRHDVKQKEKEIDDLFNRIRDYESTIQILNTKLAEIEPAFEACKDRLRHQENQIQ
ELRNKITDLESALKQSQENEAELGNKLALTESKLNKITQLLDDIKRKNMELENENGHLKDELNKL
KDQNKKLENDNDRLSNELNECKAVIQRIEPMLDHLQKHKNQLEKELEDALNKLANLRNEHEA
HLREMKEKLHVIEVITRQLDEKDDLIEKLKQEKAALEKENESLNDALNKLHQTLDAVQRRKEEV
EKDFFEAKKRIAELENLLNALKEDKDDLERMLRDAKEKNADLDHALRNSQHNEAKLKGELDEA
RGRIQRQRNELAKLQIIVGDLRAANERLLRDNTEKQNVIDGLHSQIRGLESQNGSLKKENQKLRD
ALDKLQRELHNLEQENQQLKAKVFSLQLLNDSLREEKDRLYDNFQELEKDYNDLKDKYNQAVR
ENDRLKDELAFANKRIDELENMNNQLNNEIENLKNIIAGLKRQINDLQGVIDQLRRDKSDLEQTI

NIHSETTINQRPVFDESDYVPRSEYDELKALLEAANSTKEGAERDRDQYHQEHLELHKRISKFEAE
LEGATGKRDEYKRLLQEAERRIRELEGVNGRLEDREKELQKELLNALNEVSGLQQQIISLKVKLGK
FEADRVNYEDKISKLNNEINDLHQRLSQVLASIEEKDHIIEDMRQELADTQRRHAELDSQNQILR
DEIEKLHGIINDNERKIDDLEVKLQDQRNQNSQLKNQINELNARNNKLKDEINDLQRKVSDLER
DLDQAKRDNQEKQNVIDRLNQLKNQLENDLEALRQENAGMKSDLDRLRLDNRQLLQEKHDLE
MKIMGLESDKGTLEDNVERLLNEIENLRNKIQKLKDENDRLIIENKRISHELYKYNKKSGPSDYDS
LKDQRDKLQREIADLTKELRNYKTNITVLQNEKDDLYNRLKELERDLADRDHVIEELEREKDRLE
RELESARNRADKFELSNGQLENEKNRVQEELMDLHRKLTKLEGDYELACDKRDDLQKELDSAIA
RNKTLEDNYKRSQERENKLHQDLLAAQKKITILEHELQSLKDRVNSLERANKVLDDKKNELKDD
LIAAQKRISELEIMLEGADDRNKDLQNELDAMKRKNDELRETLRLTEHGKEDLINEIQNLTAKLS
KVENKLTQAENEKRYLEQQLEDAKQRTQKDRDEIMNLQKTIYELTRKCDSLTKDNANKQALIDD
LRAKKTTLEGEIESLKRDLQNNQYEIERVENDKKNLYDELENMKNKFNVQEQEYLVLQEEKEKLR
QDMIASHQSVCRLKENYENSLGDKGKLREELATFHRKIAELTTAYDSCRSEMNRYKGDCDNYKD
AYDDIKAKYDASQNEISKSRNDYEVCLQKYQKGEQAFTKSEADRERLQKEMLDVHRKSSEIAVLF
QTTKEEKRVLENQLSMLQDDLERYREGYETFNDKTNALQDEILVSHKNYTKIEHAYNRAVEREEK
LEKDCEEAKEIVANMEKDLDNARGKANELENELRKLQDKLRREQDEYEQNSEHAGKLQMTLRD
YESKLSQLRNVEDENKTLRDEINNLKSSINKVEMDYRSNHNDLTQVQDQYESSRNNINKLNNEIN
ELQRDIRQVTSENEKLQNDLQNAAQDKEQEGERLKSTIRMLEREIDSLKTQFGQTTEQLDIVSKDR
NVMHQEIQVILKKCVSIEMTYITKTEDSRFQTSGGDEYEKSINELKNHLDKSEREFDDREKKYKYL
EDQYVREKKDKSQLEKEIDEIQRRYDNMQHEIRVIEEDKKRLSDEYQDMFNKYNDLDRDFKNTQ
TKITTYETEINTYQTTINDMQYKFTNNEDQNKKNSQVYRDLQQKLDNATKENTTLKGELNDEKA
SYRNVKKDFERQVRELQRSSESYGKASHEKDTIIEDLKSKRQALESDIDQLRRDLNHGKDEYKRLQ
REFTQHKSDYQDQQRVITDLQQKVEEHKHSKITIEEEYKITVEKYIKEIRETHIKLSKVESELQTTRE
AQNLDSDERYKRLQNELQQERETTRKDIYGKNQEIEQFKSQISNQDQEIRRLRREIEELDKQLKEA
GSNYSSTILIQKQDAPKYSSTQVTESRISSSSAPRYSTEQEVLIDASDKDTEDEKKRYQSSFYRSTATIK
PGQSDYGSVDVVLQGSQDQGQDDKDYDYNRRATGLDTNAVNRSQ
>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)
MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*
>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*
>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)
MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*
>TRINITY_DN8707_c0_g1_i2.p1   type:complete   len:564   gc:universal
TRINITY_DN8707_c0_g1_i2:2751-1060(-)
MSGFVRQSKYRHVFGSPARKDGCYEGFRVTNCAFDGNFIAANKHFIAVCVEVGGGGAFIIVPVGS
TGRLDVNIPKVSAHKEYILDLQWNPYNDFMLASCSEDGTIKIWEIPEKGLFMNIGDEKALLSLEYH
EKRCTQVLWHPSASNVLMSVSQEPKVCVWNLDEGSVEVEILEHPELIYNATWSQKGDKIGTTCK

DKKIRIFDAREGTLLVQGMGHEGAKPSRVIFTFQDKYLFTTGFSKMSERQYACWNAETIEQLGLEE
LDTANGCLVPTYDADSQLVFLNAKGDSNIRYYELVDGDPYYFYLSTYQSSAPQRGFGFIPKRCINV
NANEISKGYKLHGTKTGYIEPVSFTVPRKSETFQQDLYPDAIGDEAALEPDDWFSGKNAEPKRIA
MSTFFKGKTKPTGAAGGGLKKGGLKGLKAKKEAKTAAKSAAKSEPAKPAPVKTESKDKVDAAP
PAAAAVEQKSSSTAVAAPAAAAPVVVSGVDEKVVKELQNEIKSLKDGDKKLQKEIISLKDKLKDY
DTLRSDIKLLCDAVKKNDERITALESLVAEETDEEETGEGGDE*

>TRINITY_DN1378_c0_g1_i1.p1   type:complete   len:443   gc:universal
TRINITY_DN1378_c0_g1_i1:2151-823(-)

MLRFAVLVVVASIGVSALYDSSDDVVELTQSNFNNHVIGSDDIWLVEFYAPWCGHCRNLAPAWK
QAATALKGIVKVGAVDMDQHQSVGGPYNVRGFPTIKVFGANKMSPSDYNGARSAQAIVDEAM
KVVQRVVSDRLGGRSSGGGGRRSGGSSGGSGNKDDVIELTDSNFEKEVLNTKDMVLVEFFAPWC
GHCQRLAPEWAKAATELKGKVKLAALDATVHGQTASRFQVQGYPTIKFFPAGDKDFSSAQDYQ
GGRTASDIVAWALAKHAENVDPPEILEITSNSVLTENCNEKPLCVISFLPDILDSMAAGRNGYISTL
KELGDKYKSKMWGWLWTAPGLHSNLEQALGVGGFGYPAMAVVNIRKKVYVLLRGSFGIDGIDE
LLKSIAVGRGRTEKLTQGLPTLKDVEAWDGKDGQLPEEEDIDLSDVELDDLDDEPKQEL*

>TRINITY_DN86511_c0_g1_i1.p1   type:internal   len:143   gc:universal
TRINITY_DN86511_c0_g1_i1:427-2(-)

VLLLEATKVSCDKIFSGKFPIPPVDKDTFVTLCKLCSCNILLLTHDGYYRQVDGLAMGSQPAPLFA
NIWLSDFDDRVHCNSKFFPRYMDDILTITTTENIDKKVSEINDLHVKLQFTHEIEENNRIPFLDMLII
RNNTTLNS

>TRINITY_DN74934_c0_g1_i1.p1   type:5prime_partial   len:359   gc:universal
TRINITY_DN74934_c0_g1_i1:1215-139(-)

QPNTFDRVCYGYIPIFGCLYLCGLRAAEEMAKLQNDKEFAKICADRFALGSKNLDSLCFTNGKWY
THVPDPNHMTDVMSSCTLVGALYGQWWAHYLNLGYLLPEDHIKSHLKYTYERNYVDSYTKDIIQ
SPRRFCDSRDNGWTIGVWDKGETPAHPLLYSSEASWSGIIYPFAALLLHEGLQYEGLKVLEVTRYL
YDGTRRSPWNEIECGDHYARPMSGFALFKFASGQSWSIDNNGGVHLSFNPILKQQEFKSFFILNSC
WGSYEQNDDTFKIIVSYGKLSLASFKLPSNLFVNKPKFEEIHVKIQRCLKSENICDDDIFIYQKVMN
FKLIDELMLKFEEPLEINSDEVLCVSVTYG*

>TRINITY_DN1668_c0_g1_i1.p1   type:complete   len:220   gc:universal
TRINITY_DN1668_c0_g1_i1:748-89(-)

MTGMMWKVIAIAAFVGMAYTDDLNPLTYLPDGVETSHEAGESLSNMTITNETIVQEKTKGFGFL
DMTSNAQYSKGLRGSYLPRYLSRTLKPFAAISANMSKVVDGLQEYIKDLIGKDHEDHFFALVGKE
QYGQTRAIFLKFNQREDGRYNLKKLSFRGTFKLAADLVITRYTNQETGEINDVVSYVPKEKVSKD
DVKDLLNLMVPQLAEVMKGFAPKEL*

>TRINITY_DN97639_c0_g1_i1.p1   type:internal   len:298   gc:universal
TRINITY_DN97639_c0_g1_i1:891-1(-)

RGSAGARLYPGTRVLLHSLKAGKALNGKEGTCENWDATIGRMHVQLVEGGQVKALRPLNLQKL
KVPEPPDDQAEDTDDDPVYTRVKEVFASCDTDGNGIIDAQEFSACLHKLGLGDRCLPAFLNAIDK
SGDREIQYEEFCDWALAPASRKTQKAAINVYWPATKGQAEIIGGDDSEPEDDEEYTLEDVERSVGE
LPTGWPSHGVKLLNNMRARFPGYPIEGIVWKMQEENFIGGNVIRAIRKTGVREVETVPPSAVRVG
DPGDFPAGYRVRATPLKVYREGSRNWSFQNMRDEKLDP

>TRINITY_DN116_c0_g1_i1.p1 type:complete len:297 gc:universal TRINITY_DN116_c0_g1_i1:72-962(+)

MGFVKAIKNKQYFKRFQVKFKRRREGKTDYYARKRLVTQDKNKYNTPKYRLIVRFTNKDIVCQIA
YAKIAGDVIVCAAYSHELPRYGVKVGLTNYAAAYCTGLLVARRLLHKLNLHETYSGQTEVDGDEY
NVESVDDGPAAFRCYLDIGLNRTTTGARVFGALKGAVDGGLEIPHSVSRFPGFDSESDDFNAEVH
RNHIFGKNVGDYMRALQDEDEDAFKRQFSKYIKEGVKPDNIEGMYKKCHAAIRADPAHKPSGK
EKFKGKRYGRKKMSFAQKMDSVRQKKEAFKRKMEQDED*

>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-550(+)

LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN374_c0_g1_i1.p1   type:5prime_partial   len:290   gc:universal
TRINITY_DN374_c0_g1_i1:1-870(+)
FHSGVNIDWNNFKKYLKDALCRCEKAAAAKGKKYFSFRYFGICHGLDSLPKESSEYCFHHTFEQ
CMNNHNECVGADEAEYIYKVGVQIPTNTKPALKVQRKVFCEHRGSKTVTCGAGETIKVTKAYYG
RTSSSHCGYRGFYNLNCKGSTSYSKIKSACDGKQTCRLNPHNNVFGDPCKYTVKYIDIEYVCKPP
VKKAIFCEHRGTKSITCNEGEKIEVVHGYYGRQSSAHCGFRNFYNTRCKASSSVGKIKNKCDGHR
SCNLLPANSVYGDPCVRTVKYIEVDYRCIKN*
>TRINITY_DN58867_c0_g1_i2.p1   type:complete   len:354   gc:universal
TRINITY_DN58867_c0_g1_i2:80-1141(+)
MVSLYGDMMFNIENGYLEGLVRGFRSGILNRTDYLNLIQCETLEDLKLHLQSTDYGNFLSNEAGP
LTVSVIDEKLREKLVIEFDHLRIQAVEPLSQFMDYITYSYMIDNIILLITGTLHQRSISELIPKCHPLGR
FPEMASINIASTPAELYNAVLVDTPLAPFFVDCISEQDLDEMNIEIIRNSLYKSYLESFSRFCDSLGGT
NSEVMKTILQFEADRRAIMITINSFGTELNKDDRSKLYPKCGKLYPDGLARLARAEDYDQVRQVA
DCYAEYQPLFEGTGTNPGDKTLEDKFFEYEVKLNVNSFMQQFHFGVFYAYVKLKEQECRNIVWIA
ECISQRNKSKIDNYINIFE*
>TRINITY_DN33065_c0_g1_i1.p1   type:3prime_partial   len:663   gc:universal
TRINITY_DN33065_c0_g1_i1:1986-1(-)
MWWFVWLAVAITINVDGKKASKHKSLLEDVDLDEDFDLDYSHNIFIPLDAYENYEKFLEYAQGT
DLAKRSGVSPLPVIQSLPADGVHTYSAPGINCQVELLNKEVEGTDKRVIERKTCPEGWTLKDAMK
YFFADVGQDLQSDSAGLVHIEQLKFKMLVFEPSGGFSFVADTDGEDYSNLQSKLSLSNVDFKLTM
GASYSYESSEISITGNHEVIERSTNEAKQIEVTFEKGKDTSNFVVKMNIPSMKLETFATVFLASETEF
VTSEIGDVTFNINIDPIKAVTIESTSNSVNGVFDTVEGKFQLTAKFTSDDTNAFDGEATDIYLTVNR
NSLGAPTHYNLMLGYAKTINVMDVVRKYIGKPEIQEQFDDKFLKNTIEKWYLMFTSSRIKLAADD
DYQNMFSDIFTDDDYKEFKKGVGIKAPVNLQETLTACGGGTVPDTLSDIKINGLLTKSGLSLKFPS
NTAVPLFALMKCKLRKIQSDLGLDIPDYLKKIEEATNFKLEEFSYDHESGEFKMSLLYSNTITIYKDV
LEITNPQLTIEREGTDEPWQFTIAADIMLFGVEASVSVQYSKTGFTVEVSSDVIPLSKLLTAFSFGIEP
PFTFEIHDFKMQLVVSDKEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRGPGGGRPRR
G
>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-
2(-)
GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN128406_c0_g1_i1.p1   type:5prime_partial   len:150   gc:universal
TRINITY_DN128406_c0_g1_i1:474-25(-)
FGSTRKMSQTQSVQVFGRKKTATAVAHCKRGNGLLKINGCPLHLVEPSTLRYKVQEPILLLGKERF
EGVDIRVRVKGGGVVSRIYAIRQAIAKSLVAYYQKYVDEVSKKEIRDILVQYDRSLLVADPRRSEPKK
FGGPGARARYQKSYR*
>TRINITY_DN4781_c0_g1_i3.p3   type:complete   len:183   gc:universal
TRINITY_DN4781_c0_g1_i3:2965-2417(-)
MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*

>TRINITY_DN464_c0_g1_i4.p1 type:complete len:717 gc:universal TRINITY_DN464_c0_g1_i4:2167-17(-)

MLLHFGKSLHYLKFGTLFWRLKLVAIPRDTSNIINNIFLESKSQRYIRMSANILNEYSQNVGKMEDE
ISGLTSQLNALKRKLNGEIEDEDCSDQLKELRSKNQKLHYQKNIIQRALKKEQEKADSKMLNVQ
AALNVLFESAIRSAYPQIPNPPVALTIAHNPKFGDYQCNSAMAISKMLQKLTGEKIGPHVVAKTIV
ENIPSNSFIKKVDVAGPGFINLHLEKEFLKGVLEKVIKEKVYPPGIGNKKKVVIDFSSPNIAKEMHV
GHLRSTIIGESLSRLLEFVGHDVLRLNHVGDWGTQFGMLIAHLEDKYPDYKTVSPPIGDLLLFYKA
SKKRFDDEEDFKKRAYQRVVDLQGGNPDVRKAWQMICEVSRNEFQKIYDRLDVTLIERGESFYN
DLMSKVVENMKKSGICQKSDDGRWVAFAPNMKVPLIILKSDGGYTYDTSDMAALQQRLQEEHG
DWLIYVVDAGQGDHFKQIFGVGEAAGWYNSSITRVDHVAFGVVLGEDKKKFKTRSGDTVRLIDL
LDEGLKRSMEKLLEKGRDKELTKEELLAAQESVAYGCIKYADLSHNRVMDYVFSFDKMLDDKGN
TAVYLLYAYTRVRSIQRNAKKGRSEIEEYMKSNSLHFDHEKEWKLAKLLCRYPEIVVRCLDDLTLH
LLCEYLYELSSTLTEFYDACYCIEKNRETGEIISVDMNRIALLESVARIFEAGFHILGIKPISRM*
>TRINITY_DN61668_c0_g1_i1.p1   type:5prime_partial   len:453   gc:universal
TRINITY_DN61668_c0_g1_i1:2-1360(+)

FDGSDELGCVTVAPATTKVLHCDDDHAYCEDNLECYPKEGRCDNTYDCRDRSDEKNCGAIKTD
KPICFDFQCKSGKKECISNDKKCDGRRDCKDGEDELNCQKSDCLPFPFGFNCTRVKEQCYLHKIV
CDGSTNCRDETDEDKEICGVTKRVKNLRSKLDDLSTGGIQVRLFWDAPDVSLSKVKGYAVSFIDD
KFVQKALKVPLSPSRVTIPSLKRCRKYVFAVAVDHTDLKADKLLYESTEEIETPGRRSPNAPALISTH
GNKVLWKEDVGDCIDHYDIYNRFLSCMEMDSKTVVKNRLKSANVLFDIQSMLNSNSNDTKLYN
CSIYINYIRKSDGTPFNLQTDYFTFPHTHDHHHKTAASTGGKGKRNTLVWAMPVAVVVIVLCIGL
LLMVYKYRKLQNSFLAFAARGSYNRQVDDLDDEDDDNMAVAFHTGEDSPMINRFSDDEPLVVA*
>TRINITY_DN1091_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN1091_c0_g1_i1:200-835(+)

MKLILICLFAVLVYSIHCDQPSDPVWPNLFQQSFREKFYYPVIGTHYTNGTYYYDYKNLRYRLDRD
NGRYDRYCGLNGIRAFQNTPCTHLVLDGTRWLVYPEKKECCECCHAANGCGVLKPTWLTGAEF
VSKSNGIYKWNQKGLQDNFYSERVTDRIMTEIDQVPNDTQYYDPDSFKTKIENIEDVFKLPSYCKR
GTKCSFFSACRAVGFF*
>TRINITY_DN3202_c2_g1_i1.p1   type:5prime_partial   len:263   gc:universal
TRINITY_DN3202_c2_g1_i1:949-161(-)

WSQGNRGCYIHTQEVARGNNARRHMCWVFSKCSKNPDVNLKSCPIESGLCVKENGLDQNSGV
RKLHHYDVTTPYAEADCFKRCSTYRYGEITGCEVIWNQGNRGCYLHSQPISRGNGIARHMCWVF
SKCTTSKVPATTAPKALSMTDTYFGKTELDPIIGVKRIGCYRMHRHRFRKKVNMKGSMDPLSFIDR
VKQCRDIVNNKEAEFEIFGVSRYGSQCDFYLPAEVKNEKPKPDSEDCHFDTMGGDTAYYVYKLCK
DEKQC*
>TRINITY_DN3052_c0_g1_i1.p1 type:complete len:362 gc:universal TRINITY_DN3052_c0_g1_i1:45-1130(+)

MAHLSQEQRNELKKNAESIVAPGKGILAADESTGTVGKRFAGINVENNEENRRLYRQLLFTADKS
ISNYLGGIILFHETLYHKDDNGKPLVELIKELGINPGIKVDKGIVPLHGTNNEGTTQGLDGLAERC
KQYKQDGCTFAKFRCVIKINTPLGVPTDIAIQENAQVLARYANICQANGLVPIVEPEILIDGDHNL
ATSQRVTERVLACVYKTLVDHHVYLEGTLLKPNMVTPGQSCPEKASAEEVGVATVKALRRTVPA
AVPGITFLSGGQSEVEATKHLDAMNKTDLARPWALSFSYGRALQASVLKAWGGKKENVAEAQK
VLLHRAHLNSLASLGKYEGENASGATGDSLFVANHQY*
>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-481(+)

CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL
>TRINITY_DN493_c0_g1_i1.p1 type:complete len:473 gc:universal TRINITY_DN493_c0_g1_i1:2681-1263(-)

MKCMKFISLMLITFTSILVAQDTGFIYYDDSSSSDIDSLTEPYGYQSVMDNREKSYEKPDMRYNFDK
PSASDIDSLNTPQYGYEPVMDDRERSYKRPDMRYNSDEPSARDIDSLNIEPYDYESLMDYRDTPSE

RPGMRFDFDESITGDIDSIDTPLDDYQSLMDHKRKPYARKRRSIRHRRFIGQRRWYGRRKFIRKNQ
RQRNGFRKINSQRKRVCSKGSNCRHKLEPMGCFKDIKSERAMTEEILNERDTASKVFNNRLINWR
QYHEWLPGFICRCAQAASERGYSVIGIQFWGECWSGPNSESTYNKHGQSDSCVNKNLQENRAN
LTQCAQAAGKDSTNYVYRIAPACNTKYEPVGCFQDDQKEPRPIPHYISTDRDSSLDIFSGKLLNW
KQWNTHMPDMICRCAALAKSKGHKMFAIQFWGECWSGPLSNDYKRNGASGECRGKDFKECSC
NSYYCVGKTHTNYVYRLS*

Band 8

>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY

283

CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN

TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY

SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*
>TRINITY_DN161_c0_g1_i2.p1 type:5prime_partial len:399 gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN982_c0_g1_i1.p1 type:5prime_partial len:6412 gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)
KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL

VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT

IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)
MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)
MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT

LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDDANE*
>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)
MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYQDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE

LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN1189_c0_g1_i1.p1   type:5prime_partial   len:449   gc:universal
TRINITY_DN1189_c0_g1_i1:1554-208(-)
VSAKSQVIAKMKFFLFSIAAILLVNSALADNAVQIPKTCEDVLAMETCDRLRAVAKKFHEKVGTV
NQAVTDAFKHHKTKAVEVLTYVKEYLVDKAVNFKCEDVLPADQCHNLLEFAKRLNVKASEASIA
LREAIADGSEQAKQLYQRAVSFLVNDVPNLKCEDFFKKDDTCDKIRNFATKVNAKAKDVTAAVK
KAIVENLENAKDGLKKAKQFLKAKISCDQVLNEKMCNTIQSIGDKFSVSMKKIDAALREAYANG
VRKWSELYEAAIKYIMDKWSIFGDDEPQRERREIQPENVKKAIKNLLDSLKVKSKKVRAAIMKLIE
SGKVKFGNLRKTVKQLLASLKGDKKSEDAVTAVYKRSVVDTLKETLQKLKEQIKDLAGKAKEQA
KAKIAELKELIKGALGSLDQDQSDELDQDFEMISDVLEAAADESFDEIANNALENHLGQYY*
>TRINITY_DN36_c0_g1_i19.p1 type:complete len:223 gc:universal TRINITY_DN36_c0_g1_i19:826-
158(-)
MIKLAIIVTVIAACVFESSAARCYVGYSAKGLPLAIGVRDVECGKGFDYCTTIKYRLGGIEVTQGNC
ARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTTGLIT
KFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNIDNC
NKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND

NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT

CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*
>TRINITY_DN332_c0_g1_i1.p1 type:complete len:246 gc:universal TRINITY_DN332_c0_g1_i1:940-203(-)
MGALTYIFCLFLISSSFAKEEESCRTYAGGQVYPDERKSGVEHALHWSKAQISKPAPHWEGKAVV
NGEFKDLKLTDYKGKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFKKINTEVIAVSVDSVFTHLAWTNT
PRKEGGLGKMKIPLLADLTKQISKDYGVLLEDAGHTLRGLFIIDDKGVLRQITMNDLPVGRSVDE
TLRLVQAFQYTDKHGEVCPAGWKPGSDTIIPDPKEKLNYFNKQKEEI*
>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-2701(+)
MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*
>TRINITY_DN3986_c0_g1_i1.p1 type:complete len:446 gc:universal TRINITY_DN3986_c0_g1_i1:252-1589(+)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEDA*
>TRINITY_DN168534_c0_g1_i1.p1 type:complete len:226 gc:universal TRINITY_DN168534_c0_g1_i1:774-97(-)
MIRSAIIAIVIASHLYESSAARCYVGYSAVGLPLAIGVRDVDCQKGMDFCTTVKSTIGGITVTQGNC
ARKYGQATCQFMQNSHKAMTDCKETLCRGDYCNSALIEAEQKERKRVGPYKNTLKCTTELKTR
FPLIPFATADIPIGIDECFPGTTRCVTVEYDYIYKFKTKIATRHNHFVLPVIQKMCNRPNIDDCNKW
CTIMSIHQFMHSSCRAKCCTGDNCNAKD*
>TRINITY_DN36_c0_g1_i20.p1 type:complete len:223 gc:universal TRINITY_DN36_c0_g1_i20:1172-504(-)
MIKLAIIVTVIAACVFESSAARCYVGYSAKGLPLAIGVRDVECGKGFDYCTTIKYRLGGIEVTQGNC
ARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTTGLIT
KFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFESQIATRHNVFKLPCIQKMCNRHNIDDCK
KWCSILSIHQTMTNCEAKCCKGDNCNA*
>TRINITY_DN1369_c0_g1_i1.p1 type:3prime_partial len:1577 gc:universal TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA

LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV
>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYVIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPPLDIAT

RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ
>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-
1359(+)
MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*
>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN1616_c0_g1_i3.p1   type:complete   len:3855   gc:universal
TRINITY_DN1616_c0_g1_i3:218-11782(+)
MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKDGYTIKSMRSVIEKEND

GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN250_c0_g1_i2.p1   type:3prime_partial   len:322   gc:universal
TRINITY_DN250_c0_g1_i2:131-1093(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLMGQIVSSITASLRFDGALNVDLTEFQTNLVPY
PRIHFPLATYSPVISAEKAYHEQLTVAEITNACFEPANQMVKCDPRHGKYMACCLLYRG
>TRINITY_DN240_c0_g1_i4.p1   type:5prime_partial   len:397   gc:universal
TRINITY_DN240_c0_g1_i4:1327-137(-)
LKAAAAFSGVSPFALVQPRARVPSRSRVAMVRRSPLPVLGLAGAACFFARSPCFIPGGPLRRQPWA
AAAGSAAVLGATPALADPIGDAAKKLADASYPFAKEVDWNSGIYLQAPGKLAPLEALKAIDKMI
VLGSQADPKLLKAAADAHHKAISSASGPTGMTSKADWEAVNAALGRVFASVPESSVMDVYNAV
AKITDPGVPAYLKSKVNGADAEKAYAAFLEFKDVVKANQVSSAAAAPVPAAGGDKIGAAAQAL
ADQSYPFLKSVDWTSDLYLKPLPGVSAAKALKAVDKAIVMGSAMDGNLLKAAASAHHQAIGSI
DAAGVTSAADYASVTAALGRAIASAPTSKVMDVYNAFAGIVEPSVPNTLFSKVDPLAANAAASA
FYEFKDVVKAAQR*
>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)

MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN2113_c0_g1_i1.p1　　　　type:complete　　　　len:1704　　　　gc:universal
TRINITY_DN2113_c0_g1_i1:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA

HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN116_c0_g1_i1.p1 type:complete len:297 gc:universal TRINITY_DN116_c0_g1_i1:72-
962(+)
MGFVKAIKNKQYFKRFQVKFKRRREGKTDYYARKRLVTQDKNKYNTPKYRLIVRFTNKDIVCQIA
YAKIAGDVIVCAAYSHELPRYGVKVGLTNYAAAYCTGLLVARRLLHKLNLHETYSGQTEVDGDEY
NVESVDDGPAAFRCYLDIGLNRTTTGARVFGALKGAVDGGLEIPHSVSRFPGFDSESDDFNAEVH
RNHIFGKNVGDYMRALQDEDEDAFKRQFSKYIKEGVKPDNIEGMYKKCHAAIRADPAHKPSGK
EKFKGKRYGRKKMSFAQKMDSVRQKKEAFKRKMEQDED*
>TRINITY_DN22_c0_g1_i1.p1 type:5prime_partial len:353 gc:universal TRINITY_DN22_c0_g1_i1:3-
1061(+)
ISNYYFHFQYQTAIFEYHTVFSLVKIINMKFAVALLVVCYFYSTEACKDVLHPSICADVKSIGNCGV
YKDLCMKTCGNCGGVLPPTRRPIFPTRGPGPGPKTPPPIVPTGECGVSSFAGGRVIAGTTAREGAW
PWQILLKSNGRAGCGGSLISANWVLTAAHCMNGGSYTVVLGEHDRNRRSGNEQEIRVSSAITHP
QWNRRTFEYDYALLRLSRPAQLNRYVKPVCLPSGDPQPGTSCYITGWGKTSSQGQMNGLLQQAP
MRVIEQNTCHKKNYAAIRVAVRPSMICGGGSGRISGCQGDSGGPFVCNEGGRFVLHGDVSHGSR
YCRSSETYTVFGRVNYVRRWIKSTANV*
>TRINITY_DN776_c0_g1_i1.p1   type:5prime_partial   len:201   gc:universal
TRINITY_DN776_c0_g1_i1:692-90(-)
RAGKTPHTASMVKNVCSKTYVTPRRPFEKARLDQELKLIGEYGLRNKREVWRVKYTLAKIRKRA
RDLLTLPEKDNRRLFEGNALLRRLVRIGVLDEGRMKLDYVLGLKVDDFLERRLQTQVFKLGLAKS
IHHARVLIRQRHIRVRKQLVNVPSFIVRLDSQKHIDFSTNSPYGGGRPGRVKRKNMKKGTGGGDG
DEEDED*
>TRINITY_DN1091_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN1091_c0_g1_i1:200-835(+)
MKLILICLFAVLVYSIHCDQPSDPVWPNLFQQSFREKFYYPVIGTHYTNGTYYYDYKNLRYRLDRD
NGRYDRYCGLNGIRAFQNTPCTHLVLDGTRWLVYPEKKECCECCHAANGCGVLKPTWLTGAEF
VSKSNGIYKWNQKGLQDNFYSERVTDRIMTEIDQVPNDTQYYDPDSFKTKIENIEDVFKLPSYCKR
GTKCSFFSACRAVGFF*
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-
2869(+)
MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)

QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN286_c0_g1_i2.p1   type:3prime_partial   len:106   gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)
MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)

MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*

>TRINITY_DN121501_c0_g1_i1.p1   type:3prime_partial   len:267   gc:universal
TRINITY_DN121501_c0_g1_i1:36-833(+)

MEEQKKPKLVDAVLSSLSTSKGWPQNVELYTVLEEQELLTDKAKCYSIEALLRIHELDAKYVKNRR
NNAFYMPPIKGSLPFLRIKNEIICEKDIVEFLKKCSYVLSNDLTAEEMLFHKGIFSIIEHRLIPLELYYL
WYSEANQKDTMNKFGHNHPEPLKKILCVQRYYEIKEYLKAEGVLDKTESQLQKDLKNIFDFFAK
LLEKKKFLVGDDMTEADVLLYGHIQAILESRLPNDILLKTLESYPKLTNFCLNFSQVCLGKQAML
W

>TRINITY_DN804_c0_g1_i1.p1 type:complete len:240 gc:universal TRINITY_DN804_c0_g1_i1:125-
844(+)

MAPNTAAETFVKVDPGTKKGINGILMGPPGSGKGTQSQKLVDRYCVCHLATGDLLRAVVSSNSD
LGNEIKGVMDAGKLVSDELVVKLIDSNLEKPECKNGFLLDGFPRTVPQAEKLDELLEKRGTPLDQ
VIEFHIDEETLVKRITGRLFHMASGRSYHEVFNPPKKEMTDDITGEPLTRRSDDNEATLRRRLEAYR
KSTAPLVDFYQKRNLHSRINADRPMNAVFATVAAIFDGCRDKK*

>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)

MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*

>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)

MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*

>TRINITY_DN2636_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN2636_c0_g1_i1:986-45(-)

MSAIAVVVIVIAAVLLHFSVHKIEEGHVAVYYRGGALLSSVSGPGYHLMAPMLTKYKSVQTTLQT
DEVKNVPCGTSGGVVIYFDRIEVVNLLSVDKVHDIVKNFTADYDKALIFNKIHHELNQFCSVKSL
QEVYIDLFDQIDENLKRALQQDLNEMAPGLKILAVRVTKPKIPEQIRKNYELMEAEKTKLLIRIQH
QKVVEKEAETERKLAVIQAEKQSQVAGIQYEQKIMEKESMKRMSEIEDLTHLAKRKAMADAEFY
THQKQAESNKMKLTPEYLELMRIEAISKNNKVYYGSNIPNIFLNEGGLSQKTK*

>TRINITY_DN3545_c0_g1_i2.p1   type:5prime_partial   len:236   gc:universal
TRINITY_DN3545_c0_g1_i2:3-710(+)

SGPGRSSCRPILSVIKISKINNIDSGKVEGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGK
HCDGVSFETRECNINQCPVDGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGKPCDGVS
FETRECNINQCPVCPEIVGTYDISSRHHYGGAKYGTVVFKKLSNSKTVEAYYTINDGRRGVLTCKIE
SAQPDQCSGHGYYGKYFTYYKNRCQIIWSNDVIYTKQNC*

>TRINITY_DN1306_c0_g1_i1.p1   type:5prime_partial   len:441   gc:universal
TRINITY_DN1306_c0_g1_i1:1765-443(-)

QSSIFYNINFLELKNYFRNHIKKYIFEIGILTTMYFILLFFSSHLLLVVNAQEVLTLSTIFEKSRAAVQS
RKAVNVINVLRDYYFTDKKENSIWFHAQKEAKEHFNVELNKDDLSSIESGIRKLSNSLEECVEYSR
NKRRALCFRDLIDRLEEKQRNALWNYAPDIDREEKGKWGTLFLATLSMNTLISATISANLKYASSP
KAYLWKKNLFEFFEHWYSLLYGYEVDVIRWRVDQISAVDICEEKEHFWKRFTLACETRWKRNIDD
EVDNMAEIENIKAHLPNNEFKSEKKSMLKEKRSIANSPTFEMLSDEFKKTKQKMKALIDEEDNGR
DHPDNEPTLNALSNVIGGITSFEKIYKGKVFDFVKKKSIFEKEVLVKPADRRGDTLLSLVKEGMSKR
GVYEKKIKQELNYFNNGTSIVVRGIMAVHMNDLKKGFMQHL*

>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-
494(-)

MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*

>TRINITY_DN730_c0_g2_i3.p1 type:complete len:235 gc:universal TRINITY_DN730_c0_g2_i3:1019-
315(-)

MPKKDRTELNRELEAFAVQIPSANSGFRMQLGETFIQNVKDGKIKGFEYKVRDPYRNDLFHDTSR
IDLYTDYELIMDNLYVKNRSSYKVEVEDEKGLLAFKEKLLSKPFMCHAKLHLMLKEDLTQKLSND
FFVTVFPENPDVKAAIEKGFQHALDCVKNKKHYKVWFTPEIWFWYKDFVTNATKTQFEFGDLRY
SKIELNDKKGFFSSSKDLNCPIKPSIIELVTTEAIMPDGY*

>TRINITY_DN1199_c0_g1_i2.p1   type:complete   len:296   gc:universal
TRINITY_DN1199_c0_g1_i2:164-1051(+)

MDGLNDAATKAKTIYGGNLLFSAAMTAVAHPMTYVKVLIQIGHEPLPPQQVTTLFGKKVMRLP
NFFQYAGHIKKIDGWFGLYRGLGPRVVHNICSSAITNSVTNKIKGNSRDEARPNDKSVEGFLRETG
NLAIAKTAGIVVSYPFHLISIRMMVQFVGREGHYRNIFTSVQEIYREEGILGFFSGLIPHLVGELFAL
WMFKTLNFLVQNYLISEEYSQVAEIKSYSQGVSQYIASMVTYPFQLVSNIMSVNDSRLVAGNPPLM
PIYDSWTDCWIELGKKGLRNRGSTLFRRNVLT*

>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)

MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI

QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*
>TRINITY_DN19237_c0_g1_i1.p1   type:complete   len:209   gc:universal
TRINITY_DN19237_c0_g1_i1:128-754(+)
MMSEDEQMRMELQRMQRRADEMTDESLESTRRMLRMAEETQDTGIKTLVALDEQGEKLNRIEE
NLDEINDGMKEAERNLTGLEKFCGLCVCGCKKRKDFEGTEEYKKAYNHKSDGNKNGRSGNKA
GGSNDVAKSGYIQRITNDDREDEMDENLGEVAGIVNNLKSMALDMGNEIETQNKQIDRITDKTN
ANEIRIDHANKRAENILRS*
>TRINITY_DN3036_c0_g1_i3.p1   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i3:1643-3(-)
AFAGAARASPARQGSVARRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN
NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
SPLAKQSSVARRALDQSSRYADLSLTEEDLIR
>TRINITY_DN22492_c0_g1_i1.p1   type:complete   len:1026   gc:universal
TRINITY_DN22492_c0_g1_i1:171-3248(+)
MLQKTLIYTLLGCWITLLSHAAIVRKSGGDDFSLKVGKPQKPIGQPKLKDAKKEVKEEPTSDVIPQ
QDENNDTTDRQKHKEQVSPDAVESGMPPRYPLKAMSAEVSAHDNEIGGCRDHPRASRVCKNC
GNRNFAAEHESYTYSYCRKSCRHCDPELSSFHTFWRLRAASQFDPTWMVKEIEFYPKPTEYDNLA
TDPQRAYASSSYPGFKPSYAFDGNNKTSWYPSGWGLHDNNDDWIGFEFPVAVRVHAIRMVLDE
MHRTAAPQRIFVEASDKKDGPFTTKWKISNPTYEVDNVYKLLQCPVLWRKFESDEGSWCFRLIAK
FETWEVARNECTVEGGDLATIATEEEKRFLTDELNLGGFAWIGLNHKDQAYYWQDRANSSYKN
WKAGWSYSEVQKQNLNCVATDQDGFWYNFHCTNKYYFVCKKKLEPQAAPREDLILKAWPYEP
EIPPMIFLYPNITVPVINTKNLEPGVFPDENGKVPEEEEEETTADDLFYEQTVEHLKEKGLKPSEEIS
NDVDKEETDYTQQLNKIALKTQSRDDFRNETESDKLKFNSTEAVKQAKDLEEQKSVNLDQNFN
QYNSTDGVKQQSQPVVAAPSDGPSGNSGDNNTLPRIVNGKPVESPSVNPNNVGKPNTPVASPES
PENTDFAQPGDTTFTTPTPTVQSGDPGNAEKSNPQKATNDQQAGGQQPNQESGSNANQSQVQ
QQSQQQQPQQQQQQQAQNNNNNQNGQQNASNQQNNNNNNNNQNNNNNQQQNNQQQ
NNQNNQQQNNQNNQQQNNQNNQQQNGNNNGGNNNDLPNGLPPVMGGPAPQKIPEPPAP
KEGTKDNDSEKSVGGQADVMPDDAPSNDNDGGDETTTGNEENNDESNNNNNNNNNMNNV
NNNNDNNQSRTLDKPLPNQGKNSSETVDKATNVGGTNKQENNDFMKLQKAKPGIRTHKIGHK
KSAGLKKTHMKNVVSPLKKVKTEKKINKQVKTVKKIKAVKVKHHKKALKKEVVIHKSEDDEEE
GSGSGDEGDQEDVDDILESITNGLW*

>TRINITY_DN5500_c0_g1_i2.p1	type:3prime_partial	len:1183	gc:universal
TRINITY_DN5500_c0_g1_i2:3546-1(-)
MEIKNFLILLSLLSLTSQLKAGLVFNETGVDQPVDLFFVIDGSGSVGYELFDGQLQFVTELTDQLGG
VSPFNVHVAIAVITTSPYQAIGLTQYQVNSEFKQAVSEIFYPRGATRIDKALLAVERELLPTSRAGVP
KVLVILTDGIQARWPGVYNTHVIIERLFNAGVSPVVVGIGSDYRDLDRLNKLAIKENHHLNEPIEK
LFLTTDDMEVGSPALVQKAASTVKKILSNVARFGYEVRSDFAFLLDGSTYAEDQLKLMEGLASYFQ
INRELSRFAVASSQGGGRTYIEFNEAQLSRDFKAMLMKLNVDSESIDIGIAAKYAYEEIFRIEEGERYS
TPRTLVIFSGNAEAKDSTLFGKYYSLLKKANVNLVMIAVGGGKGRSNLRNFPVDYYLPDFNDEVS
FTEECNIIAREMHNYIIRFASDTQRSKKCLHDGDLFFSIDVSGSAGAYYQENLNIIEKIIASFEISNED
SRVGFAIDRDGNTQVTPLDKHNSLESLMRDFDSLPYYPRGRSDMVAKLKAAYNQFLTSSRIHFQDI
LFIFTDGYLNRKSESESKELIDKLKAFGVEVFVVSLGYDVNFPFLMTLSSDKGHFFHVNQLPKDSDS
FVNSIINKVCDYTETFQDKYEIPINVALVLDGSHCSEKFHEAQKTFSNVIIDGLDNSPLAKNYLFSYS
SGVQQLDSNSSLAINFGSDGNRLDLALNEVVKLFQSISSNEVNMAIFVTNAGLESEFNATMSQAR
KLRSLGVITMVICIGDNFNYDVIRTLASSRQLIYMIPSPSQLTDTKFLRHIISAAFEMAESMPPPRLEA
GKSWYPAFFGNWVDSNSLEGEVPDAPLKAYHFGPTVLWSKPIQQKNYIIESTIIPAGSESGRFGTCG
HIFKHKVGATKKEKYISKSWGYFLWSNSFLYITTDGTETSPRIEFDYSSRDKLNLKTIVDGSKVKIYI
DGVFIRSIELEGTEADSQSHMFVGVWCHRLSAVTVEDFKVSALSNPCTVNNGGCSQICSADPYEF
KCSCIPGYRLVEDESTCVAESTCPELITTTVITTTLSSSPPTTNQSKFISTTTKPDELIDTTATIISTRESDI
TTTLILSTKSTEKPIEKIEKTTTSAIGDILEQTTVAPIKTSTVFVPTTKEEVILTTKEMAETTLTVPTTASP
VEETTTVAPVSTAAKTEATTQAVITTLAATTK
>TRINITY_DN1121_c0_g1_i1.p1	type:complete	len:252	gc:universal
TRINITY_DN1121_c0_g1_i1:1155-400(-)
MAEREQLIQQAKLAEQAERYEDMATHMKGVTKMADQPLNTEDRNLLSVAYKNIVGAKRSSWR
VISSIEQKATDSKKQYAEAYRIVIEKELSDICNEVLHLLDDFLVKSASATYYEDPNLTTAESAVFYLK
MKGDYYRYLAEVASESEKQSVVDKASNAYKEASNIGIKSLAATNPIRLGLALNFSVFHYEICSEPSK
ACTLAKDAFDLAIAELDSLPEESYKDSTLIMQLLRDNLTLWTADQADGNEPDAE*
>TRINITY_DN278_c0_g1_i1.p1 type:complete len:470 gc:universal TRINITY_DN278_c0_g1_i1:3091-
1682(-)
MAPSFNKTNGHMEENGGMIHANGKSSEKPINLGEQTYSYMTFKKMGLIMITLPLVFLLLVGLPSY
LYPVLVLLFFIPVFAGYIGLNNVIYCLYERHNQVSKIDNYIEFLDEDLKKKFTGRFIPIRDLYELYAEG
KLNFKGDVLQCLERRNEYVSYKLQLWHLKFFLSKLLPELLHARSQDKEQVCDHYDRGNDFYNA
YLGPLMVYTSGIRYSESDTLEDMQMNKLKAVCEKVQLKEGDRHLDIGCGWGTLVNYAAENYNS
QSEGVTLAKEQVCWAEEKAKSKEIMDRVNYLCMDYRDIPKKKYDKITCLEMSEHVGIKRYHHFL
KDVRNMLEDDGIFFLQIAGLRRAYQWEDFLWGFFMDTYIFPGADASLPLQFPIAELEAAGFEVES
VKTVGIHYSDTIKYWYHNWVKSDSHDKMIQKYGRRMVRVWDIFLAWSTIIARQGNSTCYQIVAH
KNFNHYPRRRFIQPKN*
>TRINITY_DN1653_c0_g1_i1.p1	type:complete	len:1122	gc:universal
TRINITY_DN1653_c0_g1_i1:180-3545(+)
MMRRSIKGSEDNWVEMQNDTFKNWVNANLKSRGLEVDNFETDFEDGVRLINLFEAVSKKSIGK
YAKQPKFANQKLENVSLVLRAMESDGVKLVSIDSDHVVNGNSKMILGLIWQLILRYQISGSDDKSF
KIALKKLLLIWLQHVIPEQGIRNLTTNWNNGIALCNLINVLKPGIFPEYNNLDKRTPVENLAKGM
QLAESELDIPQIISPENMASPNVDELSMMTYLSYFTQDGGIGESWTVDLVNFWNSSLSVTNFNTD
WNDGMRLGRLVETFLPGAMPIMESTDNLDNCRIAMDVAHEKLGISKIITAEEMSNPQIPELAVMS
YIVQFTKVKRVERASDKFSASGPGLVEPKIGIVNEFYVRSDAGYPLDGLQVTIIGPNNNYIPIEIDDS
DPQLRNYSYSCEEQGQYHINIIYEGEDIPRSPIIVTSQQDLNTIRVYGERLEVSHAYEETEFTVDVGSI
NSYVTATIDGPEGSQPTPQTINNNDGTYTVRYIPSTVGTHRIYLAVNNQQLPGGPIETNITYPIVSEA
ELIETVAFSAKYEEDKHLYAELYERIGISVDTSQSGDGRITSKTIGPDEKEIYSEVDAEGDGSYTVSFTP
EVIGEYHTNVFWSGKPIHGSPFVVWVSDPNKVFARGKCLYETRVGVESSFEVATNGAGPGHITGY
AETNGVEYPINVRKREECLHDISFTANQVGIYYVYINYNNVPIKDSPFQIKVGNPSLIEIEKHEEAIM
ESNQPQSFIVNVLKDAGFGDVLCVVRGPAGEDVQCTIKDVNDSLKEIMFLPNYPGTYEVFVYYAG
GLVERSPFIFAISEPKLAIYPENIRVSGNGLSRAKLNELARFQVDTTNAGPGHLTVQIEDEKDDVEA
GIRDNNNGTYDVTYTPKRSGKYRVIIKWSDQHITDSPFEIIVDNRAEEVLVEGYGIKEGTAGQPVLF

TLDGRNAGPGQLSCRCRAPSGKMTYVLISDNKDGTYTVDLNATEPGLHTVEVEWDNQAIPGSPF
LVRIMQAPDVKKVRASGPGLRSGTLDSFNGMFQVDSKGAGPGTLKVRIHGPKGAFKVEMSRENP
KDRIINVRYNPTEPGTYTANIYWSDEHVQGSPFEIFVGQNDQEVDRWDRNKEELSKSQVNVY*
>TRINITY_DN1936_c0_g2_i1.p1   type:3prime_partial   len:1894   gc:universal
TRINITY_DN1936_c0_g2_i1:5680-2(-)
MLSPAVTKVFIVLSVLGGLICQSCDFEVANACQWTQYAKDKFDWTRNFGNTGTGGTGPKTDHTS
EVKILKANTTGGNSNGAPCVFPFKFRKRTYTKCVRSMQRGKSWCATVPDMNKKRQWGYCMPT
GYYMYIEASSKRGNPRNKGDNAVLLSPVISKGPKCLQFWYHMYGPHIDTLNVYKKVSNNMTKL
WSLTGTQGNRWISANVTFNGGSQFQMAIEAIRGVEYKGDIAIDDITVDDGSCNADNGQKGNVTS
YGKCTFEKDKCGFKDGNTSTLTWTRHKGKTPSKGTGPLVDHTFGTGLAYYMYVEASNNPMQSA
RLYTTYTNLDSTGSCLSFWYHMFGPRTGELKVYINPPEIGKEIPSFSVGGEQGNLWIRGEVTVNTTT
ALVVFEGTTKYSYLGDLAIDDVSMERGKCEDPDSCSFQKDLCAWYNLPKSSGLDDFDWIVGAGV
TPSRFTGPTSDHNGDIAGKYLFMESSSPVKMGDKTWLSSELFNSTGKGKCFVFFYHMYGRDVGSL
NIYVNTSSGVELVWTQSRSKGKQWQNGQVDVERPGTYKVLVEGVVGKGYLGDIAIDDFKFKPGK
CQIVPSNASPKKPQTTMRPTTKRPTQPPTPILDCDFEFGVCSDWRQDYKNDTDNWKVGKGTTST
AGTGPSFDHTKGTIYGKYIYLEASYGRLNETARLISTSIPATGDTGGKCLTFWYHMYGPHINRLNIY
VMIGGHTGKPIWSRVGTQGNKWNKGQVTLVGRQPFQAVIEAVKGAKYQGDIAVDDVSLSSKKC
PQPGATTCTFENSQCGYIDDTSSDVQFQWTWQSQATSSLNTGPKFDHTLQSVSGFYMYTEASNA
KQGDKARLISPVNPGTSGSCLKFWYHMYGAGMGTLSVRLLVNNKLQSVPLWSETGNKGNEWK
VATTTIKTKDAYQVVFQGVIGTTYASDMAIDDVKLSDGECQSPGFCNFEDGLCTYANSKTDDFDW
LVGSSNTPSSFTGPKVDHTFGNASGSYLFLEVSKPIKAGDVAVLESQQFNAVGGKTRCLNFWYHM
YGSDIGTLQVIYKVFSGSQQERVLWKLTGQQQITEKDPWKYARVPVDMDADHMVMFKGIAGSG
YAGDIAIDDIQFTTLACRVEPSIANPTPTTPKPPTTFPKTAPPTAAPTPFSCNFEKDFCSLTSDSTAVF
NWTRSQGYTASQNTGPSTDHTYGRGFVKTYGPGSIRHAAGMCIHISMGGHTKPKDETALVLYNG
CGQDRTEFKYDNGLIKSTQYNMCFKLKGASTSAGTKVVISDTCTNKWKMLANGAFQDAKTNLC
LAPSGKLAYPQNNSPLIVSKDCKAKGVIFTFSPTMGFYALIEASAPQKPNDTARLISPVLNKPKCLS
FWYHMYGANINQLNVYTKSPNGVYGNPVWSKFGSHGDKWRPAHVYMNPKSSSYAYAIEGVRG
NGYEGDIAIDDVSVSDKCPAPVECTFEETNPVACGWTNLKTDDFDWSIGQGATSSQNTGPSNDH
TYNDQRGKYLYIETSSNLKAGAKALIQSPVYRGNGRQQGQCFQFWYHMYGASIGRLSLHLDQVG
STTKNRAWIQESDQGNRWSIGQITIKSQAAFQLTFEGIRGKSFTGDIALDDFRMFDGPCNNIATCD
FENEKCTWKNSYHKDDFDWIIGQGTTLSLNTGPVTDHSTNSGDGHYIFIDASRKKQGAKARLYSE
IIPRGFFTFIPYCIYFWYHMSGPDIGTLNLIAKHGKGKALEKVIWSLSGNQGSKWLQGTAPVTSSVD
FHLVFEAIVGDGYKGDITLDDIVYKLGLCSISPKAADPKLISTTSAPTPIPTTAVPAMYDCNFEKNSL
CQWKQDLTDQFNWTLVQGQTPTLGSGPSVDHTTGNKTGYYLFIETSNPRKAGDKARILSPSMDS
DKDHGHPHCLKFWFHMYGPHV
>TRINITY_DN146208_c0_g1_i1.p1   type:5prime_partial   len:284   gc:universal
TRINITY_DN146208_c0_g1_i1:876-25(-)
TDSHIRTTSAFIPCAKPSKMPPKTKKIKVKKVAAAPFQTSKPAPKKSVNVLIERRPRNFGIGADVQP
KRDLTRFVRWPKYVRLQRQKRILYQRLKVPPSINQFTQTLDQQTATQLFKLLHKYRPETKAEKKQ
RLTQLAETKAAGKQESSRKKPVTIKYGINHITNLVESKRAQLVVIAHDVDPIEIVVWLPALCRKMG
VPYCIVKGKARLGKLVHKKTATAVCLTAVRQEDRHSLEKVSDAVRTNYNERFDEIRRHWGGGIM
GGKSQAKVAKAERAKAKELRV*
>TRINITY_DN165536_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)
MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*
>TRINITY_DN13856_c0_g1_i2.p2   type:5prime_partial   len:292   gc:universal
TRINITY_DN13856_c0_g1_i2:3-878(+)
GAGRQAWSPSVSRQHGAAGGGAWAGAPESAATLTSSLAVGLSAGVVVAGLSSRRARTARRAVE
NKSQNGPFGELATVEPRTLELTEKVKAVIKQKGSLDRESYREIFLAPKPDAVFAGGLVGSEYHGWG

TYQWDPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPTLTLENAHNK
LIYGLGSGPMWWLLLFCGIIESLRFKQLGLDFGKLTLENAGDLDFGKGFLPKTKEGIVQMKIKELK
NGRLAMLAVSGALTQSMAYGVYTFPWTLPSPN*
>TRINITY_DN3347_c0_g1_i1.p1   type:5prime_partial   len:924   gc:universal
TRINITY_DN3347_c0_g1_i1:2-2773(+)
YGDGSDDDMDSIDEDEDEDEDDDDDEYSDDDDMSWKVRRASAKCLSAILGSRMDLLSEFYINVA
PKLIARFKEREENVKSDIFQAYISLLRQTKPVAMNDALEDKPDSPLSMLKQQVPLVVKALHKQLM
EKNIKTRQGCFNLFTELVGVLPSGLTEHIDKIMPGIHFCITDRNSTSNMKIDTLSFLGCILQHIKAEV
FYPHIHQFLPAVVECIHDPFYKITSEALTVAQNTIKVMRPTGTENYFDFKPYINDLYQSILHRLRATD
IDQEVKEKSITCMGQLLRNMGDNLSKQLPECLPIFLDRLRNEITRLTTVKSLTTIASSPLHIDLSILLL
DGIPLMATFLRKNHRGLKLHTLTCLDLLMQNYGNVMSTKHFEAVLDELSNLISETDLHVSQLSLN
LLTTMISKQQLLLKKVSSTVLSHIVILTRSPLLQGHALNSMVSFLTTLVRYSSSGLGYTDLLQMLTEV
IYGSTTENIHKSAYHSIARCASALTIACPSEAEAVVTKFIKDIKNSGTNDSIRLFSLLTIGEIGAHLDLS
SKAELKNVIVNSFSADSEDIKTAASFSLGHITIGNMDAYLPFILKEIESNAKRQYLLLHSLKEIIVCQS
TDPSSVKSLEQYVPSIWSLLLTHCENKEEGTRNVVAECLGKLTMVEPQKLLPELKSYLSSDLYSAQ
MRSTVLTAFKFTITDQPQSIDILLKDHLQAFLQPITDNDLNVRRVALTTFNSAAHNKPGLIRDLLTK
ILPHLYNETKVKKELIREVEMGPFKHTVDDGLDIRKAAFECMYTLLDSCLDRLDIFEFLNHVENGL
KDHYDIKMLTYLMLVRLSKLSPNAVFQHLERIIDPLRTTIQAKVKANSVKQEYEKQDELKRSALRA
VCALQKIPDAESHPILSDFVSQIRSNSDTKVMFESVQRDPSSTSLDKMDTAS*
>TRINITY_DN1194_c0_g1_i1.p1   type:complete   len:555   gc:universal
TRINITY_DN1194_c0_g1_i1:101-1765(+)
MAARLGGGMMQPQIILLKEGTDSSQGIPQLISNINACEVVAEAIRTTLGPRGMDKLIVDKNGKSTI
SNDGATIVNLLDIVHPAARTLVDIAKSQDAEVGDGTTSVILLAVEFLHQIKSLVEENVHPQILIKGY
RKATKMALEKIKEINVQIKKDDQEEMRKLLQRCAETALSSKLVAGHKEFFGKMVCEAVMHLDEL
LPLNMIGIKKVKGGALEESQLITGVAFKKTFSYAGFEMQPKKYKDPKIALLNVELELKAEKENAEV
RVDNVEEYQKIVNAEWNILYEKLEKIVASGAKVVLSKLPIGDVATQYFADRDVFCAGRVVEEDLL
RTMKACGGSIQTSIHNLVDNVLGTCEDFEEVQIGCERYNLFQGCPRSKTVTLILRGGAEQFIEETER
SLHDAIMIVRRALKNDAVVAGGGAIEMELSKHLREHSRSIAGKEQLIIAAFAKALEIIPRQLCDNA
GFDSTTVLNKLRQKHAQGGKWFGVDILKEDIADNFEAFVWEPAIVRINALTAASEAACLVLSIDE
TVQNPKSDMSGDDNPITGKRGRMPQMGR*
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*
>TRINITY_DN102244_c0_g1_i1.p1   type:internal   len:304   gc:universal
TRINITY_DN102244_c0_g1_i1:1-909(+)
LTFIESLRLRLYEILVDKMDLVFACQFFLLVLCNLVYSEEVCPTRINDEDKFETKKRFDALRSKLGDK
KLEVRFRHTSKKRENDLYDYTITLCGENNSKAVTQFDVTKSTILSAGQHDSSSVVYGGVDWLMIE
YLNGDKYTTAHHCHGKPRKTLLTIRCEEDNEKPKLLAIEEARYDTDGAGRHPNTPCYYLFEYNH
PAACSSSKVRRFHSENKLSGGAIFLIIVLSITAAYLLFGFIYKRFIVGAKGWEQIPNFSFWRKVGNAS
ADGCDFVCRREERSTTYKGMADALDIETSDDDRDDGLL
>TRINITY_DN22594_c0_g1_i1.p2   type:internal   len:268   gc:universal
TRINITY_DN22594_c0_g1_i1:801-1(-)
DFQDPTLNLETAHNKLIYGLGSGPMWWLLLFCGIIESLRFRQLGLDFGKLTLENAGDLDFGKGFL
PKTEEGIVQMKIKELKNGRLAMLAVSGALTQSMAYGVYTFPWTLPAPNAVQSRTALRAVEFKGQS

GPFGALDVAEPKTLELTDRVKAVIKSKGSLDRESYREIFLQPKAETVFAGGLVGSEYHGWGTYQW
DPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPSLDLENAHNKLIYGL
GSGPMWW

>TRINITY_DN941_c0_g1_i9.p1 type:complete len:3186 gc:universal TRINITY_DN941_c0_g1_i9:86-9643(+)

MADPAKIVDPIDDPTASDAEWKKIQQNTFTRWCNEHLKSSNIYIYNLETDLCDGLKLIALLQVLS
HKKIVRYNKKPTFRPQKIENIAIALKFIEKEQIKLVNIDASDILKGNLKLILGLIWTLILKYQISMSMV
ADDDDDPDQKTTPKQALMGWVKSKLPPELKCGNFNKDWNDGIALASLVDSTAPGLFPEWEDL
DPANKLDNAKEAMKRAEEWLGVPQVLTPEEITNPNVDELSVMTYVSYFPESKLKPGAPLKPKMN
NASKCSASGPGLQEHGVVVNKPAEFTVFTSGSSRGKLNVQVFGPGRKAIDCMVQDNHDNTYSC
QYTAPKTGVYDVHIRVGGHHIPKSPFRVNVASDLDTSKVTARGPGLEPHGLIVGRPASFEVIATDA
GSGELVIDVIDPKGNKKTELKVEARPDNVYFCTYMPVQVGRYVIVIKYGGKEVAKSPYHVSVTPA
ADRVKIYGPGLEPGLKTGKPASFTIDCSEAGEGGLDVKIVGPGKGDIKYEVKDNGDGTYTCTYKP
TRPGQYEITVKFDGGVVPKCPVKVSVGSTADPSKITAWGPGLERGVAGRPVEFYVNCKGAPVDNL
TVGVEGPGEAKVDMKTNSDGTVTVTYYPTKPGKYIIHVMYDEMDIKESPYSATISPRGDVTKVYA
EGPGLEAGNMAGKPAEFTVFTKGAGVKGNVQVTCVDENGKPCEVTVKDNGDGTFKVTYYPKTI
GKYVITISFMDEQIPKSPINVTIIPFSDPTKVKATGPGLQGGKTNKLAKFKIDASKAGEGGIGLTIEG
PNESEIKCDDNGDGTCNVEYMPTESGDYKINVLFADQHIPGSPFTAVIGDDFDASKVKADGPGLK
PGNKAGKPCDIAIDARKAGKAPLVVEVTDEVGNPVKVDLNEEEPGLFASSYHPEKEGPHTINITY
GGKHIPRSPFKVTVKPSSDASKVKVFGPGIKPTGVKSLEPTYFEVDAGEAGEGNVDIKIEPTAKGM
PPVKDIDVKPGKTPNSYIVTYIPPKDGEYNIVVTFAGVNVPKSPFKISVTPGSDASKCKASGPGLEE
PIVGKENVFQVETPPEAGLATLTCTIDTPSGRKLKADCKKNKDGNGYDVTWTPKEVGRHKVTVK
YGDKEVPESPFYVDVLGKPDPTKVKVYGPGLENAFVEKPAEFTIETRDAGPGNLGLTIEGPEEAKI
DCKDNGDGTCSVTYIPTKEGPHDINVLFDDQHVPGSPFKVAATEPIDASKVKCKGKGIGKSTPAS
YPAEFVVDATKAGKAPLEVDVVGPGDKKYPCDIVDNNDGTFNCAYVPEKKGRYEVTPKYGGTP
VPGAPFKVSGEPTGDASKVKCSGPGLDRPHIGHAAPFEVDTTKAGDGKLNVNAKGPDGKELPV
KMVEEEEGIFACEFVPEELGPHELEVLFGGQPVKGSTFKADATPAPELDKVRTPALEEILEASPCVD
QQFEAPVDCSEVPDNKGAKLSGKITTPAGKREKVDVTDNFDGTFALNYTPTEVGKYVLDVGYDG
IPIPGSPFEFEVTEGGPDKVKVFGKGIKKGVVAVPSRFTVDTKNAGPGDLSVAVEGPSKVDIECVDN
GDGTCEVTYVPVEPGEYDVIVNFDNQQVPGSPFKPQIVQDEPAIEVGRQSDLCLTPEGISAKDIPSL
KGVLQAPSGKEKPVDITEGPNDSFIASFVPDEPGKNLLHVKKRNKPIDGSPVPVMVREKPVIGEES
GIPMDLADCDLPKDLPKLNAVLTRPNGKEGPCGVEPGPDDTVAISFVPEEPGKHIIKVYKDGKQIE
DSPFVVMVEGSPDQYPKVGHPCDKDFYQPEPCRRGDISKMKGTLRRPSGKEEEVDVKLGPDGTIA
VSFVPTEAGEHLVSVKKDGRHVPNSPFSIMVIDEPTVPTVGSECSANFDIPELDLPKDLQYLKGTLT
RPNGVEEPLELSVGADNSLAINFVPKEPGKHLVSIKKRGKHVKDSPFEIMVEEGKPTDAPTGGPVV
GHDCGVNLDIPELSLPRDLKNLDAELTRPTGKKEPLKCDMGPEETLAVNFTPTEPGKHLIDVKKR
GRPVKGSPFEVMVGSTPVSEDQIPVSEEIMAQSAPDVESGLPGGLDSLDSGKDKPVTVGSPCDVNL
DIDGVDLPKDLDKLKAELTRPSGKKEPVKCEMADNGGLSLNFVPEETGKHLLEVKKNNRPVKGS
PFEIMVEESASPESKPTAGQKCDLDLDIPDIDLPRDLKDLKAQLTRPNGKQEPIECTCTPENTLGLE
FTPDEPGKHLIDVTKRGRPVKGSPFEVMVESPESKPTVGNNCGLDFDIPDIDLPKDLKVLKAELTR
PTGKKEPIECTATPENTLGLEFTPSEPGKHVIDVTKRGKPVQGSPFEVVVGEEEPASKVPTVGSECD
VNLEIPGLNLPRDFKYLDGTLKRPNKTSDEPLELTMNENGTIGVNFVPEAPGRHEISIKKHGKHVS
GSPFDVMVESAPSDQPEVGSPTTLGLDMVIPKEDLRLLKGTLVRPNGQEEPIEITLDDNGHPNVTF
TPQEVGNHVINIKKRGQHVPGSPINVMVGPAKKPTTCDVGFEIPGIKLPDDLKYLKGSVVSPSGTE
EPVELQAGQNNTIVVSFLPKEAGIHYIHIKKNGKPVGDSPYQVNVKPEDIAAGQPDASKVKCTGR
GLRHGLPGVKADFLVDTKDAGYGGLGLSVEGPSKVEINCVDNEDGTCAVDFTPAEAGQYLINVT
FADTHVPGSPFKCKVGGPGVEDDIVPMTDDGVECASSDMLAFPSSKARSPQDFVIKFSGSGDLKA
TVTRPSGVEDEAEVVETGPDTYTVRFVPRETGEHLVNVKSRRRHIPGSPFKVLVEAPAGGAASCKA
HGPGLEGGVAGQPCRFTVITRDAGPGGLAVAVEGPAKAEIQCHDNGDGSCDITWYPVESGEYML
HIRFADEAIPGSPFKAFVLPADEGKAMPMESFKDQVLRVGQQASFAVQMKGKKGKITASVQSPSG
VQIDCSAVELEEGNYAVRFVPRELGDHLVSVFLDGHHIPGSPFTVKVGGLDSDPSKVTAYGPGLKG
GVASQPAEFTVNALNAGSGALALSIDGPAKVKMHCVEQDDGTYKVIYNPTVPGVYEISIRFGGQH

IPGSAYKVRIVGSGDDAINIFGDASKCNASGPGLNQATIGQPATFKVDASNAGRGSIMVGVEGPVI
PAKEIIVKHTGNNVYSINYILEQSGDHILRVLWADNHIPGSPFHVNV*
>TRINITY_DN79_c0_g1_i1.p1   type:5prime_partial   len:478   gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)
VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLDKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN
EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*
>TRINITY_DN66856_c0_g1_i1.p1   type:internal   len:443   gc:universal
TRINITY_DN66856_c0_g1_i1:1327-2(-)
WSIGQGKTASTKTGPKNDHTYNDQKGKYLFMPTSNKKLRNGAKAQIQSPIYQVQPNGNSVKCF
QFWYHMYGSSIGSLNLYMKSQWLKRKLWTKVSYQGNLWWIGQVTVTSQTPYQLMFEGVRGSSY
TGDIALDDFRMLEGACNNLATCDFENDKCTWQNVLRSDDFDWLIGQGTTWTKWTGPLTDHST
DTGDGHYMFIDSSRKTKGAVARLYSERVQRSIFSFFPFCLSFWYHMQGPNIGTLNILTKTGRGKAN
EQLVWSLSGNQANSWKYATVSLKSRKGFIMVIEAIAGGGHKGDIAIDDIVFGRRFCAISPPEAKPT
VATTPGPSPPPTTPMPTVYDCNFEKKDICQWQQDVSDQFNWTLRQGATPTRGSGPTADHTTRNK
TGSYIFIETSNPRKAGDKARIISPPMDSDKYHGHPHCLQFWYHMFGSHIDTLNVYKKV
>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)
MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*
>TRINITY_DN31399_c0_g1_i2.p1   type:complete   len:819   gc:universal
TRINITY_DN31399_c0_g1_i2:85-2541(+)
MAVNVSHVYTCPSDYLCSKAEQGTLLIPLINESEWGRGFRIFLYTLALLWCFMGIAIAADLFMCAI
EIITSKTKKIKVATEGDDKMGYEEIEIRVWNDTVANLTLMALGSSAPEILLSIIEIVGNNFESGELGPG
TIVGSAAFNLLVITACCVMAIPGGESKRINAFNVFLTTSFFAVFAYIWMFIVLTVSSKGILEVWEAAV
TLLLFGILVILAYIADKDLCVSVFTRKRRKKDIELDNFDLLNENVLKKHHPDLIEYMKEITANPSISE
QEAAKLIAIKIEASKRKNYGYYRVGALRSIGGGRKVVPAVTPKLQGIIDGGSTLNVNAETNVNDSV
PDNKATIEFTATAVSVMENNKVVQLGVERSGNMSSQVSVNFETIDGTAEAGSDYIAAKDTLVFEID
EIRKSIEIVIIDDYEWEPDETFFVKLHVPEGANDRVQIGHHSICEVTIINDDEPGTFSFNKPSNIVKES
CGQAELEVERVNGADGKVEVVWKTKDQSALHGKDFIGGEGTLVFEHGETLKSISIEIIDDHMFEK
DETFMVELLEVKNEGAKFGRLKRTVVTIVSDDEYQHMFDRVVNMAHMNLHFQLGSSTWGQQ
FREAMNVNGGDLESASFMDYVMHFITFFWKILFALVPPCTWYGGWLSFFIILGMIGCLTAVVGDIA
TIFGCLVGLRKDVTAITFVALGTSLPDLFASRNAAMNEKYADASIGNVTGSNGVNVFLGLGIPWLI
ASIYHEAKGKVFKTPTGSLATSVVTYSVCAIACILLLIIRRFVPFFGGGELGGPKGPMYASGIFMISL
WFIYVLISALVSYGHIAAL*
>TRINITY_DN73067_c0_g1_i1.p1   type:complete   len:831   gc:universal
TRINITY_DN73067_c0_g1_i1:3714-1222(-)
MHWFVILLLFGVIFVTVSNYEIDVLSTFELSEDIAGISPLDNKYQAYQFAADGKELLLDDSIKTEIVR
GVTNFKDFFIAVNIRHDKQKPSSLLSLQTKTTGKQKFTLWINAEEEKIGIRSHSKESKKGKKNLTFR
KVPLNTGQWHRIVLNFKKIDTDEPVVDLYVDCKFHDSKTFPFSIGHALIEDALISELRLGQLKHLP

EKDPIRFIGAMQDFRLVSNRDVHWYNRPQHCYNMMIEVKGMKAYHEPVSTISHDVDNMAAAM
KNMQKQLKLQLDEIRDIKNWLQQCTACKTAAENVLGGEIPKACSQNRCNENANCIESNGGSAF
RCECKAGYAGNGEKCGLDSDSDGVPDNKLDCLGKECSQDNCPGFPNAGQEDADEDGSGDACD
IDDDNDGVLDGDDNCQFLSNRDQKDSDADNRGDACDNCPFESNYNQLDSNNDGLGDACTRD
ADGDGIRDKSDNCPRVYNRDQIDRDSDGIGDACDNCIDIYNPIQKDVDNDNLGDACDSNVDID
NDGIQDNKDNCLYIANANQQDIDNDGIGDACDPDDDNDNIIDENDNCRLIYNPDQSDSDGDG
QGDACEDDADKDETVDLKDACPENPEIQNTNFTNYKHIMLDPEGTSQVDPEWEILNKGAEIKQ
WRNSDPGIAIGDKVFGGVDYSGTFYVHDDKDDDFAGFVFSFQSNSKFYALMWKKDKQTYWFET
PYKVTGHAGIQLKVVTSSTGPGEHMRNALWSSISIPGQTKIIWSDPSKEGWKPKTSYRWTLMHRP
SEGLVRITIKEGSQVRADTGYLIDKTYKGGKLGVLVFSQKEIVFSALQYRCTEQIPADYNPNSPN*
>TRINITY_DN374_c0_g1_i1.p1   type:5prime_partial   len:290   gc:universal
TRINITY_DN374_c0_g1_i1:1-870(+)
FHSGVNIDWNNFKKYLKDALCRCEKAAAAKGKKYFSFRYFGICHGLDSLPKESSEYCFHHTFEQ
CMNNHNECVGADEAEYIYKVGVQIPTNTKPALKVQRKVFCEHRGSKTVTCGAGETIKVTKAYYG
RTSSSHCGYRGFYNLNCKGSTSYSKIKSACDGKQTCRLNPHNNVFGDPCKYTVKYIDIEYVCKPP
VKKAIFCEHRGTKSITCNEGEKIEVVHGYYGRQSSAHCGFRNFYNTRCKASSSVGKIKNKCDGHR
SCNLLPANSVYGDPCVRTVKYIEVDYRCIKN*
>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)
MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK
>TRINITY_DN3190_c1_g1_i1.p1 type:complete len:315 gc:universal TRINITY_DN3190_c1_g1_i1:68-
1012(+)
MATVVDYPDFDAQADAETLRKAMKGLGTDEAAITFILGSRSNKQRQEIKTQFKQMFGKDLIDDL
KSELGGHYEDVVVALMKKPDEYDASELHNAMSGLGTHENVLIEILCSRSNAEIKAIKETYKKKYK
ADLEKDLQGETSGSFKRLLTSLVQGARLEDEPADHASAQADAHALFKAGESQWGTDESRFNAIL
ASKSFAQLEMIFHEYQLISNKTLEKAIKSEFSGDIQNGLLAIGKCAQSRPAFFAERLHKSMRGLGTT
DSTLIRVMVSRCEVDMVQIKQAFERNYGKTLNSYIADDCSGDYKKILLKLCGPE*
>TRINITY_DN40728_c1_g1_i1.p2   type:5prime_partial   len:124   gc:universal
TRINITY_DN40728_c1_g1_i1:1-372(+)
KTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGVIEPSLAVFARKYNCDKMICRKCYARLPARAVNCRKKKCGHTNMLRPKKKLK*
>TRINITY_DN21847_c0_g1_i1.p1   type:internal   len:384   gc:universal
TRINITY_DN21847_c0_g1_i1:1150-2(-)
LSADGDVTAFRRRRSVELKHGRISMLATMGYITPEITGKFPGYLSNSMSLKFADIPNGLAAISKVPA
LGWAQVVAYCGFCELSAGSSDWKTGTPGDYGFKVLTSSDPAEKEKKLAAEVANGRLAMMAIIG

MFFQDGLTGSAWGDWALYDASPLRAFENELGVQEPLGFWDPLSLSADGDVTAFRRRRSVELKHG
RISMLATMGYITPEITGKFPGYLSNSMSLKFADIPNGLAAISKVPALGWAQVVAYCGFCELSAGSSD
WKTGTPGDYGFKVLTSSDPAEKEKKLAAEVANGRLAMMAIIGMFFQDGLTGSAWGDWALYDAS
PLRAFESELGVQAPLGFWDPMGYVTDGDVEAFKQYREAEVKHGRVSMLACIGYIVPEYF
>TRINITY_DN123301_c0_g1_i1.p1   type:complete   len:272   gc:universal
TRINITY_DN123301_c0_g1_i1:90-905(+)
MAQSASYQKMDVKKEEYHAVSGASYGEEKIPQAITSQPTAVSGVESYVLDLDASQVATWTEQDVI
NNFVERVGLGYANELFMANKINGKSLMLLREDHLKEMGIQAIGDRVFLLDMIQMLKKKKKEMQ
TTAALWSGETPADGCEYSDSCGHCIRRYLCPCCISRTYWKVTGQGVFYRKVPPCRQYFGTVSTDY
MDYRFFKDLELKEEHQCCCFCPRYRLELYVDDKDHNASAKSDEANPSFPIPHELLHPEAPKVEKII
RNAWNEARLVSE*
>TRINITY_DN12632_c1_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN12632_c1_g1_i1:165-1676(+)
MGNCLRKPKKQRQKEEKKLDATSLEPSLVEPNPQPPNSFPAPAPLGNSNGVQGATVFVALYDYD
ARINEDLSFRKGERLQIINTADGDWWYAKSLQTGREGYIPSTYVAPEKSYEAEDWYFGDIKRAEAE
KRLMMRSLPTGTFLVRKAESAPGNFSLSVRDGDSVKHYRIRKLDSGGYFITARAPFSSLHELVQHY
SRDADGLVCALNIPCPNNDKPLTMGVAKDVWEIPRESLRLTKKLGAGQFGEVWAGVWNNTTQV
AVKTLKEGTMSPAGFLEEASVMKNLRHKHLVQLYAICSDCEPIYIVTEFMCHGSLLDYLSKGEGQ
NLQLPTLIDMSAQVAAGMAFLEAQGYIHRDLAARNILVGENYVCKVADFGLARLIEDTEYTAHE
GAKFPIKWTAPEAALYNKFTIKSDVWSFGILMTEIVAKGRIPYPGMTNAETIHQVDRGYRMPQPP
GCPEPLYQILLNCWNKDPEARPTFEYLQLTLEDYFVSTEPGYRDLNQTDS*
>TRINITY_DN1080_c0_g2_i1.p1   type:5prime_partial   len:8617   gc:universal
TRINITY_DN1080_c0_g2_i1:26447-597(-)
VVIRRVVRRPVPIVTRRRVYRKVILDLDGTEKGVEEKVEESLPGMQGLDEDPITAPVVAEEQESVPD
MFGDLTEQSIVSRRSDFPKEGELDGVVDIADGKIGDTDENENETNFEIAFKREVYRLAVLDKKSIPV
ERRIIRKVIKLPNGEQKVLSEEDVLIPLEEEGVPISNTEKCKIVSTRIVTKRIMQYPDGKEDVLDETIES
ETERTQPLTSPEQAYVLVVDKPDGVGSIIEKPVEIAPLEYSYSEFDEDKVDSDIVEKGKTGKIVLRRQ
TVSTSKELHRSHLNKDTEKSVIVDLITYPSEQTEDSVIVTDEQDLSKSPEIIKDEKNERGIVFRRVVRR
PLPVTTKRTVYRTIVLNDEGITTEFEASQEEPPVEKKNVLQKIISSVKPKTDGKDVPEVDDSKPEEVE
RHLIDRVVKHKDGKEELIDQYELINSLEMPAVNVEPITKRVTDSKGRVIKTQVIRRVYITVKTIVVRK
VVEKADGTEIELGSSYEESPDDSTEETPYPERSVIHRVLPQDTPRVVEESDDISPLETSYKKGQEKEFI
SKNVLDDGTIENTVYKKDEITKKKLVTRKTIEYSKGKKAKKEEPIEEIHEHPVEFGSDVKFVESTEEI
KNEKGEIVKRVIHKEKPVHTRRMIYKKLTYTPEEMNKIKLEQMGEEKVLPKESKDDKKPGKQTTA
KPLAKPSTKAKPSTKSKSVSSVKPESKESGKPSKISIEKPSKKLSTKVTTKPSTESDGKREAPPSPTKST
TKPSTDSSGKHEAPPSSTKSTTKPSTESGGKREAPPSPTKSSATKPVMKTSGVKLSKPSNEKRIVKRP
KIPGDSTKSESKSKENDPAKKNRADEKDGAEADEIISKSKNVLDVKSVPTEMNVDIDTTDKRQSE
KAAEILKEKNQKHEADEIMQPVDIEEVQSSPLDLEKPMIFDDVVKSVDMEDVQSSPFDLEKAKISD
SAFKPVDMEDVQSSPIDSEKPITSDDIVEPIDIEDVQSMPFDFVKPMTSDDVVEPINVENTQSLPYDT
KGVKGREDVFLDQGEGLSDSNDENDFIEPGKVSLMRRQSSLRKRNRPYDEKKEDIRRNSLPLQEL
FIKLGRHDSGLSAIWESLLSDSKEEYISYDDYMTWLNFLEKEYSSSKFIPGKHDLLTKEHDYNKSLK
VDLRKRKAIVDHINKMKPVLQDLAVGQDKELISQELNELTTRFDKVYVTCEHRLKEINNMVPLSK
EHEDHYVPVSTVNEIVEDELKVKPRTGVDSKKIQAEIDRVKKLKDKLDNCKPAVRQLRKSLNSVQ
KHQTDIIDKEQIEEEAVNAVSKHDDLCNNVGQYNDTLERQLEKAKKFFGECDMIKKWAPVVEA
QLYNNETDSKNPEDLKKELKQLDMLKNEIDKKRPLIMAIDENGQWLMQNLYVTDKAGRRKSTA
SEVQLSLAEITSIVHHLSEQLNGRRDKINALLADTMSFEDSATKFEKWLIVIEEKVSSQKTLVLKSNE
LKDEILRYKPLLDEIVEHKPMIQSLVHSGEKIMSSANDKDKEKYMNKIALYSDRYDKVLKTATLKA
DKLDQVLPLVREHETNTEIVENIMSLAQPVLTSIEPVGVDSEKGNDQLKKVKNVVDLLDHNEPAV
NTTKRCVVQLTRILEEDLVKSVKETTTNNAIKYEDLRAKLKEGDANLAKQYIECERFTEIFYSIESKE
EYIYVLLKEIKSCSKQPERIDDGLLKSKEISIVIEEVLEQCSVVEEIIIIIQGYCKGHPVVLKTVGEKSSVI
SSKKIMMGKVSKEVQDEQNKMISLQQANKELDQKVIDINCWLPQIEGEVVKQTPVSANYDILKV
QYEKHQPLYQDVVQKESNIKHVLLLAGNILKDKKPGEEKDKLSKSIEDIERRWNDVSEKVNKRQ
NQIQRVMPLASVYKNTSTSFCQWLSNGEKQLKDLTSLSGNLEDIAVRKRELQDLAKDIESEKPNQ

LKVNDTARKHLDVCKNEAVEEPISEKDQVQQEVDHIDARWKKLTINVKEETDRLSQIEDEAVKM
CDKERVLEDLFIEVEKTLTEQKPVNLIPEKSKEELEKIKTLIVKVDEKEKDLTVFNNCSDKLQNLLV
QYDGNKDNVEKVKPVINDKFRKIRSHLTDRHADIDDIYTNVKEFDTDVKSSHTFLHDVTKECED
VFNKKAIPKDENELKSSVDTIDKLIDRLTKKKSDLQKDYEIGDKLIEHSSRDPLVLHDVQSRLQKIQ
DPINELIDKLNDRKSSIVNESRLHQALTGKLDDLDKHLPNLENKITNLKPVSAKLTVARGQQEEFK
PVYDETMAFKPLYEAIEKEADELKSSKSKRNDEEDEMLEKKLPDVLSQWNEQFEKVEKYNNQLK
DVLPTSANYHFTFLKFSPWLENAEKQLKEIKNDSFKTEPSSNLSSDIDKFRRDIGTNEPLLKDYNTS
AGNLFDRCKEVDVTTDVPYLEDEVKHTNDRWNRLKVDFSEMTENSNKLKNALQAYEKASEPVE
ECMIAITENLNNETPSDLDLEGLEFYVDERNADLESMQEKEPALQKVQSKCNEISDLLTANGGDP
TDIRDKAKDMNARWNDTKSKLTGKRDKSEAQLKQLEQFLNATDLLDNWLNVTTTTVTNMGPA
SATSEGVKKQIDQIDAIQEEISKQNVKLLKAEELGDWLCDENKDNPQFCANVNNRLNKIKNPLD
ELRSILSARKSRLHETLVATQDFRVAFDDFSTEIDKLVSRQNKQKPLSVHHQTLKSQDDEQKATEKE
IEALKPTFEKLIENGKTIIKETEKSNERDSLEENIEQLQKKFTGISETSDKRRKSIDELFPRSEKYFTKE
DDVSDWLDKQEKVLEELDIVPVSVADVEKLENDIMKLEEEVNKEEPEYKDCLKSFTDLSEHANNE
KITKDLPETKELDEKMNTRWENLKKKKNDKKLFASKLKTLISSYSDFCEGLKNNLAQFEDAIDKK
PSHGTDSKKCNDELERIDELIRKLDTHEPEMNNVEKLNSELTELIRKEKGDSNTVELTTKNLNGRF
QKVRDTLNERKKSLEKVSRVLLQFNGIVDDVSKWSDQADEQYVKLGRVSKDPEEAKRQIHKIDLL
LEETIRQKSAVTSAEENGKWLTENCLDDKEMRANVRSVLSNVYTPINTIEAKLNDRKAKLENAVL
CGQEFDKSFNDISERVTSLEFQVDRKKPINVDWTYLVKEQQEQKLLMKEIATLKPLYNQLITTAQK
TLNSLEPGDEKEATQQRIDSIVIIWEKISVAIQHRDEVIDQLENVSQSHHDQHRLFKEWIVDPEDSI
KNLEEVPSTRDEFFKFKKSVKEFIVLIENHLPNHSSLNDSFEKIKSETEKFPDDEFVGLNSLEEDIHK
TNDRWEKLTLNMKKYRARVEKLQSPIVKYSDGYDDAGKILEDIEKALEYQPSFGADEQLGKDEL
DRIEELIKASHVASEKVTVISEDSKHLEIVIDENDGDNTNVKESTKILVKRLKDIQEQCSVRKVDVE
KKIKVVCQFHKTSEELQKFYMTITQKLVSIRSAKPTPEQVKEQLNIVNQLEEDLQKHRPQLQALKE
TANWLVEKNADDRVASSDIKNQFSIIEDPFNELADKLNEKQNLLQASLLQTQEFQDTYNNVLDN
LAEYEIKANKSEPLSVKYDKLWKQEEDFKAFETDVLQMEPMFDQLIKSAKKVKDGTDEKEEKEDI
ENKTKDIERRRKNILEKLKERRDSFEKLLPVALEEDKIHKDFKPFVENTEEQYDQIKQAPKTLQEC
KNQLESLNSLKSKVDEGKPKHKTFNTNYNKEKETANTIADIADASTLEDEVNDLNKRWEALSGN
IDTKKDQVNKLHFHFTQYQESTESALHDIKKLEDYLEQAKRFGLDSSEGQKILSNVDDMLKTLEK
TERKVDEVNRSGKDLIGELESCKSDPWEVTTQMNDVNRKLDMLKVNLKECQEKVVDEVQIVNQ
FLKDVKDCESSLTDVNNKQESFEPLSTDPTKIKEQIAAVDELLNGLEKMSPRLDQVGRQGDLICKN
NPDDFSVSTDVNFRISKIKEPTDRCILRLQERKNKLQNLLVGSQEVQDTLDDFNDKLTNFEKTYNK
MKPVSAKFIVVKKQEIITEQVLDDVSQLQPSFKLLEKTAESVLKDAEPKEQVQLTEKINSLKTRWET
TVEDLKKRRKLISKVTPLAQDYYDRDQGFSNWVGDVEKKLIPRTDDFVVDQENVSKELDRLKAIK
KDIDVHKPDYDAILSIHKPLVGTAEDDINDIDEEVKRTTERWENLVSIDKQANEFVELNNNMN
QVDEQIVPLEEFMNQCEVTLEELEPVGVDKDKAKDQLNTLNVCLTELDNKEKDIESIEKLANDLQ
EKPGLNPDKLKDTVSSLKVRHGTIKHSFTEKKEKLSEYIVYIEEYYVIIEEITEYIIVTKKNPAFTEPISS
EPSILKTQLRNIEAIQDEFISKKPKLERSNELLIIIVQECKHDFTLCNEVKQSFDEVKKPMDEIWTKIE
VRQNRLQDSLLKSQKFQESFDDFLDNIGQLEERYNNGKQVSAKYDVVRTQKKDHDQVHNDIM
QLEPVFEQIMTEANNLIETADPEEKVKLVEKVKGTTDRYTQIKENSISRMKRLSDEIVLTQKYSDET
QSFKSWLTEIEIKIENLEPLPCYGNSVSKQFIYVKSLVEDIQEKQSKLEDIEKIKKEVVENAEIDQSSV
EDDCNQIKVSYEKLSVQINERSTKLTELTVHTQEYTVHLKPIDQLLDKVEHCVVCTLPLYGIDMQK
ISKEQEDVNVLVQQLTDILPTLKDYNDVSRVIADKADKSSPEYDAFKKETDNLNERYKRLRDQLH
DKHDKLHDYANKAAKYQELNEDFDNWMEELGKTPGVMQPIGTEPEVVKRQLNEVEAVLDDLN
KKKLLPQSIEENGHWITEANPQDKNLKSNIDDKVEKNQNSYDKFSTKVEIRYNRLQNALLKSQEF
QTTFTDFTNVLEDIKSRQDKQEPLDARYEELTKLKVENELLQQDIAQKEPVYEKILQNGENLLEAS
EPGEERNALEKRLDEVKSEWNGVKDKCCKRKDDIERLHPLSKDHDCNCVTFTVYLRDAEKRRE
NLKPISSDKNIALLQLKETEELLNDVRNHESLYNGYHQTNEPIYVTCKELNITKGLPELKDEIDDID
GRWKNLNGDLEDRVSNCNDILKRLGECSEKMRPAESLVDEIKDLMKAPTRFGDDLKKGKEAKD
QIKKLKESLNNNKPEIDKLRSEIPELLRQGGIVAEPIEEKFSALLENVDECGMNLDDLDKKVDDEL
DKAAKFQDACDKLNKWLPEANKSTCLTDLSSSDPDEIMRQIEELKALQEDIVNHKPELMDVQNL
AKDMLDANKSDPKVCENIVDKLNNVAKPFDDLVNKLEERQKKLDTIKKVIDNYNHEKQPLEEFI

TATEATVDNLPPFGLDPDEGEKQVSELEDLVKTMDKRKPELRAVNRAGQSLIRQLDSPDEIEKALD
QLSDRYYDVFDKSKGKLNETKEKVNKVKIFIKVIEVLEIWITEVVVIVVKIGKTSSTEPETVKKLLDQ
VQEIRVDILNHKPQLKEAEELKDWINDILKDDENTKNMVNERFDKVKIPMDETSNKLDELEKRL
QDSFSSSKQFVDDIDDIEKLVSKLERVVEEEKPISADKDTCTRQQNDHKYIVEETLLQEPKYENVLK
QGRELLDHTDPGEEKDKLNEKLQKIAERWDQTKKNVVDRKNTLDEVVDHATNIDNDKKDIIPW
LNDAEKLSESLDCISVDPERLGKQKDCIKKLLEDMESKRPLVEHMKEHRTPLIEKAGVDQSPVNEL
VDDVCKRFDNLAKKLKDADEKADQLADGMGSFNSQKKPIEELLEKSKNLVGKQSPLGSDEADK
DIDDMKSLLDELLKHRPDVDKLKKSGDDLIAIEDKPDNVTAIKQVTDGLEKDYDDLLEKLQEKID
EAEKGKKDFEDFNKALKDANAKINGVEDKSKNLEPIGATPEKVKEQLIELENLQAELQAANNRV
AEAESLADKIRSNSNNDPSVIKKIDDELNAEKKRLKELEDLLNDREENLKDQLQQCGALQDQMD
DFNRRLQNLDGRCENQAKKPMSMNPVNMAATKNNVDGISKDLDDEKPVFEELMKNAQKLLD
NTQSPAEKEALEAKINAMKKLFDDASKKIDEEKNREEDLLGKTKTVDDKMNDLEKFLDDQEKK
LRSLEPVAIDKLSQQQKEINSLKNDTKSQQPALEEIGKLIKELEPLCEEDVPGVKEKLAKLKAHFDE
VEKLGEDRQKELTDVQNGLDNFKNISDPLKSKLSKMEALLPSLNMYGADKDKIDEINEELAKLQ
KQIEDADKKLEDMNSITENLVNEHPTADSKALRDEKDELKKRLDKFKEDFNKKSEGVNDILGDW
DALSNDIKAAVGTVKNCSEGIDKSKPTRLAVDEIVGQIENVEALEANLNESKPLFDDIQKRGRKLR
DKGIGADLFGDLLPKIDGQVREIKKDLPEKAKELGELKDTLNDFNDKLKDADQGMTAFEEKLES
QKPVGGDKDTIDKQMKDLKELSSELDKLHGKVSKLNDVRSDIKNKYPEADSSAMDEPLNKLND
RTNNANQKLSDRQGKLDDALVQCGQFTDAVDSLLGWLNETKELVDNQKPISAADENVLKAQM
QEQKLLQRMFADREASVKNLQKTGEELLKTTEDEDKKKEIEKDLEKVKELWESLKDQTDDRKTK
LDEALVASEKFNKNYNNVMQSLDDLDKEINSDKNIPTSDPQKIEEQLDNMKKLSDKIKELEPIIQA
VSGDETELEPYCTPDDLALLQNKLDKMNEKFDKLNEDCQEKEDNLSTAKDLSEEFANKEKELNE
WMDNIGKELKDADGGKLKDLQKDITDHKPDIDRLKELGKDLKKLIKPEDYSKLKKSIEDAEEKY
KNLKGDVDENARSFFMAEGKVQEFDKKLEELAKWTSDKTNQYRTIDPVGVQPDRIKEQMNEQK
QISNELSSKEPLFKELYDLSEDLMMGCNEEEKAEMKEKIENLKKNKHQLDKTSTERDEQLVDALL
LAQQFSDVYNDVASRLSNTENLLEALDKEKGRGVEMQKEKLQNVEDNIGQLLPLMGTLKKTGS
DLIKLSGPGQDSESVQKKIDECNARWDALKTNSEEKGISVGVAAQQSEAVWNDVEDLIEKCQLV
KDDFKNQRPIPVHEEPITEEIGKLEEKEMLLKDLEDPVTSALGSIDEILKDDPKSPASTALKDRQRK
LGNLWKFISTSAKDRRNDLDSSKVAAEKFWPGIEKLNDVLIDVQTKLEDQNDPGMGIEEIEGLLK
ETDMLHNELNSNEDVITELVDATPKLVEKASPEEKTEVHHQLANVRDQWDNLEKSLQKRKGDL
ENVKALATEFDSEKDHVEKWLSEAEAFLKGEDTKPSDVNELKTRLRAMRKFHREITKHQNEITKL
EQKGESLAEKVNDEDSKKINEIVEDITKRWDNLLDQSYEKQHQLEDALLDQGHFSFAIEEILVWIN
QTRDSLKTDDKIPKHKKLIEVEQSKLKIVTNDVEAHKPSVENCRKAAEKLISENSSEKAELEVKLG
QLNEGWDEIQELLKNREGKLQDAFEEALKFQSSARELTIWLSEAKAFLKTKRPYGGKLETVQKQV
DKHQEFIRVVEEREVTYLFIVETFEYLIQSSDVSSSRELQKSLNEISSAWTVVSKLSQDTTDKLNRSLG
DAQFLQDKFNEIEIWIVRIEGTVSMFKPASTVYETIEVQIIEMEEIYIEFAEKRNGMREIRKTTDRILE
HCSPEEGRILNEEIEELTQKWKELSTSLKDRKKTLDENLDQSKIFFEGSEQLMTFLDEIEKKINEDET
IGKDAASVKAQMRIHRDLQNQIGKRQTKLNVVVKLGKTLLEKSPEEDYQIIQAKIEDLQARWEV
VCAISVERQHKLEEALLFHGMFQDAVHALLEWLHAVEPSLKTETAIMGDPDTVKLLMDNHKSFE
RELTKRQKNYNSIVNRGETMIVEGKVDNIEEISQQLEKLKNDWEAVSQMTITKHERLQSAYTLAK
EFQVGCRTCVNNLGELENKLKKQGPISDDVAGVRKQIEEFIVFEELLEIEEVKVNGCLKKGAVILRF
CHPSSLQTIRHQVAVIKKRWNDVSGWARQRKARLDEILIEMIEEEQIVQILIEWIAKQEVLLEDREK
IPLPDSYEVLNQLLDEHKMMQNEAENKNPDYSKITKRAKRKPLTDQRKLMTPRHGTQPQRDFS
NPMVGVLSKRWQSLWLTLMNRHRRIQDKLDAIRIQKASAEFSWADWRDRYNTWLRDSKSRVLD
IWRKKDSDKDNKLSKEQFVGAIFESAFTTEKWEVELVYDQHKRGVLITYQDFMDALKDRKRRPD
KPQTEAEQIDDIIKSEVSRCCCAKSFEMFQVAERKYRFGETQKLRLVRILRSTVMVRVGGGWETLG
EFLDKNDPCRAEGRTNYELRENFIMPEHASQGMQAFKTSRPGISREGSATGTPKFSRERSGGIQRS
GGMKREKSCGMHQHDRTDGGSNLTTPTFQRRKSDLEREAKGLPSYKGKDYSGVKGSYGRTYN
KRTTKTTSTTPDHSSTQSTPTSSTRIAREKSGDVYSRLYGSTPKTTSATPRSSTPSTTSTGIPKSAGSVS
RGGATPRSSTSTSKTPTKRTSSSSSTTATPKLSVTSPDEVTTPIARSSSNLRKAPSQGSIAKKGTESSER
KTMTKTKSTPKSAEPKKRTSTAKK*

>TRINITY_DN121866_c0_g1_i1.p1   type:5prime_partial   len:460   gc:universal
TRINITY_DN121866_c0_g1_i1:2-1381(+)

LYIINSCEPPSIFFSCHLHFYTLVEETMSTTTAPTTTGTSAATKRLYVGNLGSTVTTQDLKQLFGLETT
PYLRDTCFVELAVCEKTGKSKNFAFVSAPGHVFSELIKLNGIEFYGRQLVIEEAKTKPEEEGEKKDN
KEKKKTPNNKRKGGSNNNRNNNRRYGNKPKSKFNLPTLEPDQVFHLVDCGVNLTNPKFSQHT
DYVIARALSAGVQKMVITGLKLNGCKAAVVMAKTRPNILYAAVGIHPHFVKDDWSDKALDQLE
EQVKQPECVAVGECGLDYKRDYSPRDQQELAFKKQVQLGVRYQKALLVHERDSHDGIIEVLKEF
EASLPPVIIHCFTGTVEQIKTYIERGYYIGVTGYICKDKYGKTLRDAIKDGTLPLNRIIVQTNAPYMT
PNTPRDEIDPVSQTLLDHCYADNEPCTLSIIVRCIAKCLSQEPRHVADVCTETAIKVFRFQKSESE*
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)

MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT

311

ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*

>TRINITY_DN89_c0_g1_i1.p1 type:complete len:376 gc:universal TRINITY_DN89_c0_g1_i1:117-1244(+)

MKTFKIFLVACLLLASAYADLMSEMEALEKELEARELADQKEDSSSEKALKDMSTEELMDELKKE
VGKAKKSAVETHREKFDDLTKRLALEEQVEEELKRADAAAKAQASDDESDKDFDNLIKNVIEDEI
KKNSNVPAYAKGTNDATEEDTATFEELKERVKKDYYGDELVPFDQCKDQMPNCNIYKKYCEVYK
KNLIKRCPKTCNFCAKPVTTPAPAVAVHVCRDKLPKRTCKMAKKMCDSENSVQRTRVQKLCAET
CMVCRAPSPPRCENTEYGCCWDKETIKTDRKGTACPACQDEFKYICKTFKDDCVRVTHNSGLFM
YRNCKTTCGVCNNNYCEDDPRFAKSCHFWKKYLKQCEKDTAMKGLCKKTCGHC*

>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)

DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*

>TRINITY_DN2472_c0_g1_i1.p1   type:complete   len:344   gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)

MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*

>TRINITY_DN468_c1_g1_i1.p1 type:complete len:191 gc:universal TRINITY_DN468_c1_g1_i1:676-104(-)

MKTFYTILLLAIVQTNAFFFPKVDTVKDLDLASYTGRWYEVYSSLIQRATFQRNSYCTTADYSLKPS
GAIKVINSGRLKSATGEENTIEGEAKVVDAKEPGALNVKFSTGPQSDKANYLVVKLGPVVDGKYD
YTVITTDYKALVWVLARNPETFKQKYEKDVLAYLKKNGYNWFINKPRPTYQGKDCIYI*

>TRINITY_DN10724_c0_g1_i1.p2   type:3prime_partial   len:148   gc:universal
TRINITY_DN10724_c0_g1_i1:442-2(-)

MLAFVGMVVQQWWQIPGLPQQPDWVKALDECYASPVAVWGIVQISVFAAVMEGHFFPEYAWE
GIMKREPGDFGFDPLKFSKRPGFDLKKKQLIELKNGRLAMIGVASMASNHVLPGSVPFLTGAYAV
RPEARAPGAPAGFCGSTGPR

>TRINITY_DN3016_c0_g1_i5.p1   type:complete   len:406   gc:universal
TRINITY_DN3016_c0_g1_i5:2713-1496(-)

MAPPNLKKMIQVKIKPRQDSYSDQFSRILMVKMLMLTAAFTGITWMKDKVKCIVPKNHDADGG
FVSKSCWINGFYVFKGLKEKDTSYYYGIPKDVLSDGYDKYGALCSTKNQQGRLNQGCTPLEKTFF
LQYQWFPLVIAAIAFLYYLPYLMFRIVNTDLQEIKDIIKGRNANDVDAKAIVKRFFVRKNNSTSRL
KARVLLNVVVKVLYVVVNVLGMIFVDSSTNSEFMQYGANWSSWTALKNEDMHDYTNREHEKA
GHRLLPSFGLCQVYTTAQDIKTKVANDHTYICELSQHVIYQYILIVMWYMFVFGIIISIIGLIQHMVL
KTMAILSMNAEGDSVRKIYSDLTVREKEYLDFIRRKNLPVFTKVLDEISQLKGVSRSYATSESDRSSF
GATAPEKENMMME*

>TRINITY_DN79126_c0_g1_i1.p1   type:complete   len:115   gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)

MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS*

>TRINITY_DN691_c0_g1_i2.p1   type:complete   len:1673   gc:universal
TRINITY_DN691_c0_g1_i2:5503-485(-)

MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEP
GLDGDVGEKGEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVR
GETGEEGPKGDRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPG
AQGEKGDQGQKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGP
DGPKGNEGEKGDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVK
HSQTTIVPSCPAGMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVAS
RNDYSFWLSTDEPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAG
YSFLMYNSAGADGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPK
SETLKAGNLKTRVSRCSVCMKTVRNGNFP*
>TRINITY_DN79_c1_g1_i1.p1   type:5prime_partial   len:450   gc:universal
TRINITY_DN79_c1_g1_i1:3268-1919(-)
EFYAPWCGHCKRLAPEYETAATKLKKNDPPVPLAKVDCVGEGKETCGKHGVSGYPTLKIFRGGQ
VSQDYDGPRDGAGIVNYMKKNSGPSSVEIKDNEHLEKKLNEAEDPLVVGYFKEENDLYKRFMKA
ADKQRASFAFAHSLNGDVNSKQGHENVIVLHRPNHMHSKHEDPKEFLSNENANTNQIIDFIKEK
QNGLVGQLTAANQESFTSPLLVTVYYKVDWKRNPKGSRYWRNRVLRVAKKFVGAATFAIAAKSE
FARQIGDWGFDVDNDDVYAIGTNAKKQVFKMEDKFSVNNLEKFVNEFKDGLLKPYIKSEPLPEN
NDGPVKVVVGENFDKIVNDPTKDVLIEFYAPWCGHCKSLEPKYTELGEKLTNNKDIVIAKMDAT
ANDVPHPYEVQGFPTIFWAPMGSKDNPKKYEGGREVSNFVDYIKREATNPVEIESKKKKKKKKEL
*
>TRINITY_DN1174_c2_g1_i1.p1 type:complete len:323 gc:universal TRINITY_DN1174_c2_g1_i1:48-
1016(+)
MQTMRTTIAVLFCLAGYCYSAEWGYVAGNPNELEPKDWKNGFPKCAGKSQSPINIETRSTYLCH
LPPILLGKSWGTLLKSADLSLANVGSTIKIDVKSSIPITTTKEGTIWKLAQMHLHWGRDSNTGSEH
TINGKYYPAEIHFVHFNSRYATIGEAVAQPDGLLVLGFFFKVDEKAVVPSIYQKLFGALDKIKFKGQ
KMKLDLSGRALGDMIPPKGTDRYYSYAGSLTTPTCDESVNWNVMSEDNAIVVTEKEMMELRKLS
AGKMNQKFKPQSGNFRPIQPRNNRLVKRNFRTAKTAFFDVIQTYAPMVFNYFNGVPMRFWN*
>TRINITY_DN2217_c0_g1_i2.p1   type:complete   len:254   gc:universal
TRINITY_DN2217_c0_g1_i2:884-123(-)
MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*

>TRINITY_DN571_c0_g1_i2.p1 type:complete len:186 gc:universal TRINITY_DN571_c0_g1_i2:192-749(+)

MREYKLVVLGSGGVGKSALTVQFVQGIFVEKYDPTIEDSYRKQVEVGSQQAMLEILDTAGTEQFT
AMRDLYMKNGQGFVLVYSITAQSTFNDLMDLRDQILRVKDTEDVPMVLVGNKCDLEDERVVGK
DQGQSLAKQFGNCTFLETSAKMKINVNEIFHDLVRQINRQPENTKSERKKKGCTIL*

>TRINITY_DN902_c1_g1_i1.p1 type:3prime_partial len:153 gc:universal
TRINITY_DN902_c1_g1_i1:146-601(+)

MIRIAIIAIAIAACVYESQAVRCHVGYSAADLPLAMSVRDVECGQGFDHCVTLKYVLDGMKITQG
NCATKFGQATCQFMRNSHAAMTDCSEAICSGDHCNSAVKEAEKIEMKRVGAYENTLKCTTGLQ
SDFPNIPFASPNVPYAVDECFPGT

>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-372(+)

MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*

>TRINITY_DN141214_c0_g1_i1.p1 type:internal len:179 gc:universal
TRINITY_DN141214_c0_g1_i1:2-535(+)

KFIQSLYNVTIPDTVQENYKIVTVSANDADSASNSNNVIRYEINSSSDTFVVNVVTGSVTLKPNINL
KGTNIKEYRIEIKAFNPDLPNSFDLAVVEIYVTKTQASLTATAIVSSYTTLTLPENQPAGAITNPITGR
NSFVIIYDSNTNPSGVIFSVDQTGRVFLNKPLDFERENQIRF

>TRINITY_DN923_c0_g1_i1.p1 type:complete len:442 gc:universal TRINITY_DN923_c0_g1_i1:53-1378(+)

MAEKYDLTYKVGAYLDRHMVFPLLEFLSSKEIYDDTELLRGRLELLQGTNMLDFVKDEYQRLHQT
DEVPDELANKRQEVIRQMRELEAATESITAAFEDPDFQKEASSARDGAQLFKYLNETFGIRSENLD
TLYQYAKFQYECGNYNGASQYLYFYRVLVHDDDKNASAAIWGKLACEILTQNWDPALEEINRLK
EVIDGDHFSHPLQLLQQRTWLIHWSLFVFFNHAKGRDLLIDMFLYSPNYLNAIQTSCPHVLRYLTT
AVITNKRRKQILKDLVRVIQQESYTYRDPITEFLECLYVNFDFDGAQKKLLECETVLLNDFFLVACL
EDFIENARLFIFETFCRIHQCISIQMLAEKLNMTPEEAERWIVNLIRNARLDAKIDSKQGHVVMGT
QAAAVHQQVIERTRSIMFKTQAITTNIDKKLASLQKQPYTEPFGLAW*

>TRINITY_DN902_c1_g2_i3.p1 type:internal len:178 gc:universal TRINITY_DN902_c1_g2_i3:2-532(+)

AVFKCIKLNYIDHIIKMIKIAIIAIVITALVHESTAVRCNVGYSTADLPMAMSVRQVECGKGLTHCN
TLSYKLDGMSVTQGNCATSGGQASCLFMKNSLQSMTECSEAICNGDHCNKAVKDAENAERARV
GPYKNTLKCTTGLQTDFPDIPFASPNVPVGVDECFPGTKECVTMTYD

>TRINITY_DN1566_c0_g1_i1.p1 type:complete len:4626 gc:universal
TRINITY_DN1566_c0_g1_i1:42-13919(+)

MDTEEVPGEPPPTVLAATEDVINYVKNITCFIFDESQPCLPLDKILKEEQTKDYFRKFISDVQTKTIL
LYRINQLTDDVDGDHDQGVSQPSYGIKLNVQYVPHKESSIAFIKRGMLLESDKKINAQLHVLILD
NSSPFDTLHSYISNAVSPFFKSYVKTSGKSEREGDKMVPSVEKKIAELEMGLLHLQQNIDIPEISLQI
HPVVQSIIQKAEIERRKISPDDYAEKAEDSSFLNALQNGVNRWIREIQKVTKLERDPSSGNALQEIS
FWLNLEKALHRIEEKQQSPEVKLTLDILKYAKRFHAIVSFTNDTGLKQGLQTVASYNPLMKDFPLE
QLLSATELERIKDALIAIFSHLRKIKLSQYPIQRCLRLIEAISKDLMSQMLKVLGTRKFMLMNYELFE
KVMTSAFNVLNCWDDEYERLQQILRDMAKKKKDDSLKTMWRVNPSHKKLQSRLNNLRTFRKQ
HEQLRAVILRVLRPSKVEAKSSNEENAASSGSIEISDDNAVKEVDLAYENFKEIDPLDVSKEGTEAW
ETALKRYGERIDRVETRITSTLRDQLGTAKNANEMFRIFSRFNALFVRPRIRGAIREYQKHLIGLVKE
DIEALHDKFKVQYSHSKASKMSRVRDLPPVSGSIIWAKEIERQLHAYLRRVEDVLGKDWENHIEG
QGLKADGDSFRQKLNTQEIFDDWSQQVQKKPLLVVGRIFSIETLKTKGSNKATRKLKVNFTKEVIT
LAKEVRNLKNLSFRVPLAIVRQANDANQYYPLAISLIESVRTYEVTNDKVFEKESIIPLVAGIRKDIQ
SLLAEGMHLEWQSYKLMPYVMRLAEAVTGYQEKVDELLTSIQKIDIEVQSLATCGFKHEAFQEILI
RIQKLVDELNLHSYSNLNSWVKTLDEQVEAKLAHRLQAGIKEWTRVLRTGNENVDDKDLAIHSP
GGLPDIKPLRVEFFIRNQVIEMHPPFEKCIEHLYNELAVYCSTITSLTKIQSQRYQVGLDRDNAEETY
HNLLTKLPDPNGPNPITVYGEMESMLEDCRKYCEGWTGFQALWDAEMSNLAPRMKTLEDWMT
ILNQIKMSRSHFDTTETMKEYGPLIVDFNAIQGKVNLKYDSLQKAIVQNFGGKLGDEVNDFFTNV
TKARTDLEQQSLDVATTAEAVTFITYVQGLKRKMKTWEQNVEVFREGQKVLERQRYQFPSNWLY

SDNVDGEWSAFNDILKRKDGAIQTQVAILQQKIVAEDQAVEERTFNLLADWDKGKPVSGNTKPD
SAIQTLQIFEGRLTRLKEDRDNLQKAKEALELIEPGTVPPSDERVQVAIEELSDFKSVWGELEKIWA
QVDDLKEQPWVSIQPRKLRQSLDSIANGMKILPAHMRQYAAFDYVQKIIKGYLKANMLVVELKS
EALKERHWKQLMRKLSVKWNLSDLTLGQIWDCNLQKNEVVIRDVINIAQGEMALEEFLKQVRE
SWQAYELELINYQNRCKLIRGWDELFDKVREHINSVSAMKLSPYYKVFEEDSKQWEDKLNRILNL
FDVWIDVQRRWVYLDGIFSGSGDIQHLLPIETQRFGSISTEFLTLMRKVAKAPLVLDVLNIQGVQRS
LERLADLLGKIQKALGEYLERERASFPRFYFVGDEDLLEIIGNSKNVGRLQKHFKKMFAGVHTIIL
NEDSTLVTGICSKEGEEVIFNKAVSLIEFPKINEWLTLVEEQMRLTLATLLTLSAKEIKSFTGDSIDPK
LYMEWVDKYQSQLVVLSAQIVWSENCEAALQTCYNGDMSSLEKVLSIVEATLTVLADSVLQEQP
QVRRIKLEHLITELVHQRDVTRTLVRSKVQGTKSFAWLSQMRFYFDPKQRDVLQQLSIHMANAKF
NYGFEYLGIQEKLVQTPLTDRCYLTLTQAIERRMGGSPFGPAGTGKTESVKALGNQLGRFVLVFNC
DEKFDFQAMGRIFVGLCQVGAWGCFDEFNRLEERMLSAVSQQIQTIQVALKEGPKEIGKPIQIELI
GKDVKVSEDMAIFITMNPTYAGRSNLPDNLKKLFRSIAMTKPDMNLIAEVMLYSQGFRTAEVLAG
KVVPFFKLCFEQLSAQSHYDFGLRALKSVLVSSGNVKRDKILSIKQKMQAQGVVADVGKITETLN
EQEILIQSVMETMVPKLIAEDIPLLHSLLADVFPGIKYVNAEMTALRNELKKVCNEMHLVYGENL
ESGAHWIEKVLQVYQISCISHGLMVVGPSGSGKSTAWRTLLKALGKLEGNEGVCHVIDPKAISKD
QLYGVMDPNTREWTDGLFTHILRKIVDNVRGELSKRQWIVFDGDVDPEWVENLNSVLDNNKLL
TLPNGERLSIPPNVRIIFEVQDLKYATLATVSRCGMVWFSDDVVSPEMIIENYIKKLRNVLLEESEED
IRSKQSKSVTDSKDELVSPTLQVQRDFSDILTPHLASNGLVLKTLEYSYSKDHIMDFTRMRALNSLF
SLLNQGVRNILQYNQQHHDFPMSQDTIEAYTPKYLVHSLLWCMSGDGKLISRLDISNYIRNITTIPL
PSPVTSLIIDFEVNMQGDWVPWSNKVPQIEIETHKVASPDVVVPTLDTVRHESLLYTWLADHKPL
VLCGPPGSGKTMTLFAALRALPDMEVVGLNFSSATTPELLLKTFDHYCEYRRTPGGLVLSPVQIGK
WLILFCDEINLPDIDAYGTQRVISFLRQLVEHNGFYRPSDLQWVSLERIQFVGACNPPTDPGRKPLS
HRFLRHLPVIYVDYPGPSSLTQIYGTFNRAMLRLVPSLRSFSQPLTDAMVEFYTKSQERFTQEMQP
HYIYSPREMTRWVRGVLEAIRPLDNLSPDGLVRLWAHEALRLFHDRLITDEERRWTNTNIDLVAQ
KHFPNVDLISLKRPILYSNWLSKDYLPVDREELRDFTRARLKVFYEEELDVPLVLFDEVLDHVLRID
RIFRQPQGHLLLIGVSGSGKTTLSRFVAWMNGLSVVQVKVHRKYTGDDFDEDLRIVLRRSGCRNE
KIAFIMDESNFLDSSFLERMNTLLANGEVPGLFEGDEYTTLMTQCKEGSQRAGLMLDSGEELYKW
FTQQVMNNLHVVLTMNPSAEGLKSRAATSPALFNRCVVNWFGDWSTGALYQVGQSFTNKIDLE
RSTYKAPDYLPVVFENLPMPPTHRDVIVNTMVFVHQTMHKANEQVTARGGRTVAITPRSYLDFIS
QYMKLFNEKRSDLEEQQLHLNVGLQKIRDTVTQVEELQKSLSMKSQELESKNELANKKLKQMLQ
GQQEAEKKRITSKQIQDDLKKQTEEINKKKSQVLGELDQVEPALLDAKAAVKSIRKENLDELRRL
GNPPTAIKLALESICLLLGTPSVEWKEIRVLVSKTTFIPSIVNFKTDDISIETRKQMMKYLNHSDYNF
EKMNKASVACGPLVKWAIAQVSYAEMLQKVDPLRRELQKNEDEMMSNQSKLDSVGEMISELEK
SIAKYKEEYALLISEAQSIKADLAAVEAKVSRSTALLRSLSSERQRWENTSDGFQNQMDTIAGDVLL
SAAFLSYGGYFDQQMRSRLWGTWSEQMEQSKIKFRSDLARTEYLSTADERLHWQSNSLPADDLC
TENAVMLSRYIRYPLIIDPSGQATEFIMKEYSGKKITKTSFLDDAFRKNLESSLRFGNPLLVQDVESY
DPILNTVLNKEVRKTGGRVLITLGDQDIDLSPAFTIFLSTRDPTVEFPPDVCSRVTFVNFTVTRSSLQ
SQCLNQVLRAERPEVDTKRSDLLKLQGEFHLRLRHLEKELLQALNDSKGSILNDDKVITTLETLKT
EAADIMKKVEETDTVMSEVEAVSEQYRTLAAACSSIFFTLEEANLIMFLYQYSLKFFLEIFQSILFNN
PLLKDKRDPLVRLGILIESLFQVVYNRVARGMVHNDRVSFATLLARIRLKGKSENSYDLEFDHLLK
GKEIVVQVSDVKLTGLSSDQKMALLRLSKLNPFKELSRYIMDNSMGFQEWINSSNATLNVPRCW
NIKDSLTSSGEVLYECLVVQAFRPDNLHAMLRKYVLAVMGEKFLHTAEQELDMVNIVENEIKAET
PLLLCSAPGYDVSGRVDDLVAITNKQITSIAIGSAEGFSEAEKAINASVKSGRWVLLKNVHLATQW
LISLEKKLHTLQPHPNFRLFMTMEINPKVPVNLLRAARIFVYEPPPGLKANLLRTFSTIPASRMSEA
PGERSRLYFLLAWFNAIVQERLRYAPLGWSKIYEFSESDLRVGYDMLDIWIANVSQGRANVSPDKL
PWDAFRKLIGDSIYGGRIDNDFDQRLLQSFIDRLFTAKSFDSDFSLVTSVDGKQSENIVIPDGMRRE
QFVQWCEKLPDYQSPSWLGLPNNAEKVILTTLGERTCVKLLKMSVNTEGSELAYSADSHLKESEV
TGDIRPLWMKSLQQSVRNWLNILPKRIDPIKRTKENIKDPMFRFFEREVNLGVKLLNDILHDLNEI
LEVCEGNRKQTNDLRMLVDTLVKGVIPRSWNRYATPKGLTVIQWIVDLGERMKQLQNIARGTNA
GGSKELKSFKVWLGGLFIPEAYLTATRQYVAQSNQWSLEELYLNVTIADELNPQLKLDDCSFVVIG

LKLQGATCRNNQLSPVDTITTDLMDICLCWTKIDPRKPPTLGANDVTLPVYLNQTRCELLFTVDM
STTGAVPPRSFYERGVGFVVSALTG*

>TRINITY_DN8101_c0_g1_i2.p2   type:complete   len:820   gc:universal
TRINITY_DN8101_c0_g1_i2:2597-138(-)
MDGKTGASLKLTILNDRGRVWTMVAGGGASVVYADTVADYGWGHELANYGEYSGAPSTEETFV
YAKTLLSLMMKYKHPEGKFLIIGGGIANFTDVAATFTGLIQALQHFAAEIKEHKIQIWIRRAGPNY
LEGLRKVKAASDKLGLGLKVYGPETHITAVIPMALGLTTPLPEPDLSQACGPPRRAAIAGAGSKPS
TQKAAPAPSAHTIVTATPETTSIVYGLQNRAVQGMLDFDFMCKRKKPSVEAMVFPFSGNHYVKFY
WGTEEVLMPVYTTTKEAVQKHPNTSVFINFASFRSVHETSLEAMQYPNVKTLAIIAEGVPEQQTR
QLIQTAEAKGVGMIGPATVGGIKPGCIRIGNTGGMLDNIVMSRLYRAGSVAYVSKSGGMSNELNN
IVCRNSNGVYEGVAIGGDRYPGSRFLDHFLRYQDDAGAKMLLLLGEVGGTDEYDLIEAVKSGRIT
KPIVAWCVGTCASCFATEVQFGHAGAQARGDMETAAAKNKAMREAGFHVPDSFDKLPELIGQV
YTQLVQEGVVVETPEAETPQVPMDYTWAKKLGMVRKPANFISSIADDRGEELKYCGVTISEVFAQ
ELGVGGVLSLLWFRRQLPPACTKFIEMILMVTADHGPAVSGAHNTIVTARAGKDLVSALCSGLLTI
GPRFGGALDDAAKMFAEAQDSGVSAKDFIEKMKKTNQLIMGIGHRIKSLANPDQRVVLIKDYAK
KHFKNTPVLDFALEVEQLTTRKRANLILNVDGCIAVCFVDMIRSCGAFSREECDDLMAFGCLNGL
FVLGRSIGFIGHYLDQLRLKQPLYRHPWDDITYIQELAAQG*

>TRINITY_DN30329_c0_g1_i1.p1   type:5prime_partial   len:213   gc:universal
TRINITY_DN30329_c0_g1_i1:1-639(+)
EPIVNRVLVKRMKVMEAINDVSPAMMLDFFKTTLATNFLKFPFFEAINAFCAALPIAPSVRGLFTG
FVFTTATLPVTNYRYRKSMQLEVNWANIYEAYFPTVIRDIVYGICRNYCTIWTLALNPQWTAVSPQ
VLFIVVILGCLGSAPFNEWRGYLLQSKGQELTFKEFFKPSNFVRSTSLGAIKQGLALAVGYWCAPP
ATRLVHGLFAGLRG*

>TRINITY_DN153369_c0_g1_i1.p2   type:5prime_partial   len:115   gc:universal
TRINITY_DN153369_c0_g1_i1:2-346(+)
GTSTSGHMSRRWPASKCSWGWHWAAPRYFACGGVAGAPLCPRCTAASGKRCRKPPSWWHGVP
GGRWMRKSFTAYTPRLPSSYGAGTCITSARTSSNPSPPVTRCPTQNLRAPPL*

>TRINITY_DN7504_c0_g1_i1.p1 type:complete len:414 gc:universal TRINITY_DN7504_c0_g1_i1:87-
1328(+)
MAKIPGGIVVEMDGDEMTRVIWDMIKTKLIFPFVDLDIKSYDLSIQNRDNTDDKVTVDAAEAML
KYNVGIKCATITPDEKRVEEFNLKKMWKSPNGTIRNILGGTVFREAIICKNIPKLVPGWTKPIVIGR
HAHADQYKATDFLVPEAGTLEMKFTPKGQTEPTISYVVNNFAGAGVAMGMYNTDKSIRDFAHSS
FQCALEKNYPLYLSTKNTILKKYDGRFKDIFQEIYDNEYKGKYEAKGIWYEHRLIDDMVAYALKVE
GGFVWACKNYDGDVQSDTVAQGYGSLGMMTSVLMCPDGKTIEAEAAHGTVTRHYRLHQKGQ
ETSTNPVASIFAWTRGLAHRGKLDGNERLMNFAKLLEEVCVATIENGSMTKDLAICIKGMKNVTR
ADYLNTTEFLQKIADNLTTKLNLSHL*

>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)
MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*

>TRINITY_DN360_c0_g1_i1.p1   type:5prime_partial   len:476   gc:universal
TRINITY_DN360_c0_g1_i1:2237-810(-)
FQELLNCKNSKQQTIRLPANRENLTMALPYSSAEDFYQSVVKRTPNEVEFHQAVKEVAFALWDFL
VKNPEYAKEGVLQRLTEPERTIMFRVPWVDDTGNIQVNRGYRCEFNSAIGPYKGGLRFHPTVNLG
ILKFLGFEQIFKNSLTSLPMGGGKGGSDFDPKGKSDAEVMRFCQSFMTELSRHIGPDTDVPAGDIG
VGGREIGYMFGQYKRLRNEFTGVLTGKGYNWGGSLIRPEATGYGCVYFTKEMLETKGHSFKDKIV
VISGSGNVSLFACEKCTELGAKVVTVSDSSGYVYDKDGIDKEKLAFLMDLKFTRRGRVIEYTQKYP
SATFHAGERPWGVKCDIALPSATQNEISGEEAATLANNGVLAVAEGANMPSTPEAIEVFLKHKVL

YGPGKAANAGGVAVSGLEMSQNSTRFQWSREEVDSKLHTIMVNIHKTCQKYGTDESGFTNYVIG
ANVGGFVKIADAMIAQGIV*

>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-2618(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*

>TRINITY_DN684_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:675　　　　gc:universal
TRINITY_DN684_c0_g1_i1:2-2026(+)

LFINGNITRMAWLLLLLAAFASITSADNVNIEKRFLKCDNILAVKVCDRFRNVGATLKLKASEFEA
LVKDAIDKGKDVKQYVENKLEEKLLSKSCEELAGESFCKNLDVFGIYLQKKKEELKPYVVKAVLA
GKQKAQEIAIQVREYVKNDLMTKKCVDILPAEHCKRIEDIGAAFKLKANEIKRVTIENVLKGLSK
ARDVASATLQSMKRSAEKFECEELLNPDVCVSLRKYAAKFRIGMPKMMRAVRSAIVMGYKVGKG
FLTVVYKIADAFIDCEHFLSVENCRKIKDTASKVGAKLTEIRDAIKSAVTKGITEAEKIYSKTLKFLK
DKFGKQKRSLIDPAGLEAKLKKYRELLKKHITNADKYLKEALKMLMKKFKVADQAIRTAVEKAIV
QGKLSYEEIKSYIEELMKKNENGQVISKRDTSGGIRDLLKKALSKATGITAVIIRKMLEYPMEKLQS
MKRYVQGIVDSVLGTETKRDVDSQLVSKSYALTGIRDLLKKALSKATGITAVIIRKLLEYPMEKLQSI
KSTVQGIIDSVLGTGDTKRDVENEMMDEAADELVKTKINDMTNDLNQQINDMAEDIVEDTAALI
DEVVRKEKRSATGESDISDYIMKILKKTLGDAYDKMQDKIAKNMADVKEALKKAGTNMLDRAE
AVLKKIDEMLKKITEEKQS*

>TRINITY_DN77_c1_g1_i1.p1　　　　type:3prime_partial　　　　len:1965　　　　gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)

MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE

RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN34481_c0_g1_i1.p1   type:complete   len:802   gc:universal
TRINITY_DN34481_c0_g1_i1:2487-82(-)
MTTPHMSPQEEQEKLLEEALQIVKNQAFQMKRCLDKAKIMDALKHASNMLGELRTSLLSPKSYY
ELYMGVSDELRHLETFLLDEFDKGRKVNDLFELVQYAGNIVPRLYLLITVGIVYIKVGDVPKKDIIK
DLVEMCRGVQHPLRGLFLRNYLLQSTRGQLPDSETEESEGTIKDSIDFILLNFAEMNKLWVRMQH
QGHSKYKEKRERERQELRILVGTNLVRLSQLEGIDVETYKKDVLPGILEQCICCRDPIAQEYLMECII
QVFPDEFHLQTLNAFLKACAELHQDVNVKNIIIALIDRLAMFAHRGDGPGIPNDIRLFEIFSQQVA
HVIQSRSDMPTEDVVALQVSLINLALKCYPDRVDYVDKVLEYTEEIFSKLNLAYIDKNNAVSKELM
RLLRIPVDIYNNVLTILKLKHFAPLFDYFDYATRKEMAMYVINNALDNETLIPSQEEVDSVLQLAA
PLIMDQDDQPTEPEDPEDFAEEQGLMGRFVQLLYSDNPDQQYLILTTARKHFGNGGEQRIKLTLP
PLVFAAFRLAFIYRDAQEQDDKWDKKCQKIFQFCHQTICALSKAEYADLSLRLFLQGALAADQQ
KFTNAETVAYEFMSQAFAIYEDEISDSKAQLAAITLIIGTFEKTSCFTEENHEPLRTQCALAASKLLK
KPDQCRGVSVCSHLFWSGRVNEGESEEKDAASNECRDGKRVMECLKKSLRIANQCMDPTVQVQ
LFVEILNRYLYYFERGNEAVNSTILNQLIDKIREDLPSLEVNDEMEQINKHFQNTLSHIQSKKDSAD
ENEAAIYKDFIL*
>TRINITY_DN95248_c0_g1_i1.p1   type:complete   len:124   gc:universal
TRINITY_DN95248_c0_g1_i1:197-568(+)
MAPKTKKVSKKKSTLNFNIDCTLPVEDGIMKVDDLKKFLQEKIKVDDKLNNLDQITLEVAKTKVT
LVSERPFSKRYLKYLTKKYLKKNNLRDWLRVVASSHTDYELRYFQINNDEEEDEEDNE*
>TRINITY_DN121236_c0_g1_i1.p1   type:internal   len:568   gc:universal
TRINITY_DN121236_c0_g1_i1:1701-1(-)
TCIMCAHDEYSPEHSSECIKRKSCTPSDYHQYWEPCKDDKTRKSFQWNQPKICNEYTGEKLPNSG
DFIECPPCNPGQYINGSECQFCPKGFYSNGKEACQRCPPETAPAPGLFYKFWNRIPKRPMHLFCL
ARPMSGCRTLVGWVVHDSYLATGLGHSDEAQLIMYIKIDRFIKKNSLFTMEFEISDCIGLTCRTKV
QTIDKHHSVQSIGVYEGNQPRTTIRYTRYNDVGTEYSILFEKKYDQDAQTYHYQSAQLKIYSIEITD
VENGGTRQCEACTTRGSGDCVTCEPGHYLSPNSQNCWKCPRGTYMPEHLQDAVGLQSCIQCPIG
STSEPGSTKCHSDCMLAFGEGVNRKYFNLTALAGPQFVRGPLLFTSKGYKFFHGFSISFCGHPYKE
SLCVDNITSTQGFHASICRSTFIPEEHKLLSTQSIIIGDTLQKINFISEESNANHTEQKQKRDIHRNEI
QYHFHAERITDVCNNGTSGVLRLICDPVASYSSKKPNIEFGNDECTSETCDGCNYAFTLKSPYACA
KCTKDDFEAITTSCNNGEKHIKYVWKEPRACVGGMEKPE
>TRINITY_DN3271_c0_g1_i1.p1   type:complete   len:399   gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)
MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR
AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*
>TRINITY_DN1907_c0_g1_i2.p1 type:complete len:210 gc:universal TRINITY_DN1907_c0_g1_i2:53-
682(+)

MDMDTTFPLVISLLFSILCCSFAVELTFELPDNARECFHEEIHNATKCTLEFQVVTGGHYDVDVSLK
DPHGKVLYDEKKKQYDSHTFEATVPGEYVFCFSNEFSSFTHKTVYFDFQSGDEPPLAPGMGKHHT
ALTLLESSAVTIHESLKVIIDYQTHHRLREGTSRDMAEYLNERVQYWSIGQSVIVVAMSIIQVYILRN
FFSEKRDRL*

>TRINITY_DN850_c0_g1_i1.p1 type:complete len:374 gc:universal TRINITY_DN850_c0_g1_i1:1261-140(-)

MAARPLVTVFNDQGEVSGQVTLPAVFKAPIRSDVVNFVHSNMAKNSRQPYAVHKHAGHQTSAE
SWGTGRAVARIPRVRGGGTHRSGQGAFGNMCRGGRMFAPTKTWRRWHRPINQNQRRYAVCSA
LAASSLPALVMARGHRVDGIPEVPLVISNAIESLTKTKAAVQVLKKVNAYDDIEKCKDSRKIRAGK
GKLRNRRYTMRRGPLVVYNEDHGIKQAFRNLPGVELISVDRLNLLKLAPGGHLGRFCIWSQSAFE
KLDSIYGTWRKASTEKSNYNLPRPKMTMPDLARLINSDEIQKVVRPAKPRARRASIKKNPLKNTQ
VMIRLNPHAKSTKRAAILAQERRKAAKDNVLDKKRGIKPAKETKAKKAKGKK*

>TRINITY_DN165_c0_g1_i1.p1 type:complete len:598 gc:universal TRINITY_DN165_c0_g1_i1:147-1940(+)

MTFHTGFSYCICLAFIFTIVLGSESQSEASQAVEYVKPSLDNLDYIAEPFHSLEEFQSRWVLSSAKKD
GVEENISKYDGKWAIVEPKENPLIGDKGLVFSSEARHGAVSGKLKTPFNFEDKPFIVQYEVRFQNK
HECGGAYIKLLADAPELSLDTFNDKTEYAIMFGPDKCGGDSKLHFIFQHKNPLNGKMEEKHAKK
PSGDFSNIFDDQKTHLVRLIVKPDNTFEIYVDKRRVNEGSLLHNFEPPVNPPKEIDDPNDQKPDD
WDEREKIPDPDAVKPDDWDEDAPKQIEDPNAKKPEGWLDDEPELIPDPQTERPADWDDEEDGE
WEAPQIDNPKCKEIGCGEWKPAVIDNPNYKGKWTPSLIANPKYKGIWSPKKIANPEFFEDNNPFA
MKSIVAVGFELWSMQADILFDNLLVADDLSLADQWTLQTWDLKHTQEVNKEPGVVGGLWNNI
QEATQERPWLWVIFVVLVLLPFVLIYFFCFGGKEDEYAIRKKTDEPTQDDDLVENSEDEPVEDKKES
DPEATEESVDSKKEDEESGKENEEITDEKTKSEVSPNDDNKVDTEKKLSEDSEDSKKEEDESPSPKT
RASKRKTRKE*

>TRINITY_DN96161_c0_g1_i1.p1 type:complete len:453 gc:universal TRINITY_DN96161_c0_g1_i1:1593-235(-)

MRECISIHVGQAGVQIGNNCWELYCLEHGIQPDGQMPSDKTVGGGDDSFNTFFSETDSGKHVPR
AVFVDLEPTVIDQIRIGPYRSLFHPEQMINGKEDAANNYARGHYTIGKIHIDNVIDRVRKLTESCTG
LQGFFIFHSFGGGTGSGLSSLLMERLSVDYGKKSKLEFAIYPAPHISTAVVEPYNSILTTHTTLEHSDC
AFLVDNEAIYDICRKKLDIERPTYFNLNRLISQIVSSITASLRFDGSLNVDLTEFQTNLVPYPRIHFPM
ATYSPILCAEKANHEQITVADITNACFDPRNQLVKCDPTKGKYMSCCLLYRGDVVPKDVNVAIQA
LKSKRTVQFVDWCPTGFKVGINYQPPTVVPGGDLAKVSRAVCMLSNTTAIGEAWARLDHKFDL
MYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGQDSNADEDGDDDGDDF*

>TRINITY_DN1339_c6_g1_i1.p1 type:internal len:570 gc:universal TRINITY_DN1339_c6_g1_i1:1-1707(+)

GMFFQDGLTGSAWGDWALYVDSPLRFFGGGEASTYKTFDPATELGVQEPVGFWDPLGFASDGDE
ATFKRRRSVEIKHGRVCMAASIGYIVPEYYKFPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIF
FAGIVEGAFGVTDDYRNGTPGDYGWKVITSDDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLT
GSAWGDWALYTASPLRAFESELGVQAPVGFWDPAGYTNDGSMENFKRRRATEIKHGRVSMLAC
MGYMTPEITGKLPGYLSPSMKVQFADIPNGLGALSKVPGVGWAQIFAYCAYCELSQDQSAASPGG
AGDFGFKAITSSDPATLTRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWALYVDSPLRFFGG
GEASTYKTFDPATELGVQEPVGFWDPLGFASDGDEATFKRRRSVEIKHGRVCMAASIGYIVPEYYK
FPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIFFAGIVEGAFGVTDDYRNGTPGDYGWKVITS
DDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPL

>TRINITY_DN1374_c0_g1_i1.p1 type:complete len:548 gc:universal TRINITY_DN1374_c0_g1_i1:1751-108(-)

MSMVLTIIHIAIIALVAQLEVEGKDFYIRTDSDVGECKYSGYIPGGKQINISPIKSTTASLETNILANIA
GFGGNAGTDAIQFPKISSTIENIAPNLGPALALFTVVLSAALNSELLTTTQEGMEDITLTGLFKLIED
VNDKFTDMENYVDQETLNVIKGRINTEYIHMFTLYSNCITEVSLQRAVECQEDANQYIRSGLPKF
MLFTDELKKFTMSSPPTADQIKKMELTFLPFREYATLSLMQLQVLKDTYRDNQNSLKNGPTIYREL
LGKLSSDAQKRIDYAQNMFKWIDLTYDEFAKNRCKDTKTSWSRCTNEGGWGSYTVCFGYTKCQF
DMTISSKKYCTTRCTVRADGQKIYTKKTYPDSFSNQDTGKKFTAEEIDLKASAYLSQKSKDVKNYY

ESEVLSSIPVWQEIKNKADAELMALNDEPNINYNFEGRQFKRTHTFNPIQRKYMPVGDFEFFEEN
DEKNSDLENRKLNYRYEENYRRSEYPILKDAEYGEFNDRFENDLSLREKKIKDGRFSPRFKERYQR
AFDTMRYFDDLNRARRF*

>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)

MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN

>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)

SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHRR

>TRINITY_DN1143_c0_g1_i1.p1   type:complete   len:629   gc:universal
TRINITY_DN1143_c0_g1_i1:2539-653(-)

MLRSRTIITNTLPKLKSINRLEPSFSCISNARCFSVSAANKDASESFAMGIFTGQANVSQIFPYPDVLT
DDQREFLSSLVDPVEKFMSEQNNAFNNDALEEIESETLEGLKEMGAFGLQVPAELDGVGLTNTQY
ARLVEVVGRYDLGVGIVLGAHQSIGFKGILLVGNEEQKKKYLPSLATGEKFAAFCLTEPSSGSDAA
SIRTNAKLSDDGKHWILNGGKLWISNGGIADVFTVFAQTPVLDEKSGETKNKVTAFIVERGFGGIS
SGPPEKKMGIKCSNTAEVHFEDVKIPVENILGGVGQGFKVAMHILNNGRFGMAAALSGTQKGLI
AQAIDHAASRTQFGQKINNFGVIQEKIARMAVRHYVTESMAYVICGMMDKGFKDFQLEAAISKI
YASEAAWEVADETIQVLGGMGYMKDCGAERVMRDLRIFRIFEGTNDILRLFVSLTGLQGAGKELR
KLQKSLSNPLSNMGTLLEQGLLRSKRAAGISSGPDLSSNVHPDLRKEADLASKGIGKFGSTSEALL
VKYKKSIIDQQMVCSRLSDSAIDLFGMVCVLSRATKSLNNNVPNAVHEALIAKTFCSEAYKRINTN
LESCKNEHNMATDKLKAQITSDITNHMGVVTTHPLGF*

>TRINITY_DN5229_c0_g1_i1.p1   type:complete   len:728   gc:universal
TRINITY_DN5229_c0_g1_i1:2363-180(-)

MFKSLTISISVLTFILLFQEGSSSPVVAANSTNNAANATILIEEDESNKRQETEPKSFSDDIEDVIKIKD
SMENAGLIRDNTGAVNKAKTSRIAGKLREKARSIDSDSADSATEGVSGAGEGLLTLVEGIKGGNW
VDIVTGGLDMISSVLGMLGPMSVIASSVLSLFSMAFGLFGGATGGEESTEDMMTRVIEKALLEAKA
EELRSEVNGIKRLLQSFSSSIANFRETNSLTQEQALTLYDQGFRGVAQFGVLEHYIEKWCAVGDPN
TYDTPVKKGELNDMVSRCLDMVNLYCDLSVFRQIMLADMASLIAEVGIEGTPEVFMHLLRKEQK
SDKKLLKFLMDPANNRDKRFVITKYFTSLTKYTTITAYLKKLSTLDLSDVETKKSARAEISKDEKFFD
KKFTLVCTDIELRGNCFQFSELGAKRDASLKGWKKKVVSLYVSDGVEVQGFHRPDLQGSLFGPYY
GPAVYGKVSGSKDWESMNILASETSALDLLRVCENENMDTEGVCEAIETKNYPNLGAMDKRGT
AMYYVSTIRKKAKCRYSKCDVWNTGKWWCERSKRRDWEECLIGRYWSERIKSMTIPKGYKIYGY
SETDYGGVEYGPLYGPSTVLKVHPSAAWKSLKMVKTTQSTTKMVQMCSEEGLKGFCDYFIANSG
QTDLSNVHGVNWDSDKRIKSMMVPGSITVYTYSEKSYGGMEMGPYDGPVTITKVDGADGEEQIK
SFKIMRRY*

>TRINITY_DN167_c0_g2_i1.p1 type:complete len:658 gc:universal TRINITY_DN167_c0_g2_i1:165-
2138(+)

MSKGRAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVAFTDTERLIGDAAKNQVAMNPV
NTVFDAKRLIGRKFNDPTVVKDKEHWPFDVVEEDGRPKIRVQYKNEKKTFLPEEISSMVLTKMKD
TAESYLGGKVSDVVITVPAYFNDSQRQATKDAGVIAGLNVLRIINEPTAAAIAYGLDKKVSEERNV
LIFDLGGGTFDVSILTIEDGIFEVKSTAGDTHLGGEDFDNRMVDWFVKEFKKKNGGKDLSTNKRS
LRRLRTACERAKRTLSASKQASIEIDSLFEGLDHYSSITRAKFEDLCADLFQSTMKPVTKAIADANY
SKEQIHEVVLVGGSTRIPKIQALLKDHFSGKELNKSINPDEAVAYGAAVQAAILSGDKDEAVADLL
LLDVAPLSLGIETAGGVMTTIIKRNSTVPTKQQQKFTTYADNQPGVLIQVFEGERAMTKDNNLLG

KFELSGIPPAPRGVPQIQVTFDIDANGILNVSAVDTSTGKENKITITNDKGRLSKEEIEKMVQEAEK
YRNEDDALKEKVQAKNNLESYAYNMKSTIDDEKVKDKISDDDKKTIQDKCTEIIGWLENNPTAS
KEEIDEKQKEIEKVCAPIVTKLYQGAGGMPGGMPGGMPGGMPGGMPGGMPGDGAPSGGSGGP
TIEEVD*

>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)
MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*

>TRINITY_DN333_c0_g1_i1.p1   type:5prime_partial   len:384   gc:universal
TRINITY_DN333_c0_g1_i1:3-1154(+)
IFVKQIILSYRSRALITAKMDMRQLSPFIFTVIGFLLFITQECNAQRNNFCSHNGCRGIPLQTVPYLA
RRVSLKASRKGQYPDNIMRIATWNISGIPVDRAVVNRRRRRPTGLCLSILKMGLTLFSLQGVDSEQ
LKGLQQCLRSHVFLPNTLIGDGNLIGFRRQRRLVKHAAGQFYLSETPFERSKLRGASDYATCTWA
KLSFANVVGKRNETVETAYSKLLGLLKHYSNQRRGSSRRVTRLRKIYRYFTFYTVNVAKVDEENKA
IAKEQMKICLSHLYNDIMERRRYPIIVTGRLNWESSFTTSNNVRTKNENFNLKNGMDDADMTYY
TFSNIDKERNTKELKDYVTYNGFDSLLTAVLVNRNSERKKRNINRPVVSFLYHS*

>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*

>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)
MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*

>TRINITY_DN140696_c0_g1_i1.p1   type:complete   len:260   gc:universal
TRINITY_DN140696_c0_g1_i1:43-822(+)
MPRGPKKHLKRLNAPKHWMLDKLSGNFAPRPSSGPHKLRESLPLVIFLRNRLKYALNYTEVMKI
MKQRLIKVDGKVRTDICYPAGFMDVITIEKTGEFFRLLYDVKGRFVCHRISSDESLYKLGKVKRVAF
GKNSVPYLVTHDARTINYPDPSVNVNDTVVIDIKTGKINDFIKFDTGNTVMVIGGRNTGRVGIITH
RERHASSYDIVHIKDAAGNQFATRLSNIFLVGKGNKAMVTLPRGKGVRLTIAEERDRRLASK*

>TRINITY_DN8707_c0_g1_i2.p1   type:complete   len:564   gc:universal
TRINITY_DN8707_c0_g1_i2:2751-1060(-)
MSGFVRQSKYRHVFGSPARKDGCYEGFRVTNCAFDGNFIAANKHFIAVCVEVGGGGAFIIVPVGS
TGRLDVNIPKVSAHKEYILDLQWNPYNDFMLASCSEDGTIKIWEIPEKGLFMNIGDEKALLSLEYH
EKRCTQVLWHPSASNVLMSVSQEPKVCVWNLDEGSVEVEILEHPELIYNATWSQKGDKIGTTCK
DKKIRIFDAREGTLLVQGMGHEGAKPSRVIFTFQDKYLFTTGFSKMSERQYACWNAETIEQLGLEE
LDTANGCLVPTYDADSQLVFLNAKGDSNIRYYELVDGDPYYFYLSTYQSSAPQRGFGFIPKRCINV
NANEISKGYKLHGTKTGYIEPVSFTVPRKSETFQQDLYPDAIGDEAALEPDDWFSGKNAEPKRIA
MSTFFKGKTKPTGAAGGGLKKGGLKGLKAKKEAKTAAKSAAKSEPAKPAPVKTESKDKVDAAP
PAAAAVEQKSSSTAVAAPAAAAPVVVSGVDEKVVKELQNEIKSLKDGDKKLQKEIISLKDKLKDY
DTLRSDIKLLCDAVKKNDERITALESLVAEETDEEETGEGGDE*

>TRINITY_DN875_c0_g1_i2.p1 type:complete len:606 gc:universal TRINITY_DN875_c0_g1_i2:2136-
319(-)
MLRLVLFAISASVVYGSCNPLKLGCFIHSGSDRNLLHSDNSEDIYTDFYSGTNIEWDKFSSYLQRAA
CRCDQAAANAGYRFFSLRDFGECHGIGKGASSFDALKLKKSMYCIAPNLGQCDISEHQHCTGAE

EGEFIYETKAQPAEKVIDGGYSSWSAWSVCSKECDQGLQERQRTCTNPEPKGKDAKDCSKLGKPS
ETRSCKIKDCPPSGETVIFCEHRGVKRIACENDQVVEILAANYGRTSTKHCVFGRTKVTNCRAAH
SMSIVKSQCDGFNYCDLNPHNDVFGNPCGFYTKYLEVKFRCVARKTSSRRAVLCEHRGSPPLSCP
NPDEVLSINKASYGRLSTHYCQYGHFKQTNCRALHSDALIKKTCNGLNSCSLNPSNTVYGNPCG
NVNKYISVEYTCKKTNAASRQAVFCEHQGGKTLKCANPDEVLSINKANYGRLSTDHCQFGHFK
QTNCRAEQSDALIKLACNGLNECSLNPSNDVYGNPCGNVRKYISVDYTCKKANAASLRAVFCE
HQGVKTLKCANPSQVLSITKAIYGRLSTDYCQLGLFKQTNCRAANSDGMIKKQCNGKNSCQLNP
SNAVYGDPCKYVRKYISVEYKCINK*
>TRINITY_DN540_c0_g1_i1.p1 type:complete len:480 gc:universal TRINITY_DN540_c0_g1_i1:1503-
64(-)
MATDKLEGLIARLEKVTGKLESVSVRGGSGGGAAVEDDPAWYDEYIAIHEGQWESFLKATKENG
DNDMVTLEQKLRAAFNAHKDLLTIAARNGKPSPKDLPELVKPLSAAIGEVQSFREKSRTSKKFNH
LSAVSEGVAFLGWVVSPSKPGQHVIDMKDSAEFYTNKILKEFKETDKVQVEWARGLRKMLMDFA
DHLKHCHPVHLLWNPDKPAATASTKASGGSGGPPPPPPPAAAPPPPPPVAAPSSAPSGGSEDSRA
ALFSALNQGSGVTAGLKKVSDDMKTHKNPALRNAQPVPGKTSSLNPRPYAPPQLKKFNAPVAEK
PPVFELQMKKWIIEHQKNNQSLVIDETNDKQTIYMYKCNNSVLQVKGKVNSITLDGCTKCGVVF
EDLISTCEFVNCQSIKAQANGKVPTISIDKTDGTQIYLNDKSLDTQIITAKSSEMNVCITKPDGDLN
EFPVPEQYKTVWNGTKFVTTIMDLNL*
>TRINITY_DN3773_c0_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN3773_c0_g1_i1:168-1679(+)
MAPVVGDLMDLSDIDASKQHNQAVVRDYISQPRLIYKTVSGVNGPLVILDQVKFPKFAEIVTLTLP
DGTRRSGQVLEVSGSKAVVQVFEGTSGIDAKHTTCEFTGDILRTPISSDMLGRVFNGSGKPIDNGP
PILAEDFLDIMGQPINPWSRIYPEEMIQTGISAIDTMNSIARGQKIPIFSAAGLPHNEIAAQICRQAG
LVKHSKGTMDYSDDNFAIVFAAMGVNRETARFFEQDFKENGSMDNVCLFLNLANDPTIERIITPR
LALTAAEYFAYQCEKHVLVILTDMSSYAEALREVSAAREEVPGRRGFPGYMYTDLATIYERAGRVE
GRNGSITQIPILTMPNDDITHPIPDLTGYITEGQIYVDRQLQNRQIHPPINVLPSLSRLMKSAIGEGM
TRKDHSDVSNQLYANYAIGKDVQAMKAVVGEEALTPDDLLYLEFLQKFEKEFISQGAYENRTIFES
LDIGWKLLRIFPKEMLKRIPAKTLAEFYPRDGRKEETD*
>TRINITY_DN32522_c0_g1_i1.p1   type:complete   len:235   gc:universal
TRINITY_DN32522_c0_g1_i1:147-851(+)
MAAWLDSYRETEQLGHDIMELINERNTLKRSASNTSKVQSSIRIKMQQYSSGLQRLKDLLLRDSSS
YNVTQQELQRRQNQLDVLVSKEQQLNQAFKPTQSNYDRSNLFGEKYGDDLNGRYGGASASNGL
DDDLTPQNFRQQQEQILKEQDKGLDSLHEVIQRQKMMGKAIGNELEYQNDLIDDITKGVSRVDN
KVNATERKVKKVHRKTGSCAMIVVIILLLIAILVVAVFPTN*
>TRINITY_DN6920_c0_g1_i3.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i3:2124-892(-)
CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN
GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT
PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*
>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-
550(+)
LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN909_c0_g1_i1.p1   type:5prime_partial   len:313   gc:universal
TRINITY_DN909_c0_g1_i1:1-939(+)
RRVLFRSLTFIESLRLSRLVNKKNKTFMEMSEKGGIYNDNEREMNFTGNSDYESGDLGFCGWFLTV
LSFIIAVCTFPLSLFFCIKIVQEYERAVIFRVGRLLSGGARGPGLFFILPCIDTYLKVDKRVISFDVPPQE

ILTRDSVTVSVDAVTYFKIQNPVASVCNVEDAQRSTKLLAQTTLRNELGTKNLSELLLEREAISRNI
SNILDQATDPWGVKVERVEVKDVRLPPMLQRAMAAEAESSREARAKVIAAEGEMNAARALKEA
SDVISESPQALQLRYLQTLTTISAEKNSTIIFPLPINMLQSMMNK*
>TRINITY_DN413_c0_g1_i4.p1   type:3prime_partial   len:463   gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR
>TRINITY_DN2776_c0_g1_i6.p1   type:complete   len:374   gc:universal
TRINITY_DN2776_c0_g1_i6:1221-100(-)
MLNTLIRTGNANVFKLSSNSQKICSCTYMSGVGVRRSLPHNTIIKFVPQQESWIVERFGKFHKVLS
PGLNILLPIVDEIKYVQSLKEIASEVPQQSAITKDNVTLHLDGVLYFRVIDPYQASYGVEAPQFAITQ
LAQTTMRSELGKIALDDVFRERDTLNQNIVEAINSAATVWGIRCLRYEIRDIQLPAKVRESMQMQ
VEAERKKRAAVLESEGQREAQINRATGEANAILAKAKARAEAIDLISAALTQQSGNQAAGLSIAE
QYIQAFSNLAKESNTVVLPAYTGDVSSMVAQAMAVYGSISKNLPNDNNNDNDPNNSGHGGSIN
SRKQSSVENETSTLGFSGYDELSKFALKSEDEFSVTTSPTRKRDFV*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN201860_c0_g1_i1.p1   type:internal   len:221   gc:universal
TRINITY_DN201860_c0_g1_i1:1-660(+)
LTAITKVVCSTTSGSATGSKDGSLSSGDDYISRDLSDKLSIITFDTNETAQYCEVQIIDDSFYEEEEQFT
VKITPYFGGEVDEERADVNIVILEDKNDEPKIYLKSTLYEIDESDGVVKVAVQRTGSDLSFKSYVIIST
KQTEPVSAKANVDYYPVVKTLEFGIDEKEKLVDIGIIDDKGRPRIEGEESFEVLLGLAKNGELLDGQ
SKGVVIINDEESDK
>TRINITY_DN5554_c0_g1_i1.p1   type:complete   len:316   gc:universal
TRINITY_DN5554_c0_g1_i1:223-1170(+)
MRIIIALLFCVVGYCYSADWGYEAGNPNVLEPKDWKQHFPKCGGRKQSPINIATRSAILSRLPKIIL
GEGWGTLLESADLSLANNGAKVSIKSSTPITTKQGGTIWNLAQFHLHWGKDSHSGSEHTINGMS
FPAEIHFVHFNSKYPTIGDAVPQPDGLMVLGFFIKVQENAVVPSILQKFFGSLDQIKFEDQKVKLDF
GGRALGDMLPPRGTSKYFNYPGSLTTPTCDESVNWNVMSTENAIVITEKQMTQLRSLSAGKKNE
AFKPQSGNFRPIQPRNGRTIRRNFRTATTKFRSVLRRYFPRIFSYFRVTPRFE*
>TRINITY_DN2077_c0_g1_i1.p3   type:5prime_partial   len:238   gc:universal
TRINITY_DN2077_c0_g1_i1:2-715(+)
LAQAVSIVGPRKPGRPAAHRSSGSRHVARVGLRPPHHGLLAGGQVVPGGVRPRGGQEEPEHHV
DRIAGERLRRGRNAEKGPRQAHGQGLYHALVQHHAQHRLRHDGHAPRRAGARLPRARDRLEV
PGPERLRDPGALSRIEARQHRTGVHAARLHAPVWRQHHAYEPGRRGGAISLPDRPRRDVQGFQ
GLRGRFEGKRGDQRFGKGHQEEGGLHRGRDDPAGHRLSPAGVGHGLQVR
>TRINITY_DN128406_c0_g1_i1.p1   type:5prime_partial   len:150   gc:universal
TRINITY_DN128406_c0_g1_i1:474-25(-)
FGSTRKMSQTQSVQVFGRKKTATAVAHCKRGNGLLKINGCPLHLVEPSTLRYKVQEPILLLGKERF
EGVDIRVRVKGGGVVSRIYAIRQAIAKSLVAYYQKYVDEVSKKEIRDILVQYDRSLLVADPRRSEPKK
FGGPGARARYQKSYR*
>TRINITY_DN4781_c0_g1_i3.p3   type:complete   len:183   gc:universal
TRINITY_DN4781_c0_g1_i3:2965-2417(-)

MCTEPKAPSSCANDEFQCTKTKQCIKKHMLNLTAYTKVGSKMTKLWTKSGTYGPRWRHATVDIS
SASTFKVVIEGTASSGYMGDIALDDLFLNNGACPPSGECSFEDPKLCGWTNMNGDNFDWTRDN
AGTSSSGTGPRFDHTYGTAQGFYVYIEASNPRSKGHKAWLKSGEYKPTLGRCLSV*
>TRINITY_DN942_c0_g1_i5.p1   type:complete   len:5116   gc:universal
TRINITY_DN942_c0_g1_i5:15664-317(-)
MKMKLALLVLFTGTTLAAPFWVLDDNLPRAEIKEVGCSGKRFQNGKSHVYEYEGVTYNTIEGST
DKKTGIKLTATATITPMSECKFMMQLKSVELMSKSMNQDTFTTNAESAKLKDELEKLMVGFTMK
GNQIVTIHASENEPTHVLNIKRSILSSLQLDESTEKETDINGICDVEIVTKSGKIVKSKTLSECTERAQ
NEIGFQSTSIKSATTLKPLDSTSKCEYVMEGDVIKSVVCEEKHIFKPFSAGYKTPSGAMTTVKQSLSF
KEYTVAAISAVPSDFTVETNLLFDHSTEEPTATSTINDQVEKVMLRLVDPAQKSDLSAKENSAQEFK
NLVTLFRRMDEKRMEATWTKYFDCIKSGVCTDANTRDLYRQYLLDGISHCGTSTCIAMVRNVIV
NGQITGERMNMFLRSIPFVTKTTMKMIGHVLEICEKNPSRQAYLTLGTLLVRHCKQNPEDCSENL
RNPVTMAEEHLVKKLGQECEGQDDHERVEELLRVLKAIGNAQRPARVQEKLMKCAEKSKHSNI
TTSIFDAFRGFSCDALKQGELLRVFEDINNEDETRIHAFITIMKCPTVEILEKVTMMLEKELSNQVA
SYMWSYLTNLMESSDPRHQVARDILTKMTAQKPLREVNLPVHQFSKAFEKSLHSEFLKSGLTTEG
HIIFNKDKYIPKMGMLNMKANMMGNSLDMLETKIGLDGIEPILETLVGPNGMLPKDLNIDLGSY
GKFNSEFLRKMLEKKNNKRKLFNDNLTKMHLKANKQFEEPCAHLSVKIMGQEVSVLSYDDILW
MIDQIDNMNAVQLLTNIAKGGHKTFSKSLMFLEMSHNVPTGMGLPLKLKLTGSAVGTVEFNGKF
DIRNLFWGTPAVNIKGHMKPSTVVELSGQMGVEGHYVSTGMFVKSSMFTSQIVKGAIEYKHGQIL
KINMDVPEEPLAAVKFSSSPFLFMNEESELVEGTSRFVNPEHCTKSALLGYGLCASMRLPIAFREYE
APYYPLSGPAHFAVRAIRGDEKLTTWQFLVELNKQSGTTFGNIEFSTPGAAYERKLNGKVSMKQE
GKMNMFTLSTEGYDRKASVELNFNKETYSTAIITKNNIFTTKDMTTKLAIFNEEIDSGRQYGIQAL
ATMDWYTFDHITKFVRKPNVYMFQTSTTYYPKKVVMGTIVYDTKENKLSTRIQANQFQQAYEFS
GKFSDDGQEKGVTVTGKCVTSGKSITLYGGIQNTKQTKQILFTADVLGYSAKQYIRYENNNDVHT
VSQFLSVNGKIISLNGELSSFTEMKRLKFVADIIGRKADTTFLLTNNKGEKSLSVDMNAMQKHAN
FKTGCYQAKDSNECKFNFKIGTKEGEILMKQIMRDGNVITTLETLFDKYVAGFRNVYSNKNANA
KSLCSSIFYGTEEKEHEPVNVCLKYNAASDEKKILAITFDIVDRNQQGEINMELTKQTEFVKMQTE
VVYNKNSLAKAMQSMKYSKDLNNEIKMEVNVGKYNAGFRWFTLKTTNGANVGIEGYAMDKKI
QFVNKYVKDVVSGTTESKVTSELYINDKLVPVTTETIFLNGKGIAGPKFQVNIGKHSVSYATLVTYG
KGVYGIDLEFLVAKESNMLFKLFNGAAASVTPKKMDFQYKFGFGINGKQYTYGGDMSYNNLGN
DEKMEHSVKLGLQYSINRRSSMTFVLSNDKTKAALNMEFEYIPTKSVSHSIEYTKNDRILQVSVEFL
PKMFYTFKSQLVKNEGYSLASSVTLNWKNYNRVLKMINSMVNNDKKFELSTVFGKDLTFTFTFG
KENQKSMTLSASGFKRSLKVIGTFVKPNVQLQVYKNGEKIMDVTTSFDGITNKFQFALTNGKDTY
LKMMKSYNEFVLASGKETYLKMKKKYNEFVVTSGKETYLKMMKTYNEFKNQYKFQINGKIWTK
VQEWYLKMTKMTKDNKITKFLAPFLDLTVKLDRETNDMKLVLSNGKQTFVKIVKSYNEAKNQH
DFQIFGMSKEWVDLMAKYNKRNKVLKVSFSFFGKELAMFTLNMKEKDTVSLTTGSDYWKKNIV
LTGSLDRSQKSIAGNFQYGKTKVQLKLRADWNNMILENAFTFNDNVAKIGLLREQNSMVFRVKL
SPTLMAQVVMEVKNDNIIKMTIQRSEGDKLIEETSMQFKLSKDLYNLAFKWNPETFKAVIRAVQN
MIQNGYYKDIKPFITNVFVKGQRMSRKALTTTVMTFTEKVKEAKTKLIDLITNFEASVDKINFVAIR
EQIGQLSLKTIQKLKELVKVTLKELMTKLENAKENIPELLKQYKQIRNKIEKISKDTAEVLPKFYKET
LEAMDKQYNKLNGYWKDVSKVVMSNFELVSKNLTDSTKPVVEKAIYLISNFKLRGKAVKEIVSIA
RELVEKYIQILIEQGKIIMANGKIQLENMKLKSMEHYKNLKLKGMEQYNNLKLKGMELYQKGKM
PYLDETVEGIIKISVEKYMDLKKKMTDFDFEKYIQSVRDQIMEKKINGKTIVEHLNTAKEEMKNLP
PALKENYVKLIELITKLTKALNTNLKEWKIFAKPLTNYMKLVALSTKKHFGPILTKSMDKILPLITGI
ELPDFKMMALEQWKQLENFMLPLIKPVGPLYENIKTQIRNIKVSGYPIGSFVDFNIEIAKTFIQTSLK
TTKQKLDENVKMVTEYANLIKKMTPEEIMNQITLKSTELTKEYKEKVLKVYEERQERLKVLVEKLK
ELYNEFKQQYERITAVPVQDHIDDMMFKSSKFVKGNLEEISKVVKQITEIEISKPTWDAWKQADV
MGHLDKYGINQKMIDFIKAVKEVDMKRIAQKTTRLIQDMISTIYSKAFVRFVQVYGKLEKVHDYL
RSIPKKEYEEWVKELKEFSLENKERVIEFMGKMYKQTQKKSLNLYTQSKFLYAIMHKIVLKNMEKI
NINLVKPSQELYSDIKYRSEQVYGDLEQPTIDVKNHYQKIINDFVEEQYTIVKGAVLRHYKSLEEYK
EIMYTKAQEKMEEVKKLIELKYNELLAKYGDMTYEEMYDNAYKYGKSQYKVVRKTVKRGYKKL
REQMEKMEERLNALYQLYSTKYSDLVNRIKTEIIPQTQEQYQKYRLIVINLIKKYQKVLMEKMAEL

KTRGMTIYNDLKTRGMAIYNDLKTKGMTIYTDNKDKTIKALFREVKQNAIKNINTVYVLVKNFG
DEKLKQVRTIIVTYYNKAKGVMVDVIIPEVKMELVSIINQTLRSSKVMTEEIMKAYTPHMVLAKNF
ANKGAILIIERGTVAMKASEKAIREFMDKAPAMMKDIVKKIKDQEYYNKIVNHEVVKKYIAKTQE
MIENLKTKVEQLKQDPTVVKYQKMFSDKVTELKERAKIVIDKLNQRIEELKNHPMTLKYQKIVTE
KMTELKKKAQLLLEDVKAKIEELRNNPSVLKYQNMMNEKIAELKAKVKMLVKELKKRIEDLRK
HPKTIEYQNMIKQKIVDLKKQISMYKQKIENLYQHPFVTKSMVTMKRIKRSALFTADKINVNLQP
KIKEASEMAQKRIEKVQEQAMSAVQFFKNEPEEAFWTGVSNLEKSGKDLYEQIKRLFNKELIKKQ
FDVLTTDAKMQWKIFLNDYFDDWSKEASRKMYEQVVTLVKNMNMKIIDMKMNMQKLPEVYK
PIIEDYKNQIMENYKNIVEYSLQNMIQGKVYLSNQWVELNNQWKACPYRLIMENPVWSEIGDEI
MQHEAMTAVKYVSNLGNLKFQAMKTILMKEYEIKKQLLNQKITELQVSLKKTVEDLRSKGLKNY
QLAKEKAEQMVKNIKEIAIKMDKFLEEKTIGEIVEITLEKYQMLITKVEFLRTQVVGLSQWYKEKA
TVIYNEKRKRAEKIFEEQKEKVLAVYQKYKAQVMPIYQKYEDKVKQYYNKYSSIIIEQYKMLLKKS
AQKYIQLRTKYEELDLKNKLNKLQKDAIDMYQNKKESALKLWEESGVPTKLVELKQMTIRKTIEA
LKQLPGQTKEQLTAVFDKYLNELKVQYKKYYSAGYTKLIKEYNDLKAKFEAKFELNRNLLIKLAK
PYTTPVVAYKWVENEVAETALFVYRYHKLGERYNNGRELIKSEIERLTPILKNNFKKYNAEIRKY
VKDQADKYSAQALEMSKDLKQKAIVLSKDLSKKVVASLKTYSLMTGDKILRSIHSSMKCIDNVDF
GKVQKQISKKAQDFYREFTKYVIIDPSKGEILINIPHGDMVPSFTHQFEQIKLRARRSVQVLKENGK
VLMKKINNRMAELKVKIEKVRNKVMKKVMDNTVEVRRDLLSSYNINKRIFDRVYVKAQIIYKKS
LRKATNQYKVLKTKSQDYIRKATAQAKAYYEEYMTKAKDYIRKNTELAKVYYQKYMTIMKERYL
TVNKIIMDLYNTPPAELYKQLKESKASLKVIELIMHLYNTPTAELYKQLKASPTYLRIDRIIMDIYNT
PLSQRLEQLKTSSAYLKVNKMVMDIYNTQYMDIYNQRLEQIKNSPRYIKVKGMIIRLYNTPAKELL
SKLQYRGQKLYKIWFNKVKVMINKAIEKNAPLIKARLNAIKKELRPYTESLKTMYKKIKLGYSVKD
SFYPMYKQMKFATKFYRGEAMRQARKIKAQICKEDPKLCKAIKSSAKVHSFIINKYATRVNKVLNI
ALDKYQEGVAKTHRAYRHALNMIARPKSTYAAVAMVFKDHYVTFDGKSYEFDIPSSKCQYVLAH
DFQNADFTILKTQDAIKINNKDMKVVIFKNGKTMTVFPDKKISNGLPVQAGESKCIRQHNEIICN
FVEDKLRVVVDLENDITTVSISAWHHGKLQGLLGTNNRESFDDMKMSNGDLAKDQLQFTNSYE
MTGSPKCQLNKVAFKKLQCGKVTQKCKKLFENPKSELAGFFNIINAEPFIKACERDLVSCEKSKEA
KHCSSVNAYLSMIKSRGYPVELHSECMKEGERMTGDKWQQKQSNKEFDIVVLVSQRKTVNKKPI
MKVLQKLQSSFKSNSIDTRYALIGFGGKGVNEEAHVHALGKGASVFSNMNDLKRAITNTMVFNG
DEESNDAYHAIVEASLQRFRPGAHKIFVMFNSEPHTSHKYGATLKEAIFTLEKESHASLFVFDEINF
KSLNKKGLTIGQTNSKIYTTKNLKGLRLSGMELPKSEFKDMVESTNGGMFTNELMNKQNELATV
LFDAITDTVTQNQRQCLDCEKHTTWYGSTRQLCHPVAC*
>TRINITY_DN464_c0_g1_i4.p1 type:complete len:717 gc:universal TRINITY_DN464_c0_g1_i4:2167-
17(-)
MLLHFGKSLHYLKFGTLFWRLKLVAIPRDTSNIINNIFLESKSQRYIRMSANILNEYSQNVGKMEDE
ISGLTSQLNALKRKLNGEIEDEDCSDQLKELRSKNQKLHYQKNIIQRALKKEQEKADSKMLNVQ
AALNVLFESAIRSAYPQIPNPPVALTIAHNPKFGDYQCNSAMAISKMLQKLTGEKIGPHVVAKTIV
ENIPSNSFIKKVDVAGPGFINLHLEKEFLKGVLEKVIKEKVYPPGIGNKKKVVIDFSSPNIAKEMHV
GHLRSTIIGESLSRLLEFVGHDVLRLNHVGDWGTQFGMLIAHLEDKYPDYKTVSPPIGDLLLFYKA
SKKRFDDEEDFKKRAYQRVVDLQGGNPDVRKAWQMICEVSRNEFQKIYDRLDVTLIERGESFYN
DLMSKVVENMKKSGICQKSDDGRWVAFAPNMKVPLIILKSDGGYTYDTSDMAALQQRLQEEHG
DWLIYVVDAGQGDHFKQIFGVGEAAGWYNSSITRVDHVAFGVVLGEDKKKFKTRSGDTVRLIDL
LDEGLKRSMEKLLEKGRDKELTKEELLAAQESVAYGCIKYADLSHNRVMDYVFSFDKMLDDKGN
TAVYLLYAYTRVRSIQRNAKKGRSEIEEYMKSNSLHFDHEKEWKLAKLLCRYPEIVVRCLDDLTLH
LLCEYLYELSSTLTEFYDACYCIEKNRETGEIISVDMNRIALLESVARIFEAGFHILGIKPISRM*
>TRINITY_DN36471_c0_g1_i1.p1 type:internal len:286 gc:universal TRINITY_DN36471_c0_g1_i1:2-
856(+)
GNKWLVDCRVSKNTINIIKINRKSYCYLPEILDRIMTSITEQPCYTLINYPMENDTVSESKLKEDLEK
GDIPVKTEALKKVMYQLLNGEKMPSMLMTIIRFILPLQDHTIKKLLLIFWEIVPKTGQDGKLLHEM
ILVCDAYRKDLEHPNEFIRGSTLRFLCKLKEAELLEPLMPAIRLCLEHRHSYVRRNAVFAIYTIFRNF
DFLIPDAPELVYEFLEKEQDASCKRNAFMMLIHVDQERALDYLSSCIDQVHSFNEILQLVIVELIYK
VCIANPQERARFIKCI

>TRINITY_DN67_c0_g1_i2.p1   type:5prime_partial   len:474   gc:universal
TRINITY_DN67_c0_g1_i2:1488-67(-)

VHREAPKKMKLLIAVLFALCAIACGENYMRVCYYTNWAQYRTRMEFFPEDLDANLCTHVVYAF
AKIGRGHKLTMYEWNDDKMYPRMMAMKKQNPNLKVLLAVGGWNHENGNGQGKFSKMVNS
NSNRRAFIDSSVALLRKWGFDGLDLDWEYPAGRPSGEKFPGDKQKFTQLCSELMSAFERDAGER
QTTRLMLTAAVAAGKGTIDAGYEVAKIGKILDILNLMAYDLHGAWDPVTGHHTAMATDGVDLP
NRVEFTIPYSVDYWIKKGFPAKKIALGMGTYGRAFRLKDKSQHGLGAPVTSGWPQPPKGQFTRE
AGFLAYYEICKMGLTIVKDNAVSAPYGYKGDIWVGFDDKESLIHKVNTQIKAKGLGGAMFWCLD
LDDFKGSQCGEGKYPLMGAVAKALGGYTPPPPPTPGPKPKSTRAPPGEKTDRPVKTEGPSGGVCR
AIGSWTGNANMNAWCVSNCARGNCPASVCKC*

>TRINITY_DN73587_c0_g1_i1.p1   type:complete   len:533   gc:universal
TRINITY_DN73587_c0_g1_i1:94-1692(+)

MLRQAVRRLSRGTNKRSLLRKSSERLLPACVNACQRFVSTDVTNNQAAAAAKAADKSPAAAVA
VGQIVAVIGAVVDVQFDAGLPPILNALEVQGHGSRLVLEVAQHLGENVVRTIAMDGTEGLVRGQ
RIVDTGNPISIPVGPETLGRIMNVIGEPIDERGPIETKSKAPIHTEAPEFVEMNVNQEILETGIKVVDL
LAPYAKGGKIGLFGGAGVGKTVLIMELINNIAKSHGGYSVFAGVGERTREGNDLYHEFIETGVINL
KDDSSKVALVYGQMNEPPGARARVALTGLTIAEYFRDVEGQDVLLFIDNIFRFTQAGSEVSALLGR
IPSAVGYQPTLATDMGSMQERITTTRKGSITSVQAIYVPADDLTDPAPATTFAHLDANTVLSRGIAE
LGIYPAVDPLDSNSRILDPNVVGEEHYQIARNVQKILQDHKSLQDIIAILGMDELSEEDKLTVARAR
KIQRFLSQPFQVAEIFTGHMGKLVELKDSINGFKQILSGELDHLPEVAFYMVGDISEVESKATRLAE
EAS*

>TRINITY_DN247_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN247_c0_g1_i1:38-1156(+)

MKLVLVIFVILVYTWNVSAGGKKCISNKDFMTPYPTNFWTEHYPKFVNNRPTIGIVAMEVLGQKM
LVNVPWSWNKDYFGSSFVKLVESAGGRAVPIKEDITEDDLDKLMRKLNGVVLPGGDADVGDSGY
ERISKQAIAFSKKMAKKNVTFPVLGICRGAQMMMMAEAGKDFLEVTDSLNLSIPLDFTSEQKESR
LFGNAPQGLIKSLSEDAITFNAHAMGIPTLNFYNNSGLQKAFRAISTNYDRNGTKFISTFEGRDAPI
YGLQWHPEKSLFVFNPVLAVDHSIKGVMASQYIANFFISEARKNNHTFRDRVEEEEHLLMSYYPS
YVGNITETPYEQIYLFDFVKPFQNPKYTPGKVNKNDDDNSGDDDDE*

>TRINITY_DN751_c0_g1_i1.p1 type:complete len:227 gc:universal TRINITY_DN751_c0_g1_i1:731-51(-)

MAMKIVLCTLAALMCCAYAQDGITAITDIINPENINTALDAAEKLKNLIHTTSESKIQSREKTQGFE
FLNMKANAQYTRGMKKHHLMRMMNRYLVPFSRSSADMKEVVDTLKEFIEDDVEEHQEQFFGL
MTQGGGGTTEAIFVYYKLRDDGKYNFKRMTFRGTFRLAADLVITHSSKSGFFSSESKDVINWLPRR
GVTAQNVQELLDIIVPKLATVMSEFAPKDSI*

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-44(-)

MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*

>TRINITY_DN97534_c0_g1_i1.p1   type:complete   len:563   gc:universal
TRINITY_DN97534_c0_g1_i1:138-1826(+)

MSATPAMDIRSPRYGYQSPNVRTRVQEKEELSDLNDRLATYIRRMQYLESQNNKLTAEITTSKESV
SREVQNVKALYESELADARRMVDELSKEKASLTLENDKLNGIIDDLRSKLEKETNGRSKAENDLR
HVERRLHEKEALSMSLSKERKALDEKCKDLESQLQDALDQLDQEKAKLEEEILRRVDMENRYQT

LTEDKKFCDEIHEKELIDLRNVTDTFKFQMQTDGAPSDPDDILREKLEELREMFEDEAENAKQEL
RDAYGSKNDSLQKELDRSNTNRLRIIEKYDGVKTELDKLKADYGLLDAKNKQLQKQIPELENLRE
MDKDEFARQIQDYIDKNKDLEEELSNLRDDYQKLLEIKIALDIEIAAYRKLLEGEEERLHLSPSSQP
RSQSTGGKRGTKRRRPEEEQVTPAEPAVNSTAVGNVEIIECDNSGKFVKLVNKSETEDEALGGFFV
QRVVNGREDKAIEYKFTPKYVLKAGQSVTLWSFSSGVKHKSPTDLVLKNNEDWTVGQSMTTSLI
NQEAEVMAKHSMVKSPNSDRDLKRARRRRGGQDRESCFIM*
>TRINITY_DN4377_c0_g1_i1.p1   type:5prime_partial   len:604   gc:universal
TRINITY_DN4377_c0_g1_i1:3-1814(+)
SFEEFQSFEALLCQTDAQYRILFEMFDLTGSGTVTFEEFKRTLECQSHAKKYPFDFDSEFVKNHFGQ
DKKYEVSYHEFTQIIKDLNKEYISHLFKQKAKSNEGDSITLLQFGEIIKVGFRHKLTPYIYENMMAA
VTAQTGRRQVSYTYCVAFYDLLSNMEQIAEIFKEATDNRKFSELTKEELLQASFHHPQVTPMQIEIL
FDLCTAHNPSKGKISLIDTVKLIPKINPLTVFSKIHEVQQYDPSYAEEEQNDQSVLMQVAESSYRFLL
GSIAGASGAAAVYPIDLVKTRMQNQRSVLATEVVYKNSWDCFRKVLSNEGVRGLYRGLIPQLVGV
SPEKAIKLTTNDFVRGKFTDKDGEIRLVGEILSGGCGGAAQVMFTNPIEIVKIRMQVAGEAGQRPS
AINLVKELGFFGLYKGARACLLRDVPFSAIYFPCYAHFKSSLADKNGYISPLSLLCAAAAAGVPAA
YLVTPADVIKTRLQVKARRGQQTYRGVIDCTRKIYVEEGGSAFFKGGVARIFRSSPQFGVTLLVYEL
LQRVFYVDFGGGYTKTQISPVNPDISLNPDHIGGLRLAVSSFSGIETKFGLLLPKFNTAPKTIPKVQP
NT*
>TRINITY_DN5263_c0_g1_i1.p1   type:complete   len:243   gc:universal
TRINITY_DN5263_c0_g1_i1:827-99(-)
MATPISKKRKFVADGVFKAELNEFLKRELAEDGYSGVEVRVTPLRTEIIILATRTQNVLGEKGRRIR
ELTSVVQKRFNFPEGSVELYAEKVSFRGLCAIAQCESLRYKLLAGAPVRKACYGVVRFIMESGAKG
CEVVVSGKLRGQRAKAMKFTDGFMIHSGFPIQEYIDMAVRHVYLRQGVLGIKVKIMLPWDPTGK
TGPKKPLPDHVSIVEPKEEVLPTAPSSEQKGGKPDIQAPAPTPVP*
>TRINITY_DN5587_c0_g1_i1.p1   type:complete   len:809   gc:universal
TRINITY_DN5587_c0_g1_i1:196-2622(+)
MAQNKDDLSTEILKKKSKPNRLMVEEAVTDDNSVVTMSADKMEELQLFRGDTVLLKGKRKKET
VCIVLSNDEATSNDKIGMNRVVRQNLRVRLGDIVSVQPCPDVKYGKRVHVLPIDDTVEGLTGSLF
DVYLKPYFLEAYRPVCKGDLFQIRGGMRSVDFKVVETDPSPYCIVAPDTVIHCEGEPIKREDEEDA
LNSIGYDDVGGCRKQLAQIKEMVELPLRHPQLFKALGIKPPRGILLYGPPGTGKTLIARAVANETG
SFFFLINGPEIMSKLAGESESNLRKAFEEAEKNSPAIIFIDEIDAIAPKREKTHGEVERRIVSQLLTLM
DGLKQRSHVVIMAATNRPNSIDPALRRFGRFDREIDIGIPDATGRLEIIRIHTKNMKLDDEVDLEQI
AAETHGYVGSDMASLCSEAALQQIREKMDIIDMEEETIDAEVLDSLAVSMDNFRFAMGATNPSA
LRETVVEVPTVTWGDIGGLENVKRELQELVQYPVEHPEKFLKFGMTPSKGVLFYGPPGCGKTLLA
KAIANECQANFISIKGPELLTMWFGESEANVRDVFDKARMAAPCVLFFDELDSIAKSRGGSAGDG
GGASDRVINQILTEMDGMGAKKNVFIIGATNRPDIIDSAILRPGRLDQLIYIPLPDEPSRISILKANLR
KTPISKEVDLGYLAKVTHGFSGADLTEICQRACKLAIRESIEKDIQREKQREAQGQNDADMEMDD
EDLVPEIRRDHFEESMRFARRSVSDNDIRKYEMFAQTLQQSRGLGTNFRFPGSSNQQSSSGTSQPAS
EQPSIYGNDDDDDDLYN*
>TRINITY_DN166344_c0_g1_i1.p1   type:complete   len:360   gc:universal
TRINITY_DN166344_c0_g1_i1:93-1172(+)
MQKPKKYDWKDSNMALFGSDTEKKVKKESAESEPAWQGAGADVGVQVWRINKFKVEHWDKE
QYGEFYNGDSYIVLNTYKEPDTDELKYDVHFWIGKYSTQDEYGTAAYKTVELDTFLDDKPIQHRE
VQGHESSKFKTYFPTLTLLKGGADTGFKRVLPEAYEPRLFHVKKQNRTQITCTQISLKRGNLKSED
VFIIDLGDKIYQYNGSSCSADEKYKATQEVARLKSVRGKARAETIEERTVSDEHPALMVLKDGSSK
EKSTVEGEKKMLRVSDADGSIGMDEVASGDDISKDKLTSDDVYIINTGSHVYCWIGSGASIDERKN
GLSYASNYLNKTETPWLPISVVGQGKEDSQFQKAF*
>TRINITY_DN1272_c0_g1_i1.p1   type:complete   len:262   gc:universal
TRINITY_DN1272_c0_g1_i1:957-172(-)
MRCQLFLLVACMAIATCSAYDWRNKVQNMLKYAKVNIFDRAAYILGDKRQHQLGKPWFCHKL
DCPAFQVVGNYTNKKDGFEERCYPETAWVMTSKEVDANENDIETRDMFMKLFKYIQGENEKQE
KIEMTVPVFTYSQLKKDDPSKRYISMHFFVPPSQEKNIPKPTRDDVTIMDVKADCYYVRSFGGYV

327

MSFGSKIMNEEKKIHAALEKNNLDFEARKTMAAGYDSPFRLFNRHNEVWVAKRKTMDSGCCTP
RKSTNVMY*

>TRINITY_DN72959_c0_g1_i1.p1　　　　type:complete　　　　len:216　　　　gc:universal
TRINITY_DN72959_c0_g1_i1:54-701(+)

MGRRPARCYRYCKNKPYPKSRFCRGVPDSKIRIFDLGKKKTGVDDFPKCVNLVSDEYEQLSSEALE
AARICANKYMTKTAGKDAFHIRIRVHPFHIVRINKMLSCAGADRLQTGMRGAFGKPQGTVARV
HIGQPLISVRCKDQHEATAIEALRRAKFKFPGRQKIFTSKKWGFTRWDREEYLERRQDGSIKPDGT
NVQYYPCKGPLKDWKWRESR*

>TRINITY_DN12390_c0_g1_i1.p1　　　　type:complete　　　　len:268　　　　gc:universal
TRINITY_DN12390_c0_g1_i1:826-23(-)

MLASQVSIALIVFYLGCGNAYRPLSFYETNGPVQEILEDFEFRDDFEDGFLDRDAGVSMAEACVH
AHNVMRQRHQDTPNLVWDEGLAKAAQAYAEKLAAKDDGLHHDIKNNKKEGWGENLYFKDA
ARVGTCADAVISWYNEIDDYDFNLGMSRNHKAIGHFTQLVWKTTTKVGVGVATHKGQTDNDIK
TYIVAKYKPPGNWFHGYHDYVKPLIIPIKHRPTSVEELDRSVCTIDAFPSRFCRGFRREGRCGEFIVK
DACYRTCHSCN*

>TRINITY_DN535_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:162　　　　gc:universal
TRINITY_DN535_c0_g1_i1:712-227(-)

GKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFRALGCDVLACSVDSHFSHLAWTQQSRKKGGLGQMK
IPILSDLTKSISRDYGVLLENDGIALRGLFIIDDKGILRQITVNDLPVGRSVDETLRLIQAFKFTDEYG
EVCPAGWKPGADTINTGKAHEYFEKQ*

>TRINITY_DN98420_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:286　　　　gc:universal
TRINITY_DN98420_c0_g1_i1:1007-150(-)

LHKEARSTVINKMASRLLNSLGKVGVGLAVVGGVVNNALYNVDGGHRAVIFDRFRGVLPDVSG
EGTHFLIPWVQRAIIYDVRSKPRNVPVITGSKDLQNVNITLRILFRPVASELPKIYMSLGEDYDERVL
PSITTEVLKAIVARFDASELITQRDNVSLNVQEALVERCKAFGLILDDISLTHLTFGKEFTEAVELKQ
VAQQEAERARFLVERAEQQKQAAIITAEGDAVGAQLLSDAFKKAGNGLIELRKIEASEEIAQNLSG
SRNVVYLPDGQGMLMNLPAP*

>TRINITY_DN14830_c0_g1_i1.p1　　　　type:3prime_partial　　　　len:834　　　　gc:universal
TRINITY_DN14830_c0_g1_i1:113-2611(+)

MNKMASAALSRSFAQLYLVWLLFQSVVGQSKVNVSPKAVSKKAKEPVYIDCSVVPKSTGIRVTWK
KDNKAIPYYSKETSQKDAPYVFAENNTLYIASLKRRHTGRYECEAFDQSGNTRTVGEATIEIKYIQK
LAPIDPVRSYVGSDAEIVCLQPLANPFAQPSWQFNGVDIVQSDRVDPTGWTLRIKNVSLTDEGVY
TCVATNDANVRTENATFTPVVSGPVEATPEDDVITEGEDAEFTCVSKANPPLEVTWKRVGKTCED
GVCNDEVTVENSDDGRINVENGVLSVTNAIPSDKGKYKCEASLGSSFNEAFVSLNVVELLKEDPQ
MHQRFQSVDIREENGTIFCQFRGDGRYDIIWSRVNSTKPLRKGMNQFNNTLKITDITFEDGGTYRC
TADGIKGTATADVTLNVYESPVFSIHPNNVSQNEGKPAWIDCKGEGTPAPRVSFHRNKQKESLNA
SHFQQLPNGTLYIAELKKEDAGTFYCWLTQKAKIEYSTFYIRVKDAEPISPGSSSPMGRTVGIAVGC
AGVYILLVIGLMIYCRARRARLLKKGLITEADDCDAKDPLVNGEDIPLPTNKSLDYLQVPKGEITEI
CELGHGKMGRVYKGLVTNERYPNGVLSAVKEFNGNNEQQNEEFNLEVEMFLQLNHDNVVKLI
GIQNNTSPHYLIIEHSEIGNLKDHLVNSPDMTDAQRVNMSLDIANGMEYLISLRYIHRNLSTRNCI
AMNNDNIKVTFLSLCEDVNKDDYYLLNNILVPLRWLSPEAIANEVYSEKSDVWSFGVTLWEIFSN
GQQPYSKFDDEQVRDGICKDLRLTVPDKCPSTVADLMKKCWIAETTER

>TRINITY_DN81944_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:222　　　　gc:universal
TRINITY_DN81944_c0_g1_i1:3-668(+)

VHQVIARYSINMLPQILSTFVILTVSTALADKPWFCHDLDCPSYKVAGAFTEKKDGFEVRCYPKTV
WAMTQAEFSAKSSSYSTGSLFMKLFKYISGNNKEGKKVAMTAPVFTYSDLKKGDNSTRVIKMHFF
VPPAQESTIPAPSGDDIEIVTVPADCYYVHSFGGFVFSMGRKIRRETGNLVKSLEKAGIKSYDLSKSM
YAGYDSPFRLFGRHNEVWLAKM*

>TRINITY_DN828_c0_g1_i2.p1 type:complete len:216 gc:universal TRINITY_DN828_c0_g1_i2:1021-
374(-)

MANSMIVSLFVLAACASISQAIKCHVGLSSKELTFEIGVRQVECGGKFTRCATTTFIADGKKAYRG
YCASTYGPYLCILMKNSAKTMTECDTQICSGDLCNKQVEEASQREKSGKGVKCYTGIEMNLPPLD

IATGDVPASVDQCEDNTDTCMSVSFLHEVKDPVQDRVFVRVPTVMRLCKPSYSTCENHCERLSK
HITIGDCKATCCKGDMCNPF*

>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)
MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN10890_c0_g1_i1.p1   type:5prime_partial   len:963   gc:universal
TRINITY_DN10890_c0_g1_i1:3568-680(-)
NEFFAGFQISPKILDLSEKDKPRKIILENTVPIVCQDGTENCRVLVELAQTNTDNFMDYCTISFKPGP
AGQTNEVEVVAKRDFIDDGDQTMFLKLHIPDHIDPVDWNCYKNITDIKIKTTDVKTSRCLSTGDP
HITTFDGHYYNHYLVGDYTLVESKARFKIHVRTWKCGSVSCNCGVAVQEGDDVIVVDMCRDR
VPRARFASTVEPQKGTTIERNNNGKSFLLSFPSGAFVRITCKRNYADFQIQLPSDDFQNTVGLCGTF
DRNRNNDLTSKSGQVFNSRRGRNGPNGFTESWKLSSRDSLFYYRGGPKKCLATRPKSYCTCKETC
CGKRTVNCDYEGYSQRPKYKQGFRGWKSLTFPGAEHCGRRKRRSLDDSSVVLPDDGDTAIYDYK
PAPVIPNEGRFPTPKGKSESQARNTCTRKIKESTIGKACLKIITGFDVQDYIDQCVIDVRVLDDFIVP
VESAVTNMASNCEEETLRDVKKYWKKDAEGKDAPPQDIGDSACLNDCSDNGVCRNGTCICND
GFITDDCSMTKGQQPVLLGIPNDGLCDIRRQDCVRTRVTGDYFIDSSTLQCKATEAKVSDTTPPEK
FGSGVIEQGQLLSFREIGCLLPKVPLVINGNPDYSRGKPTGAFYISVSNDGNNFSKEDTTYPDSKSET
VMVVYDSKCMDCTKEGTCSWKKNSCKMNEYCFANGDPKPDDWCQVCDPDRSRTEFVKRLDN
QPPVFNGGSTQYIFKGQQWKYELPAEDPEKQPLMYSFIGENHGMKISSAGILTWTPTELKVYSFKV
EIEDPCGLKASQEFKVDVRNCSCEGQNGGRCEWLKSNTPEDHKCVCPDGCKGISCTDPIDGRICR
VKVSPQSGDDDSSSNGAVIAVIIILLIILIVIAVVGFLIIRYLKKENKDVNMKNIKTTIADAGKNAKD
RVADAGRNAKDRVIPNKNAKDDINANDKMRSSIRINLRPQSGTSAK*

>TRINITY_DN4439_c0_g1_i1.p1 type:complete len:941 gc:universal TRINITY_DN4439_c0_g1_i1:77-
2899(+)
MTDSKYFTTTKKGEIYELKAELNQHKMDRKKEAVKKVIAIMTVGKDVSALFPDVINCMQTDNLE
LKKLVYLYLMNYAKSQPDMAIMAVNTFARDCDDPNPLIRALAVRTMGCIRVDKITEYLCEPLRKC
LKDEDPYVRKTAAVCVAKLHDINSTLVEDQGFLELLRDLLSDSNPMVVANAVASLHEIAESSPNAT
QYFEMNSATINKLLTALNECTEWGQIFILDSLANYSPRDEKEAQSISERVTPRLSHANAAVVLSAV
KVLMKLMEMMPTGGQLVQNLCKKLSPPLVTLLSAEAEVQYVALRNINLIVQKRPDILKNEIKAFF
VKYNDPIYVKLEKLDIMIRLASQQNIGQVLAELKEYATEVDVDFVRKSVRAIGRCAIKVEQSAEKC
VTTLLDLIQNKVNYVVQEAIVVLKDIFRRYPNKYESIISTLCENLDSLDEPEARASMIWIIGEYAERI
DNADELLTTFLDGFSDENTQVQLQLLTAIVKLFLKRPTDTQELVQQVLSLATQDSDNPDLRDRGYI
YWRLLSTDPAAAKEVVLAEKPLISEETDLIEPSLLDELICYISTLASVYHRPPSSFVAGKTPARRAVLP
RRTGSDTNENEEVSSISEETPTPTLSQVAGMPPISSQPATDTLIGDLLMDMGPAPTPPQPSVFDAHR
QQQAPSADLLAGDLSMLNTPVTPQQQPMGMGGGLNDLFSLQGALPGSGYCPPKQVWLAASKG
KGLEIAGTFSRRQGQIFMDLTFTNRAMQQMGGLAIQFNKNSFGVAPAVPVPNTPLPPNQSAEVSL
LLNIAGPVQKMQPINNLQVAVKNNIDVFYFSCLIPPHVLFVEAGKMDRKQFLDVWKEIPQVNEV
QNTITTKGFNSDGIQNVLEANNMFTIAKRTVEGQDMLYLSLRFSNGIDVLCELKIIPGNPVVQLSL
KTKAMDVIPMVQEVIQLILQS*

>TRINITY_DN119684_c0_g1_i1.p1   type:complete   len:662   gc:universal
TRINITY_DN119684_c0_g1_i1:2182-197(-)
MKLEIILFTLLVALTVHCSEKKDDSKKDVGTVIGIDLGTTYSCVGVFKNGRVEIIPNDQGNRITPSYV
AFTEEGERLIGDAAKNQLTSNPENTVFDAKRLIGREWGDKAVVHDMKFFPFKVVEKGKKPHVQ
VNVKENEKKTFAAEEISAMVLVKMKEIAEAYLGKKVTHAVVTPAYFNDAQRQATKDAGVIAGL
NVMRIINEPTAAAIAYGLDKKEGEKNILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDF
DQRVMDHFIKLYKKKKSKDIRKDNRAVQKLRREVEKAKRALSTQHQARIEVESLFDGEDFSETLT
RAKFEELNSDLFKSTMKPVQKVIDDSGLKKKEIHEIVLVGGSTRIPKVQQLVKDFFGGKEPSRGINP
DEAVAYGAAVQGGVLGGEEDTGEIVLLDVNPLTMGIETVGGVMTKLIGRNTVVPTKKSQIFSTAA

DNQQTVTIQVFEGERPMTKDNHLLGKFDLNGIPPAPRGVPQIEVTFEIDVNGILRVSAEDKGTGK
KEKITITNDQNRLSPEDIERMVNDAEKFADEDKKVKEKVDAKNEFESYAYSLKNQISEKDKLGGK
LSEEDKGVLEKAVDEAISWMDSHQDASVDELKEAKKKLEDVATPIVSKIYQQQGGAPPPPGGEG
GEEKEDKEEL*

>TRINITY_DN794_c0_g1_i2.p1 type:complete len:250 gc:universal TRINITY_DN794_c0_g1_i2:72-821(+)

MGLTGCGAVTKWILVIFNSIFFILGIGVLGVGIWLKLEREDYEDISSYDFVTPSNIAIAIGVIVMVVSF
VGCVGAATENSCFLLLHFLLLFLIFVLQIIACVLAYVNRGKVEDGLESDFRKSIKEKYGEPEYEAVT
KVIDKFQNEFKCCGFSSYKDWRMSKYNKRTASIPKSCCIESQKESKLCGSPNPSGLLVYEKKGCYN
EVLDFLKENLLVVGAFALAMAIVQVFGLIFAIYLYILVVRANKGTFA*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN22219_c0_g1_i1.p1   type:5prime_partial   len:427   gc:universal
TRINITY_DN22219_c0_g1_i1:2-1282(+)

YISKDYCKGKKNPSVCTLHIHNEFSQIKHFQHQTPVTSENAPGIILAHGQAGDALTGAGNVWFSR
NGGYNWTRIAKGSHHYAIGDNGNLIVLVPKFNSTGKTLIYSLNQGRNWYHNEFDLFDENITIHG
LAAEPHSKERSFSLWGHRLVKGKKLWHTFTVNFRKLITKECQEEDMKTWYPHINNGKDGCFLGE
RTIYKVPHKDSLCYLGRSYKPEKKVEKCSCTKDDLECDYGYERNRAGNCHRNEDIPLIEICKNGEE
MQEAFSKGYRRVPGDNCIAQSSNDEVVRFIDEHKKCVPNKEDIFGDFNRERAEVIREEEEEKEKK
MDETQKATKTKKSKKKGPNWPVIILSIILMCIIIGGAYWYWRKNYRPNNVHHVMYNASSFDNVG
MDNNDGDVDADDLFDPRPKSLREYHDETDAEDEQLLLP*

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)

MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP

RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDGLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN1614_c0_g1_i1.p1 type:complete len:218 gc:universal TRINITY_DN1614_c0_g1_i1:56-709(+)
MHKTKICIWLVVRYRSNPFRGYNRRPDLKSAGAKMTKYSTEPENPSKSCKARGSYLRVHFKNTHE
TAQAIKKMHIRKAYRYLKDVVDMKQIIPFRRFNGGVGRKAQAKAHGCSQGRWPKKSAQFLLQL
LKNAESNADLKGLDVDSLVIDHIQVNRAPYMRRRTYRAHGRINPYMSSPCHIEMILAEKEQVVPR
AEEEVEVKKVSKKKLAREKLKSRE*
>TRINITY_DN74124_c0_g1_i1.p1   type:complete   len:183   gc:universal
TRINITY_DN74124_c0_g1_i1:100-648(+)
MLLYTFACLIVSTLALELETTAKLLASKTVENNVLVENIDITIKYTIFNVGTSSASNVKLVDATFPTT
DFETVRGQLSVEWQNIPVNGNVTHIVVVKPLKTGYFNFTSAYLSYVPRDGEIQNAYTSFPGEGGIM
SELDYARKHSPHLLEWSVFALMCMPSLIIPFALWYRSHSKYTMKTKKN*
>TRINITY_DN1243_c0_g1_i1.p1   type:complete   len:929   gc:universal
TRINITY_DN1243_c0_g1_i1:2903-117(-)
MATDKEVKQTPSDDTKNKEKDEKDKKADKKKKEKEEAEMTEEDKQLLEELNMLVERLKETDTT
LYKPALESLRSQIRASTSSMTSVPKPLKFLRAHFDTLKDLHSKWPEDDNKHFLADIISVLGMTRPEE
RDCLKYRFLGSKESLESWGHEYVRHLAEEIRLEYTEKSGGEVDHLIKLANDIIPYDMKHNAEIDAC
DLAMEIERLDLLEKCVDKSTFQRVCLYLASCVKYVPEPEDSELLKCAMNIFLKYDCYPEALNLAIQ
LNDLDKIKEIFKDCTGSEDKKLIQKQLAYVLGRLQIFLEIEDEIEESDELVEIISNSHLNNSFLALGRE
LDIMEPKIPEDIYKSHLDNRPFSSSSVSMDSARQNLASSFVNGFVNTAFGKDKLLTEDGNKWLYK
NKEHGMMSTAASLGLLLLWDVDGGLTQIDKYLYSNEDFIKAGALLACGIVNAGVRNECDPALAL
LSDYVEHNTNAMQIGSILGLGLAYAGSNREDVISLILPVLADSKSSMEVVGVASFACGLIAIATCNS
EVTSVILQTMMERSAIELKEHHAKYLALGLGLTFLGKQEAVDATVETLKVVQGPLSHWSSVMVDI

CAYAGTGNVLKIQNLLHICSEHYEDKETESDKDKKEKKDDKKKDDKTSDKDEKKEKEKSSESNES
TENEKKDGSHQGIAVVGIAAIAMGEDIGIEMALRAFNHLLQYGEPAIRRAVPLALALLSASNPRLT
VIDILSKFSHDHDAEVAHNSIFAMGVVGAGSNNARLANMLRQLALYHHKDANNLFIVRLAQGL
VHLGKGTLTVSPYQYDRTYMSPVAVGGLLGTLTAFFDVKQTILGKSHYLLYSLVAAMQPRMLVTL
DTNLKPLPCNVRVGQAVDVVGQAGKPKSITGFQTHTTPVLLAHGERAELATDEFIAMAPVLEGF
VICKKNPNYDPGE*
>TRINITY_DN11097_c0_g1_i1.p1   type:complete   len:730   gc:universal
TRINITY_DN11097_c0_g1_i1:2348-159(-)
MVRPQGVTQEHSSKPSTSERNSFVFSALSKSGCFETLPSIYDSIIIQRSHWLHTEGFSMRTSSTGSQQ
TSRRAFYEELQAFSSTIPFYESLSWALLSLSGCLNPVSTPNIREEILADLEGRSVDESREVLLVFATLFD
VYKSYQNSIVVEISAILPGGILRCISLGQTEGFNSYNTVGLINYQPIVYPVGRNVLGRLFNVTGSCID
LYNEVTMDMPFVRSVSTEETHTPQKTTLIKTGANADTSSDSDCVKANALFKECTSHINVKETSLD
HLISLYCGCYMGMTSAPIAPISRLPIEAESSRAPEHMVQKLQECMGTYSGSADPSTPNQIGSKKQPF
WLSKEALESGVSPIHSTPLPISKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFI
RNLAIEHKGISIFCGVGERTREGNDLYSEMAEAGIICKDYTTMKPSDPSSNGGPTGSIDQHSVTFTR
SSVTLVYGQMNESPGCRMRVAHAGLTVAEFFRDVFKQDVLVFVDNVFRFLQAGSELSTLLGRMPS
AVGYQPTLATEMGAFQERIIAALWGSITSIQAIYVPADDLTDPAPVTIFTHLDAVSSLSRELAAKGIY
PAVDPFNSTSRMLDPQCLTSEHFRVALEVQQILQRYRELQDVIAILGIEELSEEDLKTVERARKIERF
LSQPFSVAEVFTKIKGIFVPLEATIRSFAMVLSGALDDVPEGNFYMKGGLDTLKL*
>TRINITY_DN1534_c2_g1_i1.p1   type:complete   len:547   gc:universal
TRINITY_DN1534_c2_g1_i1:1914-274(-)
MHRVNSSFVKVAERTSKLCGNLGIKNSKIPSSLIARSSSTDTTDGVGESEPGFLEMVSIFTENAHSIT
LDKLLSAKPAPGKRAEDTGVREKRIKGILDIIKPTNTALAVNFPLRRDNGDYELITGYRAQHSHHR
LPCKGGIRYAPDVNLDEVKALAMLMTFKCAVVDVPFGGAKGGICIKKSDYSENEVEKITRRFTVE
LARKGFIGPGIDVPAPDMGTGEKEMSWMADTYAMTLGYGDMNSSGCVTGKPISQGGIHGRMSA
TGRGVYHGIDNFANNEEYMNLIGLKPGLKGKTFIVQGFGNVGLHSCRYLHRYGARCIGVIEHDG
SIMNPNGIDPKDLEDYKLDNGTIVGFPGATDTTEDLMVAECDILVPAANELQITAKNAPHIKAKII
AEGANGPTTPQADKILQQRKRLVIPDLYINAGGVTVSYFEWLKNLNHVSYGRLTWKYEESSNYNL
LSSVQESLEKHFGGNIPINPSSTFLQSIQGASEKDIVHSGLAYTMERSANRIMKTAKDYDLGLDVRA
AAYVVALEKIFNTYSEAGLTFT*
>TRINITY_DN27859_c0_g1_i1.p1   type:complete   len:361   gc:universal
TRINITY_DN27859_c0_g1_i1:77-1159(+)
MKLELFYHILFFGVILTNVNSKKNRKKDNVEFNGRDNFLYSKRQHKFKALPQRSVKAVVNSNDY
NNFKNSYLSNILRVRVPGTVGHHEVKRFLISKLQEYKWNVSLDEFEEKTPLGKTKFTNIMATLNP
NADRRLALVAHYDSKLVTPKDGRYFLAATDSAVPCAMLLDFAKILSEKYEKNKEALKDVSPMIILL
DGEEAFVEWTKTDSIYGSRHLADLLSKTKHHNPKLSEFSTTALDSLDAFVLFDLIGTSTTQFIDIYPA
TSPLYQRLQQIEMSLRKSNLIASPRQYFKGQPYSPVYIEDDHVPFLEKGVPILHLISVPFPKEWHTLD
DNEKCLDETTISNLLIIFKEFLLEYFHFE*
>TRINITY_DN147947_c0_g1_i1.p1   type:internal   len:168   gc:universal
TRINITY_DN147947_c0_g1_i1:501-1(-)
VGKSALTIQFIQSHFVPDYDPTIEDSYRKQCVIDDRVAHLDILDTAGQEEFSAMREQYMRTGEGFL
LVFSVTDRSSFDEIHKFHTQILRVKDKDEFPMILVGNKSDLENERTVSTAEAQELGRKLSVPYLESS
AKQRINVDAAFHDLVRAIRRSNNVEALPIKNKKK
>TRINITY_DN5643_c0_g1_i1.p1   type:complete   len:932   gc:universal
TRINITY_DN5643_c0_g1_i1:2894-99(-)
MAFNQWRKFNFFERELLQSPLSDHIKNLQITACTSGRGRLLFGDSDGDLHILNRDLQFKTIKIYMK
SVTHLFQLKEHDILVTVGLEKSGVQHFIKVWKIDKVDGDITLKCLRVSIVPTKSDAIAVSCIAVHEN
LSHIAVGFVNGTVVTMKGDITKMRNVEHRIHEDRYPVTGLGYKQVGENTFLFVTTTETVMSFNIS
AKNYMTLLDHFGSNNHCSAVCDLSEENHFIIGRDDALYLYLPDVRTKCLPFEGTKEMVCWFQSY
LVVVSKGGKQLPRTAGTGGVQSQLISLSVYDIENKFIAFSAPFPTIAGILGEWGSLHIITSEGKIFQLT
EKDTNTKLQTLFRKNMYETAISLAKSQNYSDGLIPIFRTYGDHLYAKGDHDGAIQQYIQTGIGHLEP
SYVIRKFLDAQRIPNLTNYLQALHEKGAANTDHTTLLLNCYTKSKDINKLNDFITSDKDFDVETAI

KVCRRAGYFDHALSLAEKYEQHESYIKVQLQDLKNYKKALNYMKLLPFEEAENNLKLYGKTLIN
HATEETTELLKQLCTDYKPASGKKEEVPNVTTGIVSVGDVIMSPIPARKIKRAYPDDFIHIFVHQKP
KLKEFLEHMVKMRNDCSNVAHNTLLELYLHDASAAFSEKNIEKGSDEESKAYNLLTDIEARYDLD
HAMVLTQMHNFRRGMLYLYEKSKSYRQILRCHMEHNEYDEIIEDCQKYGAQDPGLWSQALSYFA
KNEKDCKKHIIVVLNHIDKYNLLSPLMVIETLAHNSNVTLGVVKDYIIRRLQHENEQIAKDERMI
RKYREDTEKMRVQMEELKTSAKIFQNSKCMICSRPLELPAVHFLCGDSFHQSCFESYADGENECPV
CAPENRKFMDILRAQEHNKDLHEQFNHQLERSTDGFSVVADYFGRGCFKKVSVFTDTKTQQPIL
PSEAETERRTLFN*

>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)
MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*

>TRINITY_DN37295_c0_g1_i1.p1   type:5prime_partial   len:195   gc:universal
TRINITY_DN37295_c0_g1_i1:857-273(-)
LHSLDLIYRDLKPENLLIDEKGYLKVTDFGFGKRVKGRTWTLCGTPEYLAPEIILSKGYNKAVDW
WALGVLIYEMAAGYPPFFADQPIQIYEKIVSGKMRCPSHFSQDLKDVLKSLLQVDLTKRFGNLKN
GVADIKGHRWFSSTDWIAIYQRKIDAPFIPRCKGPGDPSNFDDYEEEALRISSTEKCAKEFADF*

>TRINITY_DN1378_c0_g1_i1.p1   type:complete   len:443   gc:universal
TRINITY_DN1378_c0_g1_i1:2151-823(-)
MLRFAVLVVVASIGVSALYDSSDDVVELTQSNFNNHVIGSDDIWLVEFYAPWCGHCRNLAPAWK
QAATALKGIVKVGAVDMDQHQSVGGPYNVRGFPTIKVFGANKMSPSDYNGARSAQAIVDEAM
KVVQRVVSDRLGGRSSGGGGRRSGGSSGGSGNKDDVIELTDSNFEKEVLNTKDMVLVEFFAPWC
GHCQRLAPEWAKAATELKGKVKLAALDATVHGQTASRFQVQGYPTIKFFPAGDKDFSSAQDYQ
GGRTASDIVAWALAKHAENVDPPEILEITSNSVLTENCNEKPLCVISFLPDILDSMAAGRNGYISTL
KELGDKYKSKMWGWLWTAPGLHSNLEQALGVGGFGYPAMAVVNIRKKVYVLLRGSFGIDGIDE
LLKSIAVGRGRTEKLTQGLPTLKDVEAWDGKDGQLPEEEDIDLSDVELDDLDDEPKQEL*

>TRINITY_DN6783_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN6783_c0_g1_i1:1018-77(-)
MVREDKSTWKANYFTKLEGLLDEFPRCFLVSADNVGSKQMQQIRVALRGKAEVLMGKNTMMR
KAMRGQMQKHPSLEKLLPHIVGNVGFVFTNEDLTEIRDILLSNKKEAPARAGAISPLDVFVPAGN
TGQGPEKTSFFQALAIPTKITKGTIEILGDVHLIKKDEKVGASESALLNMLNIRPFHYGLVCRTVYD
NGSVFNPSILDIKEEDLITKFCEGVANVAAVSLAVGYPTAASVPHSMINGFKNIAAVCLEADIDIPQI
ATIKEYLADPSKFAAAVAPAAGDSGAAEVKEEKKEESEEESDDDMGFGLFD*

>TRINITY_DN61707_c0_g1_i1.p1   type:3prime_partial   len:417   gc:universal
TRINITY_DN61707_c0_g1_i1:1250-3(-)
MNVIAAIIRIAILALVFQHEAEGKVYYIRTDADSGRCTYQGYIPGGKEINISPIKAPTAQLETNVLA
NIAGFGGKAGTGVMHLSKFTETIGKIAPKLGPALGVFGVAFGVVADFVKPSPADILAATNEAIGKL
TEEVNDRFTDMKSYVDLELMNVVKERINVEYKHMFTMFSNCIKDVSLERVLECQEDANQYITSGS
GKFMLFNMDDYSDSSPPTANEIKKMELTFLPFREYVSLNLMQLQVLTDTYKDLQNSVKDGPLIYR
KHLSELSEEAAKLIVYARNMFKWIDKTYDEFSRQRCKETKTYWSRCTTEGSWSGNTACYATAQCQ
FDITIPDNKKCKTKCTVRVDGKKIYDRYDFKNKNYGYEEAGQLFAGGKLDKKASSYLNQQAADV
KNYWQAEVLSSIPVWEEMKKRADD

>TRINITY_DN164351_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN164351_c0_g1_i1:694-59(-)
MEDWGEPGEQEAVGPTSIEVQDIKLFGKWNPDEVQVSDISLTDYIAVKEKHAVYLPHTAARYAVK
RFRKAQCPIVERLTNSLMMHGRNNGKKLMTVRIVRHAFEIIHLLTGGENPLQVLCDAIINSGPRE
DSTRIGRAGTVRRQAVDVAPLRRVNQAIWLLCTGAREASFRNIKSIAECLADELINASKGSSNSYAI
KKKDELERVAKSNR*

>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-289(-)

MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSMRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*

>TRINITY_DN58867_c0_g1_i2.p1   type:complete   len:354   gc:universal
TRINITY_DN58867_c0_g1_i2:80-1141(+)

MVSLYGDMMFNIENGYLEGLVRGFRSGILNRTDYLNLIQCETLEDLKLHLQSTDYGNFLSNEAGP
LTVSVIDEKLREKLVIEFDHLRIQAVEPLSQFMDYITYSYMIDNIILLITGTLHQRSISELIPKCHPLGR
FPEMASINIASTPAELYNAVLVDTPLAPFFVDCISEQDLDEMNIEIIRNSLYKSYLESFSRFCDSLGGT
NSEVMKTILQFEADRRAIMITINSFGTELNKDDRSKLYPKCGKLYPDGLARLARAEDYDQVRQVA
DCYAEYQPLFEGTGTNPGDKTLEDKFFEYEVKLNVNSFMQQFHFGVFYAYVKLKEQECRNIVWIA
ECISQRNKSKIDNYINIFE*

>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*

>TRINITY_DN6008_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN6008_c0_g1_i1:1620-343(-)

MSLEDTQLRKRKGVSEKHYTLDGFTNLQENEKKSSPLMSITKVILKMMIATFVLLGIYIAITPSPIDP
GVLELDTPLPRFEGVLAPNDKLKQARRIGEGKLLAPESLAMDKEGNIYSGLGDGRIVKITKDEEIIN
ITRTGEPHPECGKRKLGSKCGRPLGIHFDKDQKNLIICDAFFGLLKLNIATKKLSTLVGANVINEKP
LKFTNHISVSSKNVVYFSDSSSRWDLENVALLVLEGNGDGRLMSYDMESGKLQILLEGIYFANGVS
LSPDEDFVLVCEMSRNRIIRYYLKGENKGNYDIFADNLPGSPDNIRRSPNGGYWLALPSIRKAPFSP
PDLIAPYPSIRNVIAKLLSPQTLEYLLGSMRYGMIIKLDENGKVVESYHDKDGSKMYTISEVYEDSV
NKVLYLGSYKNPFMGKLQLSDSS*

>TRINITY_DN1761_c0_g1_i1.p1   type:5prime_partial   len:251   gc:universal
TRINITY_DN1761_c0_g1_i1:843-91(-)

IRWHKHLSVCCKMRTLLLSAILCFTSFQLSYGQLAVGAGVAAGVMGAVLNPSNWITALDAAGRI
KEMIKVTKDSRIAIREKNEGFEFLTMKANAQTSRGIKKHHLLKILRKKLIPFASRSPDMKLMVQTL
VEFIEDDVEEHQEQFFGLMSQGAGGSTQAMFVYYKIREDGKYNFKRMTFYGSFRVAADLVITRSS
RKGFFSSESKDLISYLPRRGMTAKHIKNLLTIIMPNLTKIMNEFVPQDDKPFTFE*

>TRINITY_DN26425_c0_g1_i1.p1 type:internal len:414 gc:universal TRINITY_DN26425_c0_g1_i1:3-1241(+)

LSKSVKEDHNRFSACDFNANDVVISQSEIIDMWDKVKNKEISQEELIETLKKRSKSKDNCGSPQST
PGASRRNLAKVDSLEGSKKIKDERSSSLRKAASATFYTPGKEDIKQDGINEELNISDDNKSVESELS
PSPKTSPETSKSGFFRGIRNSLRKKGRLQDESPTRTEPPVNLLKKDSSKLRSNKDSLSESRSNSLSGSL
SEEKEDGHDIDSIKYETSDNEETFSEVINKLTKKPAPPPPPRDPRSITKELNDKTIELGKPIIPPRKHK

QMSPVTPKNIEDIDKEMQQLLFGLSDELKELSESQGVIKPSFKKPLLPPKGSKLKINSDNVATTKNK
ENNNIKVATLNKNKIVDKSAQDTQTVDSKISDSQESMKQVFKRLPLKDLVSKKLKKEEIEINEVPY
TNAEGLWNI

>TRINITY_DN3052_c0_g1_i1.p1 type:complete len:362 gc:universal TRINITY_DN3052_c0_g1_i1:45-1130(+)

MAHLSQEQRNELKKNAESIVAPGKGILAADESTGTVGKRFAGINVENNEENRRLYRQLLFTADKS
ISNYLGGIILFHETLYHKDDNGKPLVELIKELGINPGIKVDKGIVPLHGTNNEGTTQGLDGLAERC
KQYKQDGCTFAKFRCVIKINTPLGVPTDIAIQENAQVLARYANICQANGLVPIVEPEILIDGDHNL
ATSQRVTERVLACVYKTLVDHHVYLEGTLLKPNMVTPGQSCPEKASAEEVGVATVKALRRTVPA
AVPGITFLSGGQSEVEATKHLDAMNKTDLARPWALSFSYGRALQASVLKAWGGKKENVAEAQK
VLLHRAHLNSLASLGKYEGENASGATGDSLFVANHQY*

>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-481(+)

CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL

>TRINITY_DN5153_c0_g1_i1.p1 type:complete len:862 gc:universal TRINITY_DN5153_c0_g1_i1:61-2646(+)

MSEKKEFHRLSRSVRPIHYNITLKPDLENFTFAGNEDIDLEIKKETKHIKVNSLDIKVSSAVLTVDSQ
DIEPSDIRYKEDEETVTFKFSNPIPVGNAKLSLKFTGELNDKMKGFYRSKYTSASGEEKHMAVTQFE
PTDARRAFPCWDEPAVKATFDITMIAPKDRVVLSNMDVKSEKDHAEDDSFKEVAFNTTPIMSTYL
VAFVIGEFDFIEETLENGVLARVYTPLGKTEQGTFALKITSKTLPFYEEYFGIKYPLPKIDLIAIPDFAA
GAMENWGLVTYRETALLVDEKESSASSKQWVAIVVGHELAHQWFGNLTTMEWWTHLWLNEGF
ASWIEYLCVDYCCPEYDIWTQFVTNDFTRALELDALSNSHPIEVKVGHPSEVDEIFDAISYSKGSCV
IRMLHDFVGVGDFKRGLNSYLTTYKYANGETEDLWYHLEKASGKPVANVMATWTKQMGYPVLS
VSAEYVDTQCILKISQKKFTADGSADPNDQRWAIPINIMTNDNPKFSTLMTDPEMVLFMENEPES
NYIKLNPGQIGFYRTCYSSDLITKLVPVINSLSPVDRLGLESDLFALSIAGVSKTVDFLNILKGYKDE
MNYTVWTDIDSNISSLGVILQNTDNFELFKEYVIKLYKPISEALGWEPKDDDDHLTALLRNLILRRL
GNYGDADTLAEGQRKFKAHVDGTELVNADIRSAVYSMVSKHGDEETVDQFINLYRNTTHSEEKT
RILTYIGASYKSEVIEKSLKFSISDDVRSQDTVFALCSSTGSLNGRRLTWNFVKENWDDLFKRYQGG
FLLSRLISRTISNFATVEEANDVKTFFEEHKAPAAERCIKQGIESIQLNNAWLTRDGESINQWLFQE
N*

Band 9

>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)

MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ

VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANQFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE

NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN

LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*

>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)
KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLVSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN
LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG

VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIIHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE
ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA

KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*

>TRINITY_DN240_c0_g1_i4.p1 type:5prime_partial len:397 gc:universal
TRINITY_DN240_c0_g1_i4:1327-137(-)
LKAAAAFSGVSPFALVQPRARVPSRSRVAMVRRSPLPVLGLAGAACFFARSPCFIPGGPLRRQPWA
AAAGSAAVLGATPALADPIGDAAKKLADASYPFAKEVDWNSGIYLQAPGKLAPLEALKAIDKMI
VLGSQADPKLLKAAADAHHKAISSASGPTGMTSKADWEAVNAALGRVFASVPESSVMDVYNAV
AKITDPGVPAYLKSKVNGADAEKAYAAFLEFKDVVKANQVSSAAAAPVPAAGGDKIGAAAQAL
ADQSYPFLKSVDWTSDLYLKPLPGVSAAKALKAVDKAIVMGSAMDGNLLKAAASAHHQAIGSI
DAAGVTSAADYASVTAALGRAIASAPTSKVMDVYNAFAGIVEPSVPNTLFSKVDPLAANAAASA
FYEFKDVVKAAQR*

>TRINITY_DN776_c0_g1_i1.p1 type:5prime_partial len:201 gc:universal
TRINITY_DN776_c0_g1_i1:692-90(-)
RAGKTPHTASMVKNVCSKTYVTPRRPFEKARLDQELKLIGEYGLRNKREVWRVKYTLAKIRKRA
RDLLTLPEKDNRRLFEGNALLRRLVRIGVLDEGRMKLDYVLGLKVDDFLERRLQTQVFKLGLAKS
IHHARVLIRQRHIRVRKQLVNVPSFIVRLDSQKHIDFSTNSPYGGGRPGRVKRKNMKKGTGGGDG
DEEDED*

>TRINITY_DN161_c0_g1_i2.p1 type:5prime_partial len:399 gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*

>TRINITY_DN329_c0_g1_i2.p1 type:5prime_partial len:320 gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)
MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL

SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN2217_c0_g1_i3.p1   type:complete   len:566   gc:universal
TRINITY_DN2217_c0_g1_i3:1820-123(-)
MLRLVLIAISAAVAYGCSPLKHGCYAHSKSDAHLLHSDNSEDTHADIFSGTVIDWNNFGPYLQKA
ACRCNKAAAKAGYPFFSLRDFGECHGVGKGSTSFSALNLKKSVYCFGTDLGICDSSQHKHCAGA
EEGEFIYETKPEELTLLSEGKPSKQSSTYLGNEKTYGSYLAFDGELSQKVKRTCCHTKKSAAPWIQV
DLLQPSTIYSIKLANVLENYRNRLNNVKIYVSNNENFDGMKQLCASFVHMKTIVQTFTCQTPLTG
RYVRLVNNNNFLHICEMQVYGVQNSESITCPIEKGFCVKGNGHDQNSGVIKMNSVDGNTDNAQ
KECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPI
EKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEVIWNQHNRGCYIHT
QEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENA
QKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFSKCNL*
>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN535_c0_g1_i1.p1   type:5prime_partial   len:162   gc:universal
TRINITY_DN535_c0_g1_i1:712-227(-)
GKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFRALGCDVLACSVDSHFSHLAWTQQSRKKGGLGQMK
IPILSDLTKSISRDYGVLLENDGIALRGLFIIDDKGILRQITVNDLPVGRSVDETLRLIQAFKFTDEYG
EVCPAGWKPGADTINTGKAHEYFEKQ*
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL

KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATDGDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA
AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*
>TRINITY_DN15274_c0_g1_i1.p1   type:complete   len:1822   gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCDPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC
KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*

>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-1359(+)

MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*

>TRINITY_DN332_c0_g1_i1.p1 type:complete len:246 gc:universal TRINITY_DN332_c0_g1_i1:940-203(-)

MGALTYIFCLFLISSSFAKEEESCRTYAGGQVYPDERKSGVEHALHWSKAQISKPAPHWEGKAVV
NGEFKDLKLTDYKGKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFKKINTEVIAVSVDSVFTHLAWTNT
PRKEGGLGKMKIPLLADLTKQISKDYGVLLEDAGHTLRGLFIIDDKGVLRQITMNDLPVGRSVDE
TLRLVQAFQYTDKHGEVCPAGWKPGSDTIIPDPKEKLNYFNKQKEEI*

>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-494(-)

MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*

>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-2618(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*

>TRINITY_DN164271_c0_g1_i1.p1   type:complete   len:163   gc:universal
TRINITY_DN164271_c0_g1_i1:1172-684(-)

MATGIKPDPQCTDLYNKLKMTGGKAKPYEYLILHIDDKLNKVVPDVYPDLNSTLEMDEYKDVTG
QPASYKRLKDYLLAKASAYAFYHFEWSEKDGERSEYVMIAWCNDNKANITQKMKFSGTKDEVK
KVLKVGKVIQCNDADDIDYKTIIKDLSKNKAIFTK*

>TRINITY_DN22492_c0_g1_i1.p1   type:complete   len:1026   gc:universal
TRINITY_DN22492_c0_g1_i1:171-3248(+)

MLQKTLIYTLLGCWITLLSHAAIVRKSGGDDFSLKVGKPQKPIGQPKLKDAKKEVKEEPTSDVIPQ
QDENNDTTDRQKHKEQVSPDAVESGMPPRYPLKAMSAEVSAHDNEIGGCRDHPRASRVCKNC
GNRNFAAEHESYTYSYCRKSCRHCDPELSSFHTFWRLRAASQFDPTWMVKEIEFYPKPTEYDNLA
TDPQRAYASSSYPGFKPSYAFDGNNKTSWYPSGWGLHDNNDDWIGFEFPVAVRVHAIRMVLDE
MHRTAAPQRIFVEASDKKDGPFTTKWKISNPTYEVDNVYKLLQCPVLWRKFESDEGSWCFRLIAK
FETWEVARNECTVEGGDLATIATEEEKRFLTDELNLGGFAWIGLNHKDQAYYWQDRANSSYKN
WKAGWSYSEVQKQNLNCVATDQDGFWYNFHCTNKYYFVCKKKLEPQAAPREDLILKAWPYEP
EIPPMIFLYPNITVPVINTKNLEPGVFPDENGKVPEEEEEETTADDLFYEQTVEHLKEKGLKPSEEIS
NDVDKEETDYTQQLNKIALKTQSRDDFRNETESDKLKFNSTEAVKQAKDLEEQKSVNLDQNFN
QYNSTDGVKQQSQPVVAAPSDGPSGNSGDNNTLPRIVNGKPVESPSVNPNNVGKPNTPVASPES
PENTDFAQPGDTTFTTPTPTVQSGDPGNAEKSNPQKATNDQQAGGQQPNQESGSNANQSQVQ
QQSQQQQPQQQQQQQAQNNNNNQNGQQNASNQQNNNNNNNNQNNNNNQQQNNQQQ
NNQNNQQQNNQNNQQQNNQNNQQQNGNNNGGNNNDLPNGLPPVMGGPAPQKIPEPPAP
KEGTKDNDSEKSVGGQADVMPDDAPSNDNDGGDETTGNEENNDESNNNNNNNNNMNNV
NNNNDNNQSRTLDKPLPNQGKNSSETVDKATNVGGTNKQENNDFMKLQKAKPGIRTHKIGHK
KSAGLKKTHMKNVVSPLKKVKTEKKINKQVKTVKKIKAVKVKHHKKALKKEVVIHKSEDDEEE
GSGSGDEGDQEDVDDILESITNGLW*
>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN477_c0_g1_i7.p1   type:3prime_partial   len:1130   gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP

SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*
>TRINITY_DN941_c0_g1_i9.p1 type:complete len:3186 gc:universal TRINITY_DN941_c0_g1_i9:86-
9643(+)
MADPAKIVDPIDDPTASDAEWKKIQQNTFTRWCNEHLKSSNIYIYNLETDLCDGLKLIALLQVLS
HKKIVRYNKKPTFRPQKIENIAIALKFIEKEQIKLVNIDASDILKGNLKLILGLIWTLILKYQISMSMV
ADDDDDPDQKTTPKQALMGWVKSKLPPELKCGNFNKDWNDGIALASLVDSTAPGLFPEWEDL
DPANKLDNAKEAMKRAEEWLGVPQVLTPEEITNPNVDELSVMTYVSYFPESKLKPGAPLKPKMN
NASKCSASGPGLQEHGVVVNKPAEFTVFTSGSSRGKLNVQVFGPGRKAIDCMVQDNHDNTYSC
QYTAPKTGVYDVHIRVGGHHIPKSPFRVNVASDLDTSKVTARGPGLEPHGLIVGRPASFEVIATDA
GSGELVIDVIDPKGNKKTELKVEARPDNVYFCTYMPVQVGRYVIVIKYGGKEVAKSPYHVSVTPA
ADRVKIYGPGLEPGLKTGKPASFTIDCSEAGEGGLDVKIVGPGKGDIKYEVKDNGDGTYTCTYKP
TRPGQYEITVKFDGGVVPKCPVKSVGSTADPSKITAWGPGLERGVAGRPVEFYVNCKGAPVDNL
TVGVEGPGEAKVDMKTNSDGTVTVTYYPTKPGKYIIHVMYDEMDIKESPYSATISPRGDVTKVYA
EGPGLEAGNMAGKPAEFTVFTKGAGVKGNVQVTCVDENGKPCEVTVKDNGDGTFKVTYYPKTI
GKYVITISFMDEQIPKSPINVTIIPFSDPTKVKATGPGLQGGKTNKLAKFKIDASKAGEGGIGLTIEG
PNESEIKCDDNGDGTCNVEYMPTESGDYKINVLFADQHIPGSPFTAVIGDDFDASKVKADGPGLK
PGNKAGKPCDIAIDARKAGKAPLVVEVTDEVGNPVKVDLNEEEPGLFASSYHPEKEGPHTINITY
GGKHIPRSPFKVTVKPSSDASKVKVFGPGIKPTGVKSLEPTYFEVDAGEAGEGNVDIKIEPTAKGM
PPVKDIDVKPGKTPNSYIVTYIPPKDGEYNIVVTFAGVNVPKSPFKISVTPGSDASKCKASGPGLEE
PIVGKENVFQVETPPEAGLATLTCTIDTPSGRKLKADCKKNKDGNGYDVTWTPKEVGRHKVTVK
YGDKEVPESPFYVDVLGKPDPTKVKVYGPGLENAFVEKPAEFTIETRDAGPGNLGLTIEGPEEAKI
DCKDNGDGTCSVTYIPTKEGPHDINVLFDDQHVPGSPFKVAATEPIDASKVKCKGKGIGKSTPAS
YPAEFVVDATKAGKAPLEVDVVGPGDKKYPCDIVDNNDGTFNCAYVPEKKGRYEVTPKYGGTP

VPGAPFKVSGEPTGDASKVKCSGPGLDRPHIGHAAPFEVDTTKAGDGKLNVNAKGPDGKELPV
KMVEEEEGIFACEFVPEELGPHELEVLFGGQPVKGSTFKADATPAPELDKVRTPALEEILEASPCVD
QQFEAPVDCSEVPDNKGAKLSGKITTPAGKREKVDVTDNFDGTFALNYTPTEVGKYVLDVGYDG
IPIPGSPFEFEVTEGGPDKVKVFGKGIKKGVVAVPSRFTVDTKNAGPGDLSVAVEGPSKVDIECVDN
GDGTCEVTYVPVEPGEYDVIVNFDNQQVPGSPFKPQIVQDEPAIEVGRQSDLCLTPEGISAKDIPSL
KGVLQAPSGKEKPVDITEGPNDSFIASFVPDEPGKNLLHVKKRNKPIDGSPVPVMVREKPVIGEES
GIPMDLADCDLPKDLPKLNAVLTRPNGKEGPCGVEPGPDDTVAISFVPEEPGKHIIKVYKDGKQIE
DSPFVVMVEGSPDQYPKVGHPCDKDFYQPEPCRRGDISKMKGTLRRPSGKEEEVDVKLGPDGTIA
VSFVPTEAGEHLVSVKKDGRHVPNSPFSIMVIDEPTVPTVGSECSANFDIPELDLPKDLQYLKGTLT
RPNGVEEPLELSVGADNSLAINFVPKEPGKHLVSIKKRGKHVKDSPFEIMVEEGKPTDAPTGGPVV
GHDCGVNLDIPELSLPRDLKNLDAELTRPTGKKEPLKCDMGPEETLAVNFTPTEPGKHLIDVKKR
GRPVKGSPFEVMVGSTPVSEDQIPVSEEIMAQSAPDVESGLPGGLDSLDSGKDKPVTVGSPCDVNL
DIDGVDLPKDLDKLKAELTRPSGKKEPVKCEMADNGGLSLNFVPEETGKHLLEVKKNNRPVKGS
PFEIMVEESASPESKPTAGQKCDLDLDIPDIDLPRDLKDLKAQLTRPNGKQEPIECTCTPENTLGLE
FTPDEPGKHLIDVTKRGRPVKGSPFEVMVESPESKPTVGNNCGLDFDIPDIDLPKDLKVLKAELTR
PTGKKEPIECTATPENTLGLEFTPSEPGKHVIDVTKRGKPVQGSPFEVVVGEEEPASKVPTVGSECD
VNLEIPGLNLPRDFKYLDGTLKRPNKTSDEPLELTMNENGTIGVNFVPEAPGRHEISIKKHGKHVS
GSPFDVMVESAPSDQPEVGSPTTLGLDMVIPKEDLRLLKGTLVRPNGQEEPIEITLDDNGHPNVTF
TPQEVGNHVINIKKRGQHVPGSPINVMVGPAKKPTTCDVGFEIPGIKLPDDLKYLKGSVVSPSGTE
EPVELQAGQNNTIVVSFLPKEAGIHYIHIKKNGKPVGDSPYQVNVKPEDIAAGQPDASKVKCTGR
GLRHGLPGVKADFLVDTKDAGYGGLGLSVEGPSKVEINCVDNEDGTCAVDFTPAEAGQYLINVT
FADTHVPGSPFKCKVGGPGVEDDIVPMTDDGVECASSDMLAFPSSKARSPQDFVIKFSGSGDLKA
TVTRPSGVEDEAEVVETGPDTYTVRFVPRETGEHLVNVKSRRRHIPGSPFKVLVEAPAGGAASCKA
HGPGLEGGVAGQPCRFTVITRDAGPGGLAVAVEGPAKAEIQCHDNGDGSCDITWYPVESGEYML
HIRFADEAIPGSPFKAFVLPADEGKAMPMESFKDQVLRVGQQASFAVQMKGKKGKITASVQSPSG
VQIDCSAVELEEGNYAVRFVPRELGDHLVSVFLDGHHIPGSPFTVKVGGLDSDPSKVTAYGPGLKG
GVASQPAEFTVNALNAGSGALALSIDGPAKVKMHCVEQDDGTYKVIYNPTVPGVYEISIRFGGQH
IPGSAYKVRIVGSGDDAINIFGDASKCNASGPGLNQATIGQPATFKVDASNAGRGSIMVGVEGPVI
PAKEIIVKHTGNNVYSINYILEQSGDHILRVLWADNHIPGSPFHVNV*
>TRINITY_DN3986_c0_g1_i1.p1   type:complete   len:446   gc:universal
TRINITY_DN3986_c0_g1_i1:252-1589(+)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEEDA*
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-
2(-)
GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY

TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE
>TRINITY_DN3190_c1_g1_i1.p1 type:complete len:315 gc:universal TRINITY_DN3190_c1_g1_i1:68-1012(+)
MATVVDYPDFDAQADAETLRKAMKGLGTDEAAITFILGSRSNKQRQEIKTQFKQMFGKDLIDDL
KSELGGHYEDVVVALMKKPDEYDASELHNAMSGLGTHENVLIEILCSRSNAEIKAIKETYKKKYK
ADLEKDLQGETSGSFKRLLTSLVQGARLEDEPADHASAQADAHALFKAGESQWGTDESRFNAIL
ASKSFAQLEMIFHEYQLISNKTLEKAIKSEFSGDIQNGLLAIGKCAQSRPAFFAERLHKSMRGLGTT
DSTLIRVMVSRCEVDMVQIKQAFERNYGKTLNSYIADDCSGDYKKILLKLCGPE*
>TRINITY_DN36_c0_g1_i16.p1 type:complete len:224 gc:universal TRINITY_DN36_c0_g1_i16:829-158(-)
MMIKTTIVAVVLAACVLQSFAGRCYVGYSAKGLPLAIGVRDVECGKGYDYCTTIKYRLGGIEVTQ
GNCARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTT
GLITKFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNI
DNCNKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN1369_c0_g1_i1.p1   type:3prime_partial   len:1577   gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)
MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLYTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD
RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV
>TRINITY_DN2636_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN2636_c0_g1_i1:986-45(-)
MSAIAVVVIVIAAVLLHFSVHKIEEGHVAVYYRGGALLSSVSGPGYHLMAPMLTKYKSVQTTLQT
DEVKNVPCGTSGGVVIYFDRIEVVNLLSVDKVHDIVKNFTADYDKALIFNKIHHELNQFCSVKSL
QEVYIDLFDQIDENLKRALQQDLNEMAPGLKILAVRVTKPKIPEQIRKNYELMEAEKTKLLIRIQH
QKVVEKEAETERKLAVIQAEKQSQVAGIQYEQKIMEKESMKRMSEIEDLTHLAKRKAMADAEFY
THQKQAESNKMKLTPEYLELMRIEAISKNNKVYYGSNIPNIFLNEGGLSQKTK*
>TRINITY_DN3545_c0_g1_i2.p1   type:5prime_partial   len:236   gc:universal
TRINITY_DN3545_c0_g1_i2:3-710(+)

SGPGRSSCRPILSVIKISKINNIDSGKVEGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGK
HCDGVSFETRECNINQCPVDGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGKPCDGVS
FETRECNINQCPVCPEIVGTYDISSRHHYGGAKYGTVVFKKLSNSKTVEAYYTINDGRRGVLTCKIE
SAQPDQCSGHGYYGKYFTYYKNRCQIIWSNDVIYTKQNC*
>TRINITY_DN817_c0_g1_i10.p1 type:internal len:186 gc:universal TRINITY_DN817_c0_g1_i10:556-
2(-)
VGLSSKELTLEISVRKVECPGFATKCATTKFVLDGTTSYRGYCASDYGPYLCTYMESSFKTMTDCKS
TLCSGHYCNTAVERASKRSTINGKGIKCYTGMQMFLPQLPIGIATGTVPTEVDQCEDQTSQCMSVI
FTHLVTDPIRKIKVKIPTQMRLCQPGYSTCENHCRRLAQHITIENCEASCCK
>TRINITY_DN165469_c0_g1_i1.p1 type:complete len:2668 gc:universal
TRINITY_DN165469_c0_g1_i1:41-8044(+)
MVEEDLNRSKELDIPKTLAYCFHNVTTVSLNRKQDIFRLLTQCIESQGCQDGHLKAVCKIISLTVM
RYRDSKSRQLVLKFVQKFLDIHELQAVKCLLTEIHILAKQLIKCGASLFSASCGLALLSWCSSISKKK
VQEASILKILYEVEAMCYSVICTCDSFRVKRLLKRAYLYLQDGKDAEQLENCLGVIISNSNCQLESIC
LVGFIFQYLTTKKEIQRVDEVKKRSLIDIIIKNYIQTKVKADYHYLKHAVPFLKYITHDDFKEILPAIE
KGLLRNPETVLQGVGYLLEGLSIDSSNYIEELSKCIAVHLISKNASLQADAVFAVSVIAKQCSDFSAI
NHLLKQLIKVLNESEGKLVFPEQKNAVLQAIKSVDCTSVTGSDHKENLATTLHDGLFPFILLEGHE
GVLTQALNVMKTWCKYFKNNLPKTFVDNIKKGLSLKVSTTVIQAHYLLVVSEALKGNTVSQASG
LLETLLQVIEKVKGQSHLINNVFLCISSSMVLLKMFLSDDVQVNAAKEDSFWNVILDPVKKNLVSE
KFLLSHQKEYFYHLSQCMNTMFLNYSSRFSQKLLEPWYRAFNVLMVYGDWKTKKSVKILLSKMF
DSGNYDTDEFQSRLFADLDSLLDQEMSKSSKIEDTEDILVVNHVVDAYLFLCIWNKKDINEDEVLA
VLRKCLIYVHHDTIYQHDSSLFSKIGSVLKKDVAKEFVEKYKDDLLKYFINLESLSKADNHSLKTLL
SLYPEALLDTLVDEIIKYFTKPDLINVTSQEYEIMKTPDGVAYDQSVFESAKAANQKSGNLKRESKA
YSYKDQKAEMELRKELEKKKGKSDKIELNKKQKEQLEVILTQEKAIRDKLKSLEQGVMKHASILSL
LLDMDSDLLCYHYLDLMNLLLCLCQSHIAAPHVIPIYTKLSEKLFEGDLKHLGQLVANVILRLKKP
VCELPMGWSVENLPEQAKRALNTLHTFVNERNVYLMMTYTRKKTFSVLVFSYCLPLLKSILKDQ
GALVKGSEEFRMKALQLIHIHAKLRSPMDMGSEKNDPELLPRKEMLQILSDVIVSCEGHNKEAKV
QQQATLAFDEVCKCASGRLGCAVATEEEINILLSNILSQCSILRRVSLKGLLEFVDILPTENVVIMTQ
LTRSVLIGRFDIVDENATLAKRLWDEADICIEPSMIQHLVENVTHPLDDVRLAASLALEFSLNERKE
VDIIPQLLDIYFEKLKIPPPIIDNLGRVVSQQFVDSWEARQGVGLALEKIAETVGEDKLGDLFSFFVP
KALGDRNESVRKQMLNASLQYVNLYGQKNMDMLLGVFQDFLDSAPDSKELDTIRQSVIILTGSIA
KHFDKTDPQIKSIFSKLMAALSTPSQSVQQAVANCLPPLCGAMKSEAPELFKNLLEQLLESESYGE
RRGAAFGLGGLVKGLGILSLKQQNVIPTLNDAIQNKKIWKHREGALFAFETLCTMLGRLFEPYVV
HLLPHLLLCFGDGNQYVREAADDTAKAVMKNLSNHGVKLVLPSLLKALEEDAWRTKTGSAELL
GAMSFCAPKQLSSCLPSIVPRLTEILADSHLKVQKAGQQALRQIGGVVRNPEIQEICPIILDALSDP
NKHTVACLQALLSTSFVHFIDAPSLALIMPTLEKALGQRPTETKKMAAQILGNMYALTDPKDLQP
YLQAVVPGLKKSLLDPSPEVRAVSARALGAIVKGMGEVDDLMPWLLETLTSEASSVDRSGAAQG
LSEVLFALGKDKLDKLMPDVIATSMKTELSPNIRDGYLMLYVYLPATFEDQFLDYIGLIIPAVLKGL
ADESEFVRDTSLKAGQRMINMYADSAIELLLPQLEAGLFDDHWRIRLSSVQLLGDLLFKLSGVTG
KQTTVSEEDDNFGTAYSSQVILETLGFDRRNRLFAGLYMGRSDVALGVRQAALHVWKVIVQNTA
KTLREILPVLFELLLGCLASQSYDKRQVAARALGDLVRKLGERILPEIIPILEAGLDHEDGDKRQGV
CIGLSEIMDSTSREMISMFEDSLINTIRKALVDELPNVREAAASSFENLHNTIGHRALEGVLPTVFQ
KLDDPQLSNYALDGLKQVMTVKSKSVLPFLVPKLTTPPVNTKALAILSSVAGEALIKHIEKILPAMI
QAIQVSQGTGLDGDSEFESTRTLILSVYDEVGVRTIVDELTTSSKSQMPGIRKVAASLLMVFCKETR
GDHVPYIQSLFRTIIQLMNDVDQDVVASAWGALDALVKRLDPSEQLQHLSSLRQAVRFIKDDIRN
EQLPGFCILKKGITPVLSIFREGILNGPQEIKEQAANGLGEIIKLTSPEALRPSVVHITGPLIRILGDRF
NSSVKVAILDTLGLLLQKVGALLKPFLPQLQTTFIKSLNDSALGVRQKAAWTLGLLTVLHTRVDSL
FTELKNGIKNNEDSAICETILGALRSITLKAGSKMSEGIRNTLYETLVELISSNEDGIRLKAAAALGA
MCQILPQDQIEQLLNDNLLDINQMLDWSICHGRAVALSYALYHAPSQVFDAVDEDDIVEAVVKY
STYDRVPICTYGVHSLGHLLMFSKDNADVAPQIVVSSIKKTLLNSSVDIRLASLSTIKHVSRNTPEV
MTFERIRYLIPEFISLLRDRNTSVRSSAEITLAFTLQMDKNDILFDECVNTISEASHFLEEFKKNTFSK
LNDSLATKDDYFFAT*

>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN

LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE

>TRINITY_DN577_c0_g1_i1.p1　　　　　type:5prime_partial　　　　len:269　　　　gc:universal
TRINITY_DN577_c0_g1_i1:1086-280(-)

PCQNCADMAVGKNKRLSKGKKGSKKKIVDPFTKKDWYDVKSPSNFQIRNIGKTVVSRTVGTKIA
SDGLKGRVFEIAQADLNKDEVAFRKFKLICEDVQGRCVLTNFHGMTMTTDKLRSLVKKWQTCIE
AHVDVKTTDGYLLRLFAIGFTKKRQNSVKKTAYAKTTQVRAIRKKMVEIITREVSTKDLKDVVNK
LLPDSMGSDIEKASQGIYPLHDCYIRKVKCLKKPKFDVHKLMEMHESSGTTTTDATGGVVVERPD
NFEPPVLDSV*

>TRINITY_DN15584_c0_g1_i1.p1　　　　　type:complete　　　　len:275　　　　gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)

MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN3034_c0_g1_i1.p1　　　　　type:complete　　　　len:1941　　　　gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)

MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYQDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*

>TRINITY_DN1339_c0_g1_i2.p1　　　　　type:internal　　　　len:384　　　　gc:universal
TRINITY_DN1339_c0_g1_i2:1151-3(-)

IIGMFFQDGLTGSAWGDWALYTASPLRFFGGDSAPAYKSFDPATALGVQEPVGFWDPLGFSSDND
EATFNRRRSVELKHGRVCMAASIGYIVPYYYKFPGFLSPSEGVQFADVPNGLAALGKVPALGWVQ
IIFFAGIMEGAFGVTDDYKNGTPGDYGWKVITSDDPAEKEKKLAAELANGRLAMVAVIGMFFQD
GLTGSAWGDWALYTASPLRAFENELGVQDPVGFWDPVGFTSDGDVTAFRRRRTVELKHGRISML
ATMGYITPELTGKFPGYISNSLSLKFADIPTGLSAIAKVPALGWAQVVAYCGFCELSAGSDDWKTG
TPGDYGFKVLTSDDPAEKEKKLAAEVANGRLAMVAIIGMFFQDGLTGSAWGDWALYTAS
>TRINITY_DN96_c0_g1_i2.p1   type:5prime_partial   len:189   gc:universal
TRINITY_DN96_c0_g1_i2:1253-687(-)
LASLGICYGADLMVTKQVYFDVSIGGQNAGKITIGLFGEVVPKTVQNFYELVTHSKGFGFKGSKF
HRVIKAFMMQGGDFTNGDGTGGKSIYGERFPDENFKLSHYGPGWLSMANAGQDTNGSQFFITF
TKTPWLDGRHVVFGKVVNGMDVVKKVEQVQTDSRDKPKKDVTIEDCGVVKVEKPFAVKKQ*
>TRINITY_DN3036_c0_g1_i3.p1   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i3:1643-3(-)
AFAGAARASPARQGSVARRRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN
NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
SPLAKQSSVARRRALDQSSRYADLSLTEEDLIR
>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAQYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYCH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN

VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN6920_c0_g1_i3.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i3:2124-892(-)
CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN
GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT
PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*
>TRINITY_DN12_c0_g2_i1.p1 type:complete len:203 gc:universal TRINITY_DN12_c0_g2_i1:239-847(+)
MANRPKGFGMTAELANKRAAKFDAELAAEAMGWVKDVLEASGNDEAVNLAREIGSIDGPTDV
KGPLKNGVILCHLINSIQPGSVKRINQSSMAFKQMENIGNFLTGCEGIGCSKQDLFQTVDLYEGN
NIPQVINGLFALGRKARKTGYDGPRLGPDEASENKREFTEDQLRAGEGVIGLQAGSNKGASQAG
QNFGKTRAIID*
>TRINITY_DN278_c0_g1_i1.p1 type:complete len:470 gc:universal TRINITY_DN278_c0_g1_i1:3091-1682(-)
MAPSFNKTNGHMEENGGMIHANGKSSEKPINLGEQTYSYMTFKKMGLIMITLPLVFLLLVGLPSY
LYPVLVLLFFIPVFAGYIGLNNVIYCLYERHNQVSKIDNYIEFLDEDLKKKFTGRFIPIRDLYELYAEG
KLNFKGDVLQCLERRNEYVSYKLQLWHLKFFLSKLLPELLHARSQDKEQVCDHYDRGNDFYNA
YLGPLMVYTSGIRYSESDTLEDMQMNKLKAVCEKVQLKEGDRHLDIGCGWGTLVNYAAENYNS
QSEGVTLAKEQVCWAEEKAKSKEIMDRVNYLCMDYRDIPKKKYDKITCLEMSEHVGIKRYHHFL
KDVRNMLEDDGIFFLQIAGLRRAYQWEDFLWGFFMDTYIFPGADASLPLQFPIAELEAAGFEVES
VKTVGIHYSDTIKYWYHNWVKSDSHDKMIQKYGRRMVRVWDIFLAWSTIIARQGNSTCYQIVAH
KNFNHYPRRRFIQPKN*
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-2869(+)
MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL
RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVNQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDMFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN4329_c0_g1_i1.p1   type:5prime_partial   len:735   gc:universal
TRINITY_DN4329_c0_g1_i1:2240-36(-)
LTFIESLRLSNNMKEKLDYVVLCFFSWMVVGSCVDRGNFKTCKDSSFCRRNRAIQAGGSPFALLS
DTLVFGSDSITGDIYNTNTNVSFKLTIDTLVKETARIRITELSPIRPRYIVQESLVREPQHIKYEKVKSD
SDGFKVKFGSSLMQVTFKPLKVDFFDAEGVLLMSLNNKGLLNFEHYRVKNSSPQDSVEKTNESEK
GEDADQNSENEGKENTEEEKPENTNTVREDINEEGMWEETFKDHTDSKPYGPSSVGFDVSFIGFE
HVYGIPQHADSLSLKQTSGGEPYRLYNLDVFEYELNNPMALYGSIPFMTAHSAYKTVGIFFNNAA
EQWIDISSSKSVLSSLISFFKSGDTPEVDTHWMAESGIIDLFVMLGPKPNDVLNQYSTITGTQTLPP
MFATAYHQCRWNYNDEDDVKNVDAGFDEHDIPYDVIWLDIEHTDGKKYFTWDALKFPDSKRMI

DHIASKGRKMVTIVDPHIKRVGGYRIHSEAESKQFYVKKKDGADYEGWCWPGSSSWIDYTNPDA
RNWWASKFFLDQYQGSSLDLFTWNDMNEPSVFNGPEVTMHKDAIHYGDWEHRDVHNIYGML
QHMSTFEGHLLRSDGKARPFILSRSFFAGSQRAGAHWTGDNTADWGHLKMSIPMLLSLNVAGFP
FVGADVGGFFGNPDSEMLVRWYQMATFFPFFRAHAHIDTRRREPWLFGEENTQLIQQAIRKRYM
ILPYIYTLMRNSFDTGMAVMR*

>TRINITY_DN453_c0_g1_i1.p1 type:complete len:249 gc:universal TRINITY_DN453_c0_g1_i1:944-198(-)

MDIDQLKYEIIELGKQIETVHVAIAVVVLTTILLWIAIRSRRSGDTVLLLGLCDSGKTLLFSLLTAGKS
AATQTSIKENKSRLTMGKKSWAIVDLPGHERLRAKYLYNHKDSARGIVLMIDSVEFPREIRDVAEL
MYDLLANRTIKKNKVSILVACNKQDLTTAKACNVIKSQLEKEINNLRKTRSAALLGIDDNTSSKN
AFIGKKGKDFEFAHVKPIKIEFCECCLKDENGESKTDYNGIEEWMKKL*

>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-2701(+)

MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*

>TRINITY_DN286_c0_g1_i2.p1   type:3prime_partial   len:106   gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)

MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN

>TRINITY_DN4439_c0_g1_i1.p1 type:complete len:941 gc:universal TRINITY_DN4439_c0_g1_i1:77-2899(+)

MTDSKYFTTTKKGEIYELKAELNQHKMDRKKEAVKKVIAIMTVGKDVSALFPDVINCMQTDNLE
LKKLVYLYLMNYAKSQPDMAIMAVNTFARDCDDPNPLIRALAVRTMGCIRVDKITEYLCEPLRKC
LKDEDPYVRKTAAVCVAKLHDINSTLVEDQGFLELLRDLLSDSNPMVVANAVASLHEIAESSPNAT
QYFEMNSATINKLLTALNECTEWGQIFILDSLANYSPRDEKEAQSISERVTPRLSHANAAVVLSAV
KVLMKLMEMMPTGGQLVQNLCKKLSPPLVTLLSAEAEVQYVALRNINLIVQKRPDILKNEIKAFF
VKYNDPIYVKLEKLDIMIRLASQQNIGQVLAELKEYATEVDVDFVRKSVRAIGRCAIKVEQSAEKC
VTTLLDLIQNKVNYVVQEAIVVLKDIFRRYPNKYESIISTLCENLDSLDEPEARASMIWIIGEYAERI
DNADELLTTFLDGFSDENTQVQLQLLTAIVKLFLKRPTDTQELVQQVLSLATQDSDNPDLRDRGYI
YWRLLSTDPAAAKEVVLAEKPLISEETDLIEPSLLDELICYISTLASVYHRPPSSFVAGKTPARRAVLP
RRTGSDTNENEEVSSISEETPTPTLSQVAGMPPISSQPATDTLIGDLLMDMGPAPTPPQPSVFDAHR
QQQAPSADLLAGDLSMLNTPVTPQQQPMGMGGGLNDLFSLQGALPGSGYCPPKQVWLAASKG
KGLEIAGTFSRRQGQIFMDLTFTNRAMQQMGGLAIQFNKNSFGVAPAVPVPNTPLPPNQSAEVSL
LLNIAGPVQKMQPINNLQVAVKNNIDVFYFSCLIPPHVLFVEAGKMDRKQFLDVWKEIPQVNEV
QNTITTKGFNSDGIQNVLEANNMFTIAKRTVEGQDMLYLSLRFSNGIDVLCELKIIPGNPVVQLSL
KTKAMDVIPMVQEVIQLILQS*

>TRINITY_DN2805_c0_g1_i1.p1   type:complete   len:189   gc:universal
TRINITY_DN2805_c0_g1_i1:623-57(-)

MGFEKVVIIDGKGHLMGRLASVIAKSLLQGQRIVVVRCEGINISGNFYRNKLKVLDYLRKRMNTK
PSRGPYHFRAPSKCLFKVVRGMIPRKTKRGMEALNRLKVFDGIPPPYDRMKRMVVPSALRVLKLK
PGRKYCSIGRLSHETGWKYKALIESLEEKRKAKAELYYKARKQTEAVRQKAIQQVAAS*

>TRINITY_DN5793_c0_g1_i1.p1   type:complete   len:213   gc:universal
TRINITY_DN5793_c0_g1_i1:170-808(+)

MSYAYLFKYIIIGDTGVGKSCLLLQFTDKRFQPVHDLTIGVEFGARMITIDGKQIKLQIWDTAGQES
FRSITRSYYRGAAGALLVYDITRRDTFNHLTTWLEDARQHSSSNMVIMLIGNKSDLEARREVRKEE
GEAFAREHGLIFMETSAKTAANVEEAFIGTAKEIYQKIQEGVFDINNEANGIKLGPQHSASSPSPM
GGGGGNQQGGGCC*

>TRINITY_DN326_c0_g1_i1.p1 type:complete len:177 gc:universal TRINITY_DN326_c0_g1_i1:729-
199(-)

MTSNVRQNYHAETEAAINKQINMELYASYVYLNMAYHFDRSDLALEGYHNYFKNQSDEEREHA
QKLMKYQNVRGGTILLKDVAAPPDMSVNSNDHIASLEAALELERKVNDSLLKLHALGDSHNDA
HLCDFLESEFLDEQVQSINEIAKLITNAKRCGDGLGVFQFDKLTMQEMKE*

>TRINITY_DN1614_c0_g1_i1.p1 type:complete len:218 gc:universal TRINITY_DN1614_c0_g1_i1:56-
709(+)

MHKTKICIWLVVRYRSNPFRGYNRRPDLKSAGAKMTKYSTEPENPSKSCKARGSYLRVHFKNTHE
TAQAIKKMHIRKAYRYLKDVVDMKQIIPFRRFNGGVGRKAQAKAHGCSQGRWPKKSAQFLLQL
LKNAESNADLKGLDVDSLVIDHIQVNRAPYMRRRTYRAHGRINPYMSSPCHIEMILAEKEQVVPR
AEEEVEVKKVSKKKLAREKLKSRE*

>TRINITY_DN74124_c0_g1_i1.p1   type:complete   len:183   gc:universal
TRINITY_DN74124_c0_g1_i1:100-648(+)

MLLYTFACLIVSTLALELETTAKLLASKTVENNVLVENIDITIKYTIFNVGTSSASNVKLVDATFPTT
DFETVRGQLSVEWQNIPVNGNVTHIVVVKPLKTGYFNFTSAYLSYVPRDGEIQNAYTSFPGEGGIM
SELDYARKHSPHLLEWSVFALMCMPSLIIPFALWYRSHSKYTMKTKKN*

>TRINITY_DN147947_c0_g1_i1.p1   type:internal   len:168   gc:universal
TRINITY_DN147947_c0_g1_i1:501-1(-)

VGKSALTIQFIQSHFVPDYDPTIEDSYRKQCVIDDRVAHLDILDTAGQEEFSAMREQYMRTGEGFL
LVFSVTDRSSFDEIHKFHTQILRVKDKDEFPMILVGNKSDLENERTVSTAEAQELGRKLSVPYLESS
AKQRINVDAAFHDLVRAIRRSNNVEALPIKNKKK

>TRINITY_DN73067_c0_g1_i1.p1   type:complete   len:831   gc:universal
TRINITY_DN73067_c0_g1_i1:3714-1222(-)

MHWFVILLLFGVIFVTVSNYEIDVLSTFELSEDIAGISPLDNKYQAYQFAADGKELLLDDSIKTEIVR
GVTNFKDFFIAVNIRHDKQKPSSLLSLQTKTTGKQKFTLWINAEEEKIGIRSHSKESKKGKKNLTFR
KVPLNTGQWHRIVLNFKKIDTDEPVVDLYVDCKFHDSKTFPFSIGHALIEDALISELRLGQLKHLP
EKDPIRFIGAMQDFRLVSNRDVHWYNRPQHCYNMMIEVKGMKAYHEPVSTISHDVDNMAAAM
KNMQKQLKLQLDEIRDIKNWLQQCTACKTAAENVLGGEIPKACSQNRCNENANCIESNGGSAF
RCECKAGYAGNGEKCGLDSDSDGVPDNKLDCLGKECSQDNCPGFPNAGQEDADEDGSGDACD
IDDDNDGVLDGDDNCQFLSNRDQKDSDADNRGDACDNCPFESNYNQLDSNNDGLGDACTRD
ADGDGIRDKSDNCPRVYNRDQIDRDSDGIGDACDNCIDIYNPIQKDVDNDNLGDACDSNVDID
NDGIQDNKDNCLYIANANQQDIDNDGIGDACDPDDDNDNIIDENDNCRLIYNPDQSDSDGDG
QGDACEDDADKDETVDLKDACPENPEIQNTNFTNYKHIMLDPEGTSQVDPEWEILNKGAEIKQ
WRNSDPGIAIGDKVFGGVDYSGTFYVHDDKDDDFAGFVFSFQSNSKFYALMWKKDKQTYWFET
PYKVTGHAGIQLKVVTSSTGPGEHMRNALWSSISIPGQTKIIWSDPSKEGWKPKTSYRWTLMHRP
SEGLVRITIKEGSQVRADTGYLIDKTYKGGKLGVLVFSQKEIVFSALQYRCTEQIPADYNPNSPN*

>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)

MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK

ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN164351_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN164351_c0_g1_i1:694-59(-)
MEDWGEPGEQEAVGPTSIEVQDIKLFGKWNPDEVQVSDISLTDYIAVKEKHAVYLPHTAARYAVK
RFRKAQCPIVERLTNSLMMHGRNNGKKLMTVRIVRHAFEIIHLLTGGENPLQVLCDAIINSGPRE
DSTRIGRAGTVRRQAVDVAPLRRVNQAIWLLCTGAREASFRNIKSIAECLADELINASKGSSNSYAI
KKKDELERVAKSNR*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN168534_c0_g1_i1.p1   type:complete   len:226   gc:universal
TRINITY_DN168534_c0_g1_i1:774-97(-)

MIRSAIIAIVIASHLYESSAARCYVGYSAVGLPLAIGVRDVDCQKGMDFCTTVKSTIGGITVTQGNC
ARKYGQATCQFMQNSHKAMTDCKETLCRGDYCNSALIEAEQKERKRVGPYKNTLKCTTELKTR
FPLIPFATADIPIGIDECFPGTTRCVTVEYDYIYKFKTKIATRHNHFVLPVIQKMCNRPNIDDCNKW
CTIMSIHQFMHSSCRAKCCTGDNCNAKD*
>TRINITY_DN345_c0_g1_i1.p1 type:complete len:150 gc:universal TRINITY_DN345_c0_g1_i1:760-
311(-)
MADQLTEEQIAEFKEAFSLFDKDGDGTITTKELGTVMRSLGQNPTEAELQDMINEVDADGNGTI
DFPEFLTMMARKMKDTDTEEEIKEAFRVFDKDGNGFISAAELRHVMTNLGEKLTDEEVDEMIRE
ADIDGDGQVNYEEFVKMMMAK*
>TRINITY_DN5633_c0_g1_i1.p1   type:complete   len:848   gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)
MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-
289(-)
MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSMRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*
>TRINITY_DN374_c0_g1_i1.p1   type:5prime_partial   len:290   gc:universal
TRINITY_DN374_c0_g1_i1:1-870(+)
FHSGVNIDWNNFKKYLKDALCRCEKAAAAKGKKYFSFRYFGICHGLDSLPKESSEYCFHHTFEQ
CMNNHNECVGADEAEYIYKVGVQIPTNTKPALKVQRKVFCEHRGSKTVTCGAGETIKVTKAYYG
RTSSSHCGYRGFYNLNCKGSTSYSKIKSACDGKQTCRLNPHNNVFGDPCKYTVKYIDIEYVCKPP
VKKAIFCEHRGTKSITCNEGEKIEVVHGYYGRQSSAHCGFRNFYNTRCKASSSVGKIKNKCDGHR
SCNLLPANSVYGDPCVRTVKYIEVDYRCIKN*
>TRINITY_DN2904_c0_g1_i1.p1   type:complete   len:221   gc:universal
TRINITY_DN2904_c0_g1_i1:1339-677(-)
MSLAKIFGSGKKKEESPNAQDAIQKLRQTEEMLTKKSDFLEKKIQQELVIAKQNSSKNKRIAINAL
KKKKRYEKQLNQIDGTLSTIELQRETLEGASTNTEVLKTMGYAAKALKNAHQQLDVDDVHDM
MDEISEQTEISKEITDAISTSFGVADDIDEDELNAELEELEQEGLDEQMLNIESTSLPSVPETELPTPS
RAQPSAQKVQPDDDMAELEAWAS*
>TRINITY_DN40728_c1_g1_i1.p2   type:5prime_partial   len:124   gc:universal
TRINITY_DN40728_c1_g1_i1:1-372(+)
KTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGVIEPSLAVFARKYNCDKMICRKCYARLPARAVNCRKKKCGHTNMLRPKKKLK*
>TRINITY_DN1819_c0_g1_i5.p1 type:complete len:432 gc:universal TRINITY_DN1819_c0_g1_i5:79-
1374(+)

MILQLLLILSIWNVAEGLDNGLALTPPMGWLQWERFRCITDCKKYPKQCISDSLFKRTADRLVSDG
YRDVGYEYVNIDDCWAELQRTKKGEMVANHERFSQGIKALADYIHSQDLKMGIYTDFGTKTCG
GYPGSIFYMKEDTMSFADWGIDMIKVDGCYVCGDLYADGYKAFGFHMNQTARPMLYSCSWPAY
LNDKGKPYKEIAEHCNIWRNWADIQDSWDSVLSIINYNGEHQDEIVPYVGPGNFNDIDMLLIGD
FGLSQEQCKTQFALWAILAAPLFISADLDTMQDWQKEILLNKEIIDVNQDVLGKMGKRYYNENN
QQTWMRPLSNGEMAVAMMSTRTDIPVQMGFTLQQLSLNGIYNVRDLYTHEDKGNITQGYEAEV
NPTGVVMLKLTPVKSEEVEPAVIHSGYENAEVNEIKEKIEEMYEYIIY*

>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)

MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*

>TRINITY_DN1339_c0_g2_i3.p1 type:internal len:185 gc:universal TRINITY_DN1339_c0_g2_i3:553-2(-)
NSRLAMVAILGMFFQDGLTGSAWGDWANYVDSPLRAFENELGVQEPVGFWDPAGFTADGNVE
NFARRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVPNGLAAISKVPAAGWAQI
VAYCAFCELSQDQSAGSPAAAGDFGWKLLTSSDQAELTKKLSAEVANGRLAMMAIIG
>TRINITY_DN1676_c0_g1_i12.p1 type:complete len:1631 gc:universal
TRINITY_DN1676_c0_g1_i12:206-5098(+)
MLIITRTAKLLLLSLTYIYLTIAQDLTNATLNNGFEAGRAIKCKTDDGMVQRCMPVFENIAFGRDII
ASNTCGQTRQTYCVQTGTSGAVKICEVCDASDPDKAHPADLMTDLQFDDQPSWWQSETILDNK
SPVYLTLNLNKKYNVAFIRLRFHSVRPHSFAIYKKSTYDSNEQWLPYQFYSRTCQETYNVPNQQSV
SYSNQKLALCTDEASGMIPLSGGNVAFLTLQYRPGKRDFDNNPGLQDWVTVTALRFELDRVNTF
GDEVFGDPKVLRSYYFAISDITVGGRCKCNGHGSSCNNNNNEGTFQCVCEHNTAGKDCEKCLPI
YNDRPWRKASGRSANPCKACDCNGLADQCEFDQQLWVDSRYRSGGRCVNCKNNTDGINCEYC
KEHHFRSNVKEACKPCRCNPLGSRSLSCTTKGECACHPGVTGLKCDKCKEGYYGFSSSGCKACN
CDRDGSIGVNCDFTGQCNCKKKTVGKRCDQCAPLTFDLDRSNPKGCKECFCFGHGVSCDAIEGI
GVKEIFTTFEADFDGWKLQDESGASFDSNMEWDFRGQYISVKPPRNKQLYLVAPQRYLGNKLSSY
GKLFTFAYGIFLDPNDPLVSAGRDIIFEGNGLQAVYPINSQNNILPEARFYQFKYRLMEPVGMSTFD
FQKILVNLTAVKIRTAYMNERTGAIDNIKLYSTKFISINSPEQVTWQEICECEEGYTGDHCEKCDSGY
TRSGGDTSPFGECKKCFCNNHGNFCNPDTGICQCLHNTTGDSCDQCAPGFYGNPTAGTPEDCK
PCPCLYGNECILIGNSVKCTDCPEGHIGDLCELCDDGYFGDPNGTIGEPSRCQKCDCNGNIDPNAI
ANCDSLTGSCLKCINNTKNGPENKCELCADGFYGNSTIDPKGNCSACSCYEKGTMKPPFHDPKL
QLPCDTNGKCECLQNVIGDKCDMCPPGHWNVASGKGCELCNCNATGSKGSDCNLQTGQCEC
QDGVGGRKCDQCAPRFYGFSKDGCIACNCHPDGSKHQNCTQDGVCECLPGVLGIKCDQCPEN
KYNLSVGCIACPRCFDLIQVAVNKLRNKLKTFNITGNLTTGSIDIKDPEFEKLFNELKRNISELEQK
MKDLLEGDMAILEFYEVLVNQSSTLIEMIPGIQKMIKKSEGAAETGSVTISKAEEITEEIQNLLGQAE
KMLEAETGRIFKNVTSSSEDVSGLSKRMSEIAEEARKHADRQEQESKDIEFNTDMAYNNSKAAYE
QAKKARDTEEAISYLLDQMALGHDEALALSKNSTEIIAKANSTSIAALNDSDHLMMKAKEPLPN
LDIEAMKEKAKNIDAEGKATEFNATDLHEKNKDKITQLQNDDKEARELMERGTQLHNDSNALY
KIAKNASDEAKQAQEDGLKVAKDAQDMLKTLMEFENNIAKSKANATEALKLIGLIRRLISKANK
TTENASSNAIMASINATAALRLASAANKTTQDAMNEIESSRREVEKLLNETMDFMMKEVAQTKD
DIDDIEKSLEESEKLAKSNSMKLGDALNDSQAATDKASMVQNELLKSLDQIEDLMNEISNLDEIDF
ETLEDAEKRFEEAKDTIENKLKNEIEIMESKLSDQKKLLQQHELDLTPLKEQIMKNEELFKYLPKSC
FREKAKPEDIDK*
>TRINITY_DN8903_c0_g1_i1.p1 type:5prime_partial len:447 gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN2472_c0_g1_i1.p1 type:complete len:344 gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)
MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*
>TRINITY_DN123121_c0_g1_i1.p1 type:internal len:127 gc:universal
TRINITY_DN123121_c0_g1_i1:3-380(+)

LNQKLCAQQVIHLEITDANDNFPVFSQSRLSLNVSEYTEVGQVIATVRANDLDERSQGNLLFSILK
DEDFFGILSNGDNGVIFLKQSLDAERRLTHQIEVTVSDREGKSSLQNMEIIVFVEDENDN

>TRINITY_DN17095_c0_g1_i1.p1 type:internal len:607 gc:universal
TRINITY_DN17095_c0_g1_i1:1820-3(-)
CVEHAHCKRNEFHCIGTMNCILKSSLCNSVKDCQDGSDEGPKCTFSSCNDTCSYKCQKQPSGVG
ACICEPGKILADDGHSCIDENECDQVPSPCSQHCNNTEGSFMCSCTYGYILQDDKRGCKLNVSKE
EELLFVDVKEIKRYYMRSKLLQPVFTNLSRGVAFDFDSASGKLFYTDVTQNVIYSSYLDDFAKVVH
GEKRILDRGLAIPDGIAVDWICKVIYFAESAANRIDVIEFNGKNRASLISANLTTPRGLALDPRVGY
LFITDWGGKPKILRSQMDGSNLKVLITEKVGWPNGITIDYYDKTVYWVDARYDYIDAIDYNGNN
RRNIVKGKDLIPHPFSLSILDDDIYVTDWVLNGVLKISKLPGTKKVEQLVYNLSRPMDIHVISEKRQ
PYTDNPCDTRKKGNRCDQLCVIKSATESSCLCQARYILGSDGRTCEPANEFLLFARSWEVRGISLN
ASYLNDVMTPVLGLNSAVGTDFDALSEYVYFSDVKTDKIGRTFIGNDKGGKIEWIVEGNLDNPDG
LAVDWVGRNLYWTDSRISRQSEIGVSKLDGKFRKSLIQEPLGKPRGIVVYPEKGYLFYTDWMRPAK
LGRIDMDGSHLMILVN

>TRINITY_DN468_c1_g1_i1.p1 type:complete len:191 gc:universal TRINITY_DN468_c1_g1_i1:676-
104(-)
MKTFYTILLLAIVQTNAFFFPKVDTVKDLDLASYTGRWYEVYSSLIQRATFQRNSYCTTADYSLKPS
GAIKVINSGRLKSATGEENTIEGEAKVVDAKEPGALNVKFSTGPQSDKANYLVVKLGPVVDGKYD
YTVITTDYKALVWVLARNPETFKQKYEKDVLAYLKKNGYNWFINKPRPTYQGKDCIYI*

>TRINITY_DN10724_c0_g1_i1.p2 type:3prime_partial len:148 gc:universal
TRINITY_DN10724_c0_g1_i1:442-2(-)
MLAFVGMVVQQWWQIPGLPQQPDWVKALDECYASPVAVWGIVQISVFAAVMEGHFFPEYAWE
GIMKREPGDFGFDPLKFSKRPGFDLKKKQLIELKNGRLAMIGVASMASNHVLPGSVPFLTGAYAV
RPEARAPGAPAGFCGSTGPR

>TRINITY_DN186979_c0_g1_i1.p1 type:internal len:357 gc:universal
TRINITY_DN186979_c0_g1_i1:1-1068(+)
LGSGVTTVLIDIIDVNDFTPILSVSSSNVNIKENGLIGTIIAVFNVRDDDTFTKNNNEITYNLRTGATS
FNILKVSETTAYVVLSRQLDAEQSVSTNLELFAVDSNGGKSNSQIVTLNIEDVNDFNPQFVLTNYIF
DVQETNNIPINVGLVKAMDNDATSVNNQIIYSLLGSIDTQVLINETSGLITLNQAIDYESEKEVVFT
VVATDNSFPPISRRQASANVLIRIQNADDNKPVFKSATTIVVSESTSIGTTVYIASAVDADESDVTTF
SESTQGPFRVERDGKVILQSLLDYETKEFYTLSILALSNGQPGTVLNVQVDVQNENDERPRFINTPY
QVTIAENNALSNIINVSA

>TRINITY_DN1797_c0_g1_i2.p1 type:3prime_partial len:998 gc:universal
TRINITY_DN1797_c0_g1_i2:2993-3(-)
MSKIKLNIVYILLLVLWISIVHSQSQDDRCPAIDNEQECPPPDSLNNECLENSDCAGNQICCGDGC
ELKCVVAADELCKVPIDLGFILDSSGSIGSKFDNVKIFVEKIIDAFVIGEDFTHIGIVEYSENASVVLA
FNTYQGAELTKANILTELRKMSLIGGHTRIDLALEVASRDLFSAKGGVRPGKPKIALVLTDGKQTR
GKLAPDAKDLHIASQPLKDSEIHVYSLGIGDDYDIGELLDIASDDTSVFRSQDFDELLNIVSQITEET
CKGCTRAIDIHFALDTSINVGRENFEYMKNFVEAIGYRFVISETSSHMSASIFGEEPMLMFLMNEAT
EQNMFLEEVKQLQYIESANGNMDRLLRMVYDDIFTLEGFTRQSVPKVLVMLTASNCDSCDERVEE
AVKPLKEQGVHVVTIPIGNNVNMDEINAMASYPSSEYVVPRQTYVGLMNDFFIQKVSDMICSGRP
GVCAEPPVEGSCDTIIQECTTDVKCEGNRKCCIKNCKASCELPVSACITPVDLAFAFETTRNGEAD
FENAQKFAANLLDHFKIDRSTTHVSVSTFSETIGTSTFFNEEYDKSNIQQFIKDLGSDSGDQSNLGD
FLEFASRKIFSVQAGLRQSTPRVLVIFTNGIVSAEQSLKAQQEAQKLKAEGLDVSILVVNIGGNIGSV
DLFESIISNGRIFSYVESSELSKFEAETDLAEAICATKVRVRRCPPKRTPDTCNVKDDLCSSDFDCPG
YQDCVSDGCRLRCQTCEYRCEDKLDLLFMIDSSYRIGAEGFQKAKENVNKMLEWFTIAPDNTHV
GVITYSDTANIAMSLPPLGTNNPPQSLPDVQGRINAIPYNGGSKSYLDEALKLAAAQVFVENSDRF
RKGSKKAVVIITDGKDDSTSRLDLASWPLRKQRVVVGKEDYSAIHILAVAIGDELNTNALENVVTP
TLEENFFFAANYKDMYNEIRKLAKSSCEYAGAFTAPPDIYMKGEPGPPGPPGPKGDPGPDGPDGT
R

>TRINITY_DN79126_c0_g1_i1.p1 type:complete len:115 gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)

MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS*
>TRINITY_DN691_c0_g1_i2.p1 type:complete len:1673 gc:universal
TRINITY_DN691_c0_g1_i2:5503-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEP
GLDGDVGEKGEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVR
GETGEEGPKGDRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPG
AQGEKGDQGQKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGP
DGPKGNEGEKGDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVK
HSQTTIVPSCPAGMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVAS
RNDYSFWLSTDEPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAG
YSFLMYNSAGADGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPK
SETLKAGNLKTRVSRCSVCMKTVRNGNFP*
>TRINITY_DN6044_c0_g2_i1.p1 type:5prime_partial len:661 gc:universal
TRINITY_DN6044_c0_g2_i1:2126-144(-)
YMTPSNSPNDKQYGKVEGSGPSVTFVFQNVLPGKYKVFPVRKNWCWSPLNKEIAVEESNIGDIEL
THSGYHLKCKISHNITLNFTLEGRNEVVGSFELKQGSNQFCVKAAGTYSLTPKSCYQFEKLTYTYK
TSDPKSLTLSVAFYKVIIQIISSKKVSDLQVKVRTSTSEDILTPTYVESKDQNYGFLYEIVHWAKLAQQ
LIVTPISKEVLFLPKSSSVTVRENCPGGQVQFNGKEGIFVEGEIVPPFSNVFVIIKTESNEYEEGKVME
VMTDENGKYRVGPLHGGTVYSVDAYKEGYFITPFDKKKGSFVAQKLGHITVKVVDENNEPMSSV
LLSLSGGQYRNNNLTQMNGAFTFSNLGPGQYFLRPMKKEYNFEPSSKMIDVSEGEDVIFHIKGTR
VAFSVSGFVSTLSGIPEKSIAIEAVGMHKCSEYQESTITDNNGNYRLRGLMPGCAYNIRMMRSKEN
EQVERLAPANHVFQIQKEDISNVNFIVFMKPTKFHLSVQVETEYDYLPNLKVVLYAEDNPDSPIHT
LTMGAIKYIKFPPLPPKTYVVKLHSNLSPSTHETKSTSATIEASQDLSKKHVKLKFDVKKRRVDMEP
TQSVIALPFAVALVFLAYNYDAVLVFLLRAKAFMQSLNQQEEDENESNQENEGLSLNKKKKKL*
>TRINITY_DN10563_c0_g1_i1.p1 type:internal len:307 gc:universal TRINITY_DN10563_c0_g1_i1:1-
918(+)
GMFFQDGLTGSAWGDWGLYVDSPLRAFESELGVQAPVGFWDPIGFTKDGSAENFSRRRQTELKH
GRISMLATMGYITPELTGKWSGYISPSMGLRFEDIPNGLGALSKVPALGWAQIIGYMAFCEISQDQS
AGSKGAAGDFGFKVLTASDPEALKRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWGLYVD
SPLRAFESELGVQAPVGFWDPIGFTKDGSAENFSRRRQTELKHGRISMLATMGYITPELTGKWSGY
ISPSMGLRFEDIPNGLGALSKVPALGWAQIIGYMAFCEISQDQPAG

>TRINITY_DN95387_c0_g1_i1.p1   type:complete   len:169   gc:universal
TRINITY_DN95387_c0_g1_i1:96-602(+)

MAATLKPYLNAVRATLEAAMCMENFSSQVVERHVKPEVEVQSSKELLLTPVCIARNEKEKVLIEG
SVNSVRVSIGVKQADEIEKILCHKFMRFMMLRAENFFVLRRKPIKGYDISFLITNIHTEQMYKKKLV
DFVIQFMEEIDKEISEMKLSLNARARISAEEFLKNF*

>TRINITY_DN194146_c0_g1_i1.p1   type:complete   len:190   gc:universal
TRINITY_DN194146_c0_g1_i1:165-734(+)

MKTVLASQTVTIPEDVSVSVNGRTIVVKGPRGTLKRNFNHLNLVLTRVNKTTIRVDVWFALRKHL
ACLRTICSHIENMMKGVRFGFLYKMRSVYAHFPINIIVNDGGKVVEVRNYLGENYVRVVKMREG
VICKPSGNKDEIIVEGNDIELVSNSAALINQCVKAKNKDIRKFLDGIYVSEKTTIVPMTE*

>TRINITY_DN6397_c0_g2_i3.p1 type:internal len:130 gc:universal TRINITY_DN6397_c0_g2_i3:387-
1(-)

LTSSDQAELTKKLSAEVANGRLAMMAIIGMFFQDGLTGSAWGDWSLYTASPLRAFENELGVQDP
VGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVP
N

>TRINITY_DN16548_c0_g1_i4.p1 type:internal len:171 gc:universal TRINITY_DN16548_c0_g1_i4:2-
511(+)

LYTDSPLRAFEGELGVQAPVGFWDPLGLAADGDSVAFRRRRVTEIKHGRISMLACMGYITPELVG
KFPGSLSPSQGIEFADVPNGLAAISKIPSYGWFQIIAYCLYCEASALNFGYFNEAFDQKAPGDYGW
RPPLLATDDAALKTKRLNAELANGRLAMVAIIGMFFQDG

>TRINITY_DN571_c0_g1_i2.p1 type:complete len:186 gc:universal TRINITY_DN571_c0_g1_i2:192-
749(+)

MREYKLVVLGSGGVGKSALTVQFVQGIFVEKYDPTIEDSYRKQVEVGSQQAMLEILDTAGTEQFT
AMRDLYMKNGQGFVLVYSITAQSTFNDLMDLRDQILRVKDTEDVPMVLVGNKCDLEDERVVGK
DQGQSLAKQFGNCTFLETSAKMKINVNEIFHDLVRQINQRQPENTKSERKKKGCTIL*

>TRINITY_DN902_c1_g1_i1.p1   type:3prime_partial   len:153   gc:universal
TRINITY_DN902_c1_g1_i1:146-601(+)

MIRIAIIAIAIAACVYESQAVRCHVGYSAADLPLAMSVRDVECGQGFDHCVTLKYVLDGMKITQG
NCATKFGQATCQFMRNSHAAMTDCSEAICSGDHCNSAVKEAEKIEMKRVGAYENTLKCTTGLQ
SDFPNIPFASPNVPYAVDECFPGT

>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-
372(+)

MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*

>TRINITY_DN141214_c0_g1_i1.p1   type:internal   len:179   gc:universal
TRINITY_DN141214_c0_g1_i1:2-535(+)

KFIQSLYNVTIPDTVQENYKIVTVSANDADSASNSNNVIRYEINSSSDTFVVNVVTGSVTLKPNINL
KGTNIKEYRIEIKAFNPDLPNSFDLAVVEIYVTKTQASLTATAIVSSYTTLTLPENQPAGAITNPITGR
NSFVIIYDSNTNPSGVIFSVDQTGRVFLNKPLDFERENQIRF

>TRINITY_DN6132_c0_g1_i1.p1 type:complete len:161 gc:universal TRINITY_DN6132_c0_g1_i1:95-
577(+)

MTNPHGKRRGTRYLFSKQFRKRGVEHLSTYLKTYRVGDIVDVKGNGAIQKGMPYKYYHGKTGR
VFNVTRRAVGVVVNKKLGNRIIPKKINVRVEHIKHSKCRDDFLRRVKENEIKKKEGKAKGIKVDC
RRQPVQPRGAHFVSSKNNAPSLVQPIPYEFII*

>TRINITY_DN2487_c1_g1_i3.p1 type:internal len:317 gc:universal TRINITY_DN2487_c1_g1_i3:1-
948(+)

EINNGRLAMVAIIGMWFQNGLTGSAWGDWALYTDSPLRAAAPDFSKEIGACPPLGFWDPLGFSV
YKDPELAAAQFRRRRLVELQHGRVSMIACIGYIVPEYFRWPGFISPSEKLAFEDIPNGLGAAAKVPI
LGWGQMIGFAGAIEISNLSSPSSKTPGDYAGYGAFGLPFGKGIDDPAKREKSLLAEINNGRLAMVA
IIGMWFQNGLTGSAWGDWALYTDSPLRAAAPDFSKEIGACPPLGFWDPLGFSVYKDPELAAAQF
RRRRLVELQHGRVSMIACIGYIVPEYFRWPGFISPSEGLAFEDIPNGLGAAAKVP

362

>TRINITY_DN923_c0_g1_i1.p1 type:complete len:442 gc:universal TRINITY_DN923_c0_g1_i1:53-1378(+)

MAEKYDLTYKVGAYLDRHMVFPLLEFLSSKEIYDDTELLRGRLELLQGTNMLDFVKDEYQRLHQT
DEVPDELANKRQEVIRQMRELEAATESITAAFEDPDFQKEASSARDGAQLFKYLNETFGIRSENLD
TLYQYAKFQYECGNYNGASQYLYFYRVLVHDDDKNASAAIWGKLACEILTQNWDPALEEINRLK
EVIDGDHFSHPLQLLQQRTWLIHWSLFVFFNHAKGRDLLIDMFLYSPNYLNAIQTSCPHVLRYLTT
AVITNKRRKQILKDLVRVIQQESYTYRDPITEFLECLYVNFDFDGAQKKLLECETVLLNDFFLVACL
EDFIENARLFIFETFCRIHQCISIQMLAEKLNMTPEEAERWIVNLIRNARLDAKIDSKQGHVVMGT
QAAAVHQQVIERTRSIMFKTQAITTNIDKKLASLQKQPYTEPFGLAW*

>TRINITY_DN6294_c0_g3_i2.p1 type:complete len:134 gc:universal TRINITY_DN6294_c0_g3_i2:817-416(-)

MGYKRFVEAGRVALINKGKYDGKLVVIADIVDQKRLLCENPVKSVPRHVVRTQDVNLTDLKVNI
PCGARGGKIRKEYEKEEVDSKWEKTVWAQKIKARHVKRTLSDFDRFKSKIQKQRRNRKVKAVLK
SMKKN*

>TRINITY_DN20278_c0_g1_i1.p2 type:internal len:154 gc:universal TRINITY_DN20278_c0_g1_i1:460-2(-)

ISMLATMGYITPEVTGKFPGYLSPSMDLKFADIPTGLAAVSKVPALGWVQMVAYAAYCELSGPRTR
AANVEDYADITPGDYGFKVLTSSDPDELTKKLNAEIANSRLAMVAILGMFFQDGLTGQAWGDWS
LYTDSPLRAFETELGVQAPLGYW

>TRINITY_DN902_c1_g2_i3.p1 type:internal len:178 gc:universal TRINITY_DN902_c1_g2_i3:2-532(+)

AVFKCIKLNYIDHIIKMIKIAIIAIVITALVHESTAVRCNVGYSTADLPMAMSVRQVECGKGLTHCN
TLSYKLDGMSVTQGNCATSGGQASCLFMKNSLQSMTECSEAICNGDHCNKAVKDAENAERARV
GPYKNTLKCTTGLQTDFPDIPFASPNVPVGVDECFPGTKECVTMTYD

>TRINITY_DN5188_c0_g1_i8.p1 type:complete len:520 gc:universal TRINITY_DN5188_c0_g1_i8:154-1713(+)

MELSNIVIVSTILFLELVLAVPDQPPFTAQIVESLVKKEIAKKMPAAVSSDHKKKSMAGVHLKEATD
AINKLVDESIVDRVQEAEKEVSQMLLRSIERHIQDAGKVLLKQDENTCKDKIDSCDRLKEAGVCES
SKDAMVTNCPATCGFCGMLDNMKAAKAEGKKEEKEENETKPMQEQPQKLRADDKKEEELAEK
IEQEMEHVNNAPIVNKDKKPKKEKLNRNHLKKHLTPKLKTSIPEEVRLLHQNMIDETFDHANLP
LAVKTEPVEFEIEGSKAHILPKNDRQEEEESDNEQNEEVENEEKTKKQRQLEEEEKYKADKLKKQ
KEEKLKQEKLRQEQLKEERKKEEKLKIEKLRRAKKIKEERERIVKEAREKEAKERKKVEEKRLKEA
EDKRKAELAKKKKLAKKVKEQQSIMQTLSGNDTGSSGNGETETETIEQTNLQQQTNDQIQQVQL
TPSTEYAYGEPVVRYIQYSQPYEKPTKGVNQDATKRNTDKKVNTNRKLKDEIEVMVDKAFGELLL
*

>TRINITY_DN250_c0_g1_i6.p1 type:complete len:452 gc:universal TRINITY_DN250_c0_g1_i6:131-1486(+)

MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQALDRIRKLADQ
CTGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFSIYPAPQVSTAVVEPYNAVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYP
RIHFPLATYSPVISAEKAYHEQLTVSEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDV
NAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAVAEAWARLD
HKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVDAEDEEEGDEY*

>TRINITY_DN1566_c0_g1_i1.p1 type:complete len:4626 gc:universal TRINITY_DN1566_c0_g1_i1:42-13919(+)

MDTEEVPGEPPPTVLAATEDVINYVKNITCFIFDESQPCLPLDKILKEEQTKDYFRKFISDVQTKTIL
LYRINQLTDDVDGDHDQGVSQPSYGIKLNVQYVPHKESSIAFIKRGMLLESDKKINAQLHVLILD
NSSPFDTLHSYISNAVSPFFKSYVKTSGKSEREGDKMVPSVEKKIAELEMGLLHLQQNIDIPEISLQI
HPVVQSIIQKAEIERRKISPDDYAEKAEDSSFLNALQNGVNRWIREIQKVTKLERDPSSGNALQEIS
FWLNLEKALHRIEEKQQSPEVKLTLDILKYAKRFHAIVSFTNDTGLKQGLQTVASYNPLMKDFPLE
QLLSATELERIKDALIAIFSHLRKIKLSQYPIQRCLRLIEAISKDLMSQMLKVLGTRKFMLMNYELFE
KVMTSAFNVLNCWDDEYERLQQILRDMAKKKKDDSLKTMWRVNPSHKKLQSRLNNLRTFRKQ

HEQLRAVILRVLRPSKVEAKSSNEENAASSGSIEISDDNAVKEVDLAYENFKEIDPLDVSKEGTEAW
ETALKRYGERIDRVETRITSTLRDQLGTAKNANEMFRIFSRFNALFVRPRIRGAIREYQKHLIGLVKE
DIEALHDKFKVQYSHSKASKMSRVRDLPPVSGSIIWAKEIERQLHAYLRRVEDVLGKDWENHIEG
QGLKADGDSFRQKLNTQEIFDDWSQQVQKKPLLVVGRIFSIETLKTKGSNKATRKLKVNFTKEVIT
LAKEVRNLKNLSFRVPLAIVRQANDANQYYPLAISLIESVRTYEVTNDKVFEKESIIPLVAGIRKDIQ
SLLAEGMHLEWQSYKLMPYVMRLAEAVTGYQEKVDELLTSIQKIDIEVQSLATCGFKHEAFQEILI
RIQKLVDELNLHSYSNLNSWVKTLDEQVEAKLAHRLQAGIKEWTRVLRTGNENVDDKDLAIHSP
GGLPDIKPLRVEFFIRNQVIEMHPPFEKCIEHLYNELAVYCSTITSLTKIQSQRYQVGLDRDNAEETY
HNLLTKLPDPNGPNPITVYGEMESMLEDCRKYCEGWTGFQALWDAEMSNLAPRMKTLEDWMT
ILNQIKMSRSHFDTTETMKEYGPLIVDFNAIQGKVNLKYDSLQKAIVQNFGGKLGDEVNDFFTNV
TKARTDLEQQSLDVATTAEAVTFITYVQGLKRKMKTWEQNVEVFREGQKVLERQRYQFPSNWLY
SDNVDGEWSAFNDILKRKDGAIQTQVAILQQKIVAEDQAVEERTFNLLADWDKGKPVSGNTKPD
SAIQTLQIFEGRLTRLKEDRDNLQKAKEALELIEPGTVPPSDERVQVAIEELSDFKSVWGELEKIWA
QVDDLKEQPWVSIQPRKLRQSLDSIANGMKILPAHMRQYAAFDYVQKIIKGYLKANMLVVELKS
EALKERHWKQLMRKLSVKWNLSDLTLGQIWDCNLQKNEVVIRDVINIAQGEMALEEFLKQVRE
SWQAYELELINYQNRCKLIRGWDELFDKVREHINSVSAMKLSPYYKVFEEDSKQWEDKLNRILNL
FDVWIDVQRRWVYLDGIFSGSGDIQHLLPIETQRFGSISTEFLTLMRKVAKAPLVLDVLNIQGVQRS
LERLADLLGKIQKALGEYLERERASFPRFYFVGDEDLLEIIGNSKNVGRLQKHFKKMFAGVHTIIL
NEDSTLVTGICSKEGEEVIFNKAVSLIEFPKINEWLTLVEEQMRLTLATLLTLSAKEIKSFTGDSIDPK
LYMEWVDKYQSQLVVLSAQIVWSENCEAALQTCYNGDMSSLEKVLSIVEATLTVLADSVLQEQP
QVRRIKLEHLITELVHQRDVTRTLVRSKVQGTKSFAWLSQMRFYFDPKQRDVLQQLSIHMANAKF
NYGFEYLGIQEKLVQTPLTDRCYLTLTQAIERRMGGSPFGPAGTGKTESVKALGNQLGRFVLVFNC
DEKFDFQAMGRIFVGLCQVGAWGCFDEFNRLEERMLSAVSQQIQTIQVALKEGPKEIGKPIQIELI
GKDVKVSEDMAIFITMNPTYAGRSNLPDNLKKLFRSIAMTKPDMNLIAEVMLYSQGFRTAEVLAG
KVVPFFKLCFEQLSAQSHYDFGLRALKSVLVSSGNVKRDKILSIKQKMQAQGVVADVGKITETLN
EQEILIQSVMETMVPKLIAEDIPLLHSLLADVFPGIKYVNAEMTALRNELKKVCNEMHLVYGENL
ESGAHWIEKVLQVYQISCISHGLMVVGPSGSGKSTAWRTLLKALGKLEGNEGVCHVIDPKAISKD
QLYGVMDPNTREWTDGLFTHILRKIVDNVRGELSKRQWIVFDGDVDPEWVENLNSVLDNNKLL
TLPNGERLSIPPNVRIIFEVQDLKYATLATVSRCGMVWFSDDVVSPEMIIENYIKKLRNVLLEESEED
IRSKQSKSVTDSKDELVSPTLQVQRDFSDILTPHLASNGLVLKTLEYSYSKDHIMDFTRMRALNSLF
SLLNQGVRNILQYNQQHHDFPMSQDTIEAYTPKYLVHSLLWCMSGDGKLISRLDISNYIRNITTIPL
PSPVTSLIIDFEVNMQGDWVPWSNKVPQIEIETHKVASPDVVVPTLDTVRHESLLYTWLADHKPL
VLCGPPGSGKTMTLFAALRALPDMEVVGLNFSSATTPELLLKTFDHYCEYRRTPGGLVLSPVQIGK
WLILFCDEINLPDIDAYGTQRVISFLRQLVEHNGFYRPSDLQWVSLERIQFVGACNPPTDPGRKPLS
HRFLRHLPVIYVDYPGPSSLTQIYGTFNRAMLRLVPSLRSFSQPLTDAMVEFYTKSQERFTQEMQP
HYIYSPREMTRWVRGVLEAIRPLDNLSPDGLVRLWAHEALRLFHDRLITDEERRWTNTNIDLVAQ
KHFPNVDLISLKRPILYSNWLSKDYLPVDREELRDFTRARLKVFYEEELDVPLVLFDEVLDHVLRID
RIFRQPQGHLLLIGVSGSGKTTLSRFVAWMNGLSVVQVKVHRKYTGDDFDEDLRIVLRRSGCRNE
KIAFIMDESNFLDSSFLERMNTLLANGEVPGLFEGDEYTTLMTQCKEGSQRAGLMLDSGEELYKW
FTQQVMNNLHVVLTMNPSAEGLKSRAATSPALFNRCVVNWFGDWSTGALYQVGQSFTNKIDLE
RSTYKAPDYLPVVFENLPMPPTHRDVIVNTMVFHQTMHKANEQVTARGGRTVAITPRSYLDFIS
QYMKLFNEKRSDLEEQQLHLNVGLQKIRDTVTQVEELQKSLSMKSQELESKNELANKKLKQMLQ
GQQEAEKKRITSKQIQDDLKKQTEEINKKKSQVLGELDQVEPALLDAKAAVKSIRKENLDELRRL
GNPPTAIKLALESICLLLGTPSVEWKEIRVLVSKTTFIPSIVNFKTDDISIETRKQMMKYLNHSDYNF
EKMNKASVACGPLVKWAIAQVSYAEMLQKVDPLRRELQKNEDEMMSNQSKLDSVGEMISELEK
SIAKYKEEYALLISEAQSIKADLAAVEAKVSRSTALLRSLSSERQRWENTSDGFQNQMDTIAGDVLL
SAAFLSYGGYFDQQMRSRLWGTWSEQMEQSKIKFRSDLARTEYLSTADERLHWQSNSLPADDLC
TENAVMLSRYIRYPLIIDPSGQATEFIMKEYSGKKITKTSFLDDAFRKNLESSLRFGNPLLVQDVESY
DPILNTVLNKEVRKTGGRVLITLGDQDIDLSPAFTIFLSTRDPTVEFPPDVCSRVTFVNFTVTRSSLQ
SQCLNQVLRAERPEVDTKRSDLLKLQGEFHLRLRHLEKELLQALNDSKGSILNDDKVITTLETLKT
EAADIMKKVEETDTVMSEVEAVSEQYRTLAAACSSIFFTLEEANLIMFLYQYSLKFFLEIFQSILFNN
PLLKDKRDPLVRLGILIESLFQVVYNRVARGMVHNDRVSFATLLARIRLKGKSENSYDLEFDHLLK

GKEIVVQVSDVKLTGLSSDQKMALLRLSKLNPFKELSRYIMDNSMGFQEWINSSNATLNVPRCW
NIKDSLTSSGEVLYECLVVQAFRPDNLHAMLRKYVLAVMGEKFLHTAEQELDMVNIVENEIKAET
PLLLCSAPGYDVSGRVDDLVAITNKQITSIAIGSAEGFSEAEKAINASVKSGRWVLLKNVHLATQW
LISLEKKLHTLQPHPNFRLFMTMEINPKVPVNLLRAARIFVYEPPPGLKANLLRTFSTIPASRMSEA
PGERSRLYFLLAWFNAIVQERLRYAPLGWSKIYEFSESDLRVGYDMLDIWIANVSQGRANVSPDKL
PWDAFRKLIGDSIYGGRIDNDFDQRLLQSFIDRLFTAKSFDSDFSLVTSVDGKQSENIVIPDGMRRE
QFVQWCEKLPDYQSPSWLGLPNNAEKVILTTLGERTCVKLLKMSVNTEGSELAYSADSHLKESEV
TGDIRPLWMKSLQQSVRNWLNILPKRIDPIKRTKENIKDPMFRFFEREVNLGVKLLNDILHDLNEI
LEVCEGNRKQTNDLRMLVDTLVKGVIPRSWNRYATPKGLTVIQWIVDLGERMKQLQNIARGTNA
GGSKELKSFKVWLGGLFIPEAYLTATRQYVAQSNQWSLEELYLNVTIADELNPQLKLDDCSFVVIG
LKLQGATCRNNQLSPVDTITTDLMDICLCWTKIDPRKPPTLGANDVTLPVYLNQTRCELLFTVDM
STTGAVPPRSFYERGVGFVVSALTG*

>TRINITY_DN30329_c0_g1_i1.p1   type:5prime_partial   len:213   gc:universal
TRINITY_DN30329_c0_g1_i1:1-639(+)
EPIVNRVLVKRMKVMEAINDVSPAMMLDFFKTTLATNFLKFPFFEAINAFCAALPIAPSVRGLFTG
FVFTTATLPVTNYRYRKSMQLEVNWANIYEAYFPTVIRDIVYGICRNYCTIWTLALNPQWTAVSPQ
VLFIVVILGCLGSAPFNEWRGYLLQSKGQELTFKEFFKPSNFVRSTSLGAIKQGLALAVGYWCAPP
ATRLVHGLFAGLRG*

>TRINITY_DN7504_c0_g1_i1.p1 type:complete len:414 gc:universal TRINITY_DN7504_c0_g1_i1:87-
1328(+)
MAKIPGGIVVEMDGDEMTRVIWDMIKTKLIFPFVDLDIKSYDLSIQNRDNTDDKVTVDAAEAML
KYNVGIKCATITPDEKRVEEFNLKKMWKSPNGTIRNILGGTVFREAIICKNIPKLVPGWTKPIVIGR
HAHADQYKATDFLVPEAGTLEMKFTPKGQTEPTISYVVNNFAGAGVAMGMYNTDKSIRDFAHSS
FQCALEKNYPLYLSTKNTILKKYDGRFKDIFQEIYDNEYKGKYEAKGIWYEHRLIDDMVAYALKVE
GGFVWACKNYDGDVQSDTVAQGYGSLGMMTSVLMCPDGKTIEAEAAHGTVTRHYRLHQKGQ
ETSTNPVASIFAWTRGLAHRGKLDGNERLMNFAKLLEEVCVATIENGSMTKDLAICIKGMKNVTR
ADYLNTTEFLQKIADNLTTKLNLSHL*

>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)
MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*

>TRINITY_DN18025_c0_g1_i1.p1   type:5prime_partial   len:225   gc:universal
TRINITY_DN18025_c0_g1_i1:1248-574(-)
PCHNTAERCRVTTKSEMATMEAAYLATFLSLILILRCNSLTFTLSAGNTKCLREEVHKDVLVTGEY
KLSEAPIQTHLTVIDTNGHVLYKKEDAQKGKFAFTSDDYDMFEICFRSLGNHGQGIDREIFLDVKT
GFEAKNYDDLAKTEKLKPMELELKKLEDLSEAIVNDFAYMRGREEQMRDTNESTSDRVLYFSIFS
MLCLIGLAMWQIFYLRRFFIAKKLIEN*

>TRINITY_DN198705_c0_g1_i1.p1   type:complete   len:190   gc:universal
TRINITY_DN198705_c0_g1_i1:80-649(+)
MADEYYKRFTDRIIIDFERRGCSPCLQGGIDGDLKDNIPKELSDVGITPAKWHELLTEFEEIDATDG
TSIWCQMVGALIPTCGFQMIFACCFPPAVKHSCSCLPGCYGKWTVRMTDWLEKVNEFLNHYGM
HMKFTTYKPYTKAPRSVNFKKRVRWQDPRKYQMTFIEIALTREESQSYKKNIGVMEFRL*

>TRINITY_DN199_c0_g1_i1.p1 type:complete len:229 gc:universal TRINITY_DN199_c0_g1_i1:207-
893(+)
MVQGSMTIVKYLMFFFNFIFWLSGLALIVIGAVIRDKYGDYFSYADSRFTNVAVFLIVVGVIVFIIGFL
GCCGAIKENYCMVTTFAVILGIIFILEIVAGAIGFAYKGQVEEKADKALVRASKNYNNDDEPGAKK
LLDWAQQRFECCEVASATGNGTCADKSPKSCHPDNDCNKTKYSQKCKEGFVEFMKDNLVTVGA
VALAIAFIQILGIVFACCLMKAIKGEYEVV*

>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)

MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID

>TRINITY_DN1222_c0_g1_i2.p1   type:5prime_partial   len:213   gc:universal
TRINITY_DN1222_c0_g1_i2:2-640(+)

FKNMVPYSLFLLQQGCSSGRLIKVGMFNKIVKPGGEQPDELEKSIGEALLELEVNSDLKTQLRELYI
AGAREVDIGDKRKCIIIFVPVPLLRQFQKIQVRLVRELEKKFSGKHVVVVAQRKILPKPSRKTRNQK
QMRPRSRTLTAVHDSILEDLCFPSEIVGKSIRVKMDTSRMIKVVLEKAQQTNVEHKLDTFTSVYKK
LTGKDTHFSFEI*

>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)

MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK

AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*
>TRINITY_DN6388_c0_g1_i2.p2   type:5prime_partial   len:143   gc:universal
TRINITY_DN6388_c0_g1_i2:1-429(+)
QWWKDTCYPVWFKYVKGPYERYQYEHAVAELRGYGLMFDDQHNDKDPIVERAIELLPHDLAV
GRHRRLMRAFEMNTKKTHLPVEEQNYDPMVPYLAPFMEEAKFQMQEEQELLNFHPWDRRLYS
GPTTGFGETSPYTCFSCW*
>TRINITY_DN95248_c0_g1_i1.p1   type:complete   len:124   gc:universal
TRINITY_DN95248_c0_g1_i1:197-568(+)
MAPKTKKVSKKKSTLNFNIDCTLPVEDGIMKVDDLKKFLQEKIKVDDKLNNLDQITLEVAKTKVT
LVSERPFSKRYLKYLTKKYLKKNNLRDWLRVVASSHTDYELRYFQINNDEEEDEEDNE*
>TRINITY_DN4762_c0_g1_i1.p1   type:3prime_partial   len:542   gc:universal
TRINITY_DN4762_c0_g1_i1:171-1793(+)
MSLTSPEDIENWFKGTQSYDHGDIDTALKQFREVTQNSRILFNTGCCHLTLNDIKTASENYKRAVE
NDQHLAVGYFMLGLTAFLEKDFENAKVAFERSLVLLRGNRCVDYKQLGLKYQLYSCEILTNQAV
MSYHLNDFDKARELLLEAVGCKAEKRHEKIFEMLVSLQAGAEISPFTLPKNQIFRPPKSYVQNLKT
KDYLGKATVVTTSNEDDIYACFSGIRDQVMAAKDQKMAAKANGQTKVENDKEKKPVTRALSHS
IMLKELRKPERKKTLKKTIVKRREPTIKLGKILEAPDVENVPLITPKPKKPRPKSPCPPRKSSSVDSYV
GDKDRNSSASSPPPRLSPPNSVFSSQASLAITDSDESPYESINENLDNSHNESSFTSISSNKNMERLR
QNRSREDRFSMPNLDPNQEKRLNITLLKPQKKQPALPDRAMSLDEVGLYHNAQYSNTLPIPGHIE
NSLKHLSLQKPKKKPPSPLLEESQEDHDNRRRHSNIDVVRKSRTSSLPLNNLKEEKLQTSSKSKDFP
KKKVSLDDKFLYW
>TRINITY_DN801_c0_g1_i4.p1   type:5prime_partial   len:182   gc:universal
TRINITY_DN801_c0_g1_i4:1-546(+)
SSLAQGAPRPPPNDPLPRPARPRRARLGLPSPMADQLTEEQIAEFKEAFSLFDKDGDGTITTKELGT
VMRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLSLMARKMKDTDTEEELIEAFKVFDRDGNG
FISAAELRHVMTNLGEKLTDEEVDEMIREADVDGDGQINYEEFVKMMMAK*
>TRINITY_DN3271_c0_g1_i1.p1   type:complete   len:399   gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)
MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR
AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*
>TRINITY_DN651_c0_g1_i1.p1 type:complete len:408 gc:universal TRINITY_DN651_c0_g1_i1:122-
1345(+)
MSGHQGGVKRSNDGGNASGGGGPKKMRGDNVTFRFLLLSKHAGGIIGKGGQTIKRLRTEYSAT
VNVPDSPTQERVLSIGASQESAIKVLCECLPLFHEPPYSVGGNHQNQGKYEINFLVHSSQVGGIIGR
GGFKIKELREATNANIKVFQECLPNSTERVVAISGNEDEIVNLLHKILEIMQEAPIKGNIALYDPSQE
AWNGPNDNFGGPPMNMGMGGGNRGGMRGGMRGGRGGGAGVGGNQGGRGGFQGGFQGG
QGGPGGPGGPGGPPGNFGGPNNNRGGFNGGPMGGNGNFNDDYRNNQNFYNQGPGNQNQG
AAPGGGTGNDFSIGDSQTTQVTIPNDLAGAIIGKGGERIRNIRQRSSADIKISDPIEGKSDRIITITGT
QEQIQYSQFLMQQSVRQYSGKPMK*
>TRINITY_DN33065_c0_g2_i1.p1   type:3prime_partial   len:804   gc:universal
TRINITY_DN33065_c0_g2_i1:2409-1(-)

MWQFVWLAVAITSQINGNVHHKHTKPRHQNLIDDIVPNDDFDLDYSHNIFIPFDAYDNYEKFLE
YAERSDLAKRGGVTSLPAIQSLPGDGSHTYAAPGVNCQVQLLNKKVEGTDKRVIERTSCAEGWTL
KNALGFFFAGVGHDLATKSAGLVHMNQLRFKMLIFEAEGYTFVADTDNEVYSNLQSKLSLKNAE
CRLTISNSYTFENSEIVLTGNHEVIEKITNAKKTLEVTFEKGKDTSSFDVKMKVPSMPLETFATIFLES
ETEFITADMGDTSYEINIDPIKAVIIESTSNSVTGVFDGSDGKFQLTGKFLSNDQNAFMGQATDIYLT
VNRKSLGSRTTYNLMLGFAKEVKVMDIIPKYVGKTEIQDEFDDNFLKTTIEKWHLLFTSKRIIVAD
GAEYKKTFANIFDADEYQEFKQGVGIKATVDLQKTLTACSSGSTVPDSLKSVKIKGLLGRRGLSMV
FPPGTSVPLIPLIKCKLRQIQDDLGFELPISLKGYEQKSKFKLEEIAYSSDSGAFKMSLLYENTITIYKD
VLEITNPQLTIEREGKDEPWQFTIAADVSIFQVDASVMISYSKTGYTVEVSSGNVPLTNLLRAFSFSD
KPAITFEIHDFKMQIEVKDKEEEEENEEEGEDEGNKNQLAIKRQDNKEEKKRDLKFSIAGKPVFN
GFDKVSIEALVWTSQTPAGVAVAVIMENIRLDEVLEKILDVPEVPMAWFSDMTLTMVISNVDAEG
CDNPAQSEDDCEEADEEEEEEEGEGEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRG
PGGGRPRRG
>TRINITY_DN1319_c0_g1_i2.p1 type:complete len:134 gc:universal TRINITY_DN1319_c0_g1_i2:86-487(+)
MVVPSAKRKIVKKRTKKFIRHQSERYKTVKQNWRKPKGIDNRVRRRFKGQYLMPSIGYGSNQKT
RHLMPDGFKKFVVHNVKELELLMMLKGTHAAEIAHCVSRRKRIEIVERANQLAVKVTNATARV
RSEENE*
>TRINITY_DN3180_c0_g1_i1.p1   type:complete   len:1889   gc:universal
TRINITY_DN3180_c0_g1_i1:5857-191(-)
MGYLRVTWICVITLSTIVLSEFIFDDDEFGEKRTFGDPDSLVKRSSSGSTKKHVSTFTRTQRFSGGGST
CNYRVIKRSGRQYVVFRSSRHTRVANGCTKIHVQSFLNNHFGGKNLLTTFPNLNGDNFEVVQMM
YSLETRVAFMEAISKTSMAFFGGGNLEFGKSGDVPLTLKLQWTEDHDSSAWDPSDIQVELETTKV
VLSAASFHFKAKKSYHNPDHFMIEKFDTQGVGNFRVSAYTSAIAGLDNTAFGADFSQDKYGALT
WNDFRGYGFFDPAENFQLVLHPSTYVRNSRLFNNEETSQFIILSNPVSDDTTYVTLMAQFGQSTNI
KDTLNGIMTSVNADIGIIKRINSRAFCLTVSSGEYDFLFTPPYTKDRNLMNPCFPLEYQDARDNQN
DLSKQKKKMTADINIHVTINFKENVGSCNDDSSIDTSSLPPKMTINGNENWKGFSWSFPEQAKGP
MMAIMKCMWQNSAAFQGLPYSLPFGDSEVVSISDFLDSPTEKTIGLKITPPEQWRTIPGIDLTFNYL
EFTASYNIPDQTWELSGTADMRIDKFEVFLKLEYSRTTVEVEDDDDDDSSNEDDGEGPDKKAKKK
SDKKKKQSKNSKSSKSESKLMAKLRKRKSMDALLKSLPDTFQDDDFNNNHHVFYDNLIIPRSLPV
KNNQSANVSLNKDAGTNIVPAAVKNSSLATAATTSKRTTEVEKQWTFTILMPTLLVKDIYTIFSPQ
STLPAEYPKVFNNGIKNLQISWAWGNEFEVRFRGQLVIMGWDKILLETVFWKQMPSRSLKFGIGIY
FQKIDVDAILKHIFQDESISVPWLSNLDCKLVIGNSEGFKDVSKKKKKIKKIKKAKSNKKVSKKQR
KTSKSKSKTSAALTRSTRGMEEYIYADLAEKRQADDDDDGDDDDAEPDVKFTYGSLADNALIAG
AGFEMTWYRPTEEEKCLGNTLCKFIYEKVQSNTQFVLAGQVDTGGITISAEVKDAGIVLATDLKL
ENAKLEIDGRAGGGIKLSCQMIYTNSEIATNPLTFEGAIEIGFAGELTFRFTMGGTIDSAFGYNRIAL
GNILLGATIDFKAASFTIEFGVTVLMGLLNEDPITIRGYFGLSPTNWIDSWVYVKASKLTIGSLGKAF
DFSVPDTFKDEGFPEGFQFSLSRKVVNIESLGIEIPSGLYLVGKFKFKFFELSADCTIDPANKAFDVKL
EMNKQNWIGGMITISSYTDENKGPMFHIKVDENTPFYANIDGKLTVLGLSQEILVRIDENSGALIH
LRGTPFPFIFDAALDINAALDPNTKSFNGGTFKITVSSSEFIPTLARKIRDWLEGLKSEGTQAKQDG
MTAITKGEEDSETITGKKSLWDSALDTWKSNLQRRESELAAKQRAITGALQACIDECELVCVPFFD
WEEDCFTIFGWSAPCPWPNSCAKKVPNYFCYAGCALDQLGSAFLTWVESTLTKIGLALQSTAVFL
TDMVEGIAAALTKLGEYIVAAKDWLINQFQAALNWVADLLTKQIVLRKLVLEATVQPPFKYCFG
YDIDITLFTWHITDGGHVCLDTLIRDLIYSLFGYNQDSKKALGMKDQIEEAKSKTLSIKEAAEELEE
SAETTQAEVDMQTAKTFEEELKRKRTMPTKEMFKFIDEKSKNTKYSKAHQKIMDTPHGMPAYQI
HNNHMLENLEKRSPWVVVRSFKDGNRNLEPKRIADHEIVKRSLSFGDGSKPCSRLRRSLATYDTI
VNVLIRSARNLENMEKNHFAHKEFHGHGIRKLDKRIAELELKNMTDEQREDAYFWYDKANEGY
EDFHNKVRRNIDYHDNYALPLLHNQLNYILKKSGKEGGFLKRVEDMHSEALHDFKRSIKNEEDR
ADGQELLSKIKKSMLAIVTDENTPLSRYTRSINGMKNDITRMNKMVLAC*
>TRINITY_DN1995_c0_g1_i1.p1   type:internal   len:514   gc:universal
TRINITY_DN1995_c0_g1_i1:1539-1(-)

LTFIESLRLRTSKKRMGKEFKHQKNEKLEEDNEDISKTKGRLTNDTISYYKRVDSVLTENNFESDEL
YEAFIRNVFAQLKEDSVQVLRHTLTSKVIEKIIPLLSKSQFIELLEFVKEDVELLCCDRFASHVMETIV
ITYNGISDSTSDENFIKQFVSFCKVIRELIDHLIRDVFGCHVVSKLLQVLSGVKVSDRITKSKASINSK
KKAQQKYQIKEKELSAKEVTIINVADSLKKQYSKHVRVLLNVDNFGELLCHRNASPVLQVLLITTS
HINKKKYSVLSNQILQRARLIENRSLMEEENEDTIHKLPVVLTDAVGSHLIEVLLQTADDGLYRLLS
SQCFKNIIVSLCIQPVANFLAQTFLRLLEEKEQALFYVDKLFMYMEDILAVGNMGCISRLAELISRL
DLIDKQKKFIKVISNALHIPDQKLYKTDQKSNVLVTLIITMTTFDMFYKKESESENKTDIKVETDTN
KEIQNSDIENLCIKKNSINYHGACILKNCFKFKKCKTIVQS
>TRINITY_DN123_c0_g1_i1.p1   type:5prime_partial   len:1231   gc:universal
TRINITY_DN123_c0_g1_i1:2-3694(+)
RGGFRPFGTGLMGSPMLGPYAFGPARSGALGGFGIAPLVRPPTRGGAAGANRGSRSNSNRGGKK
TTPVKNNKSTPEAKKDNNINAKNDKKEDKKDEKKDDKKDEKKDDKKDDKKGGKTPTGKEIKV
EPKDDMKNIKKNFFKDPKVEPKNEKKPDTKAVTVKPEIKKESGPQNVTLDKFNSELHLSIDADGL
SAGNMKGEGFQYMWGGVRGTHGVKKGKVCYEVYLLENIKVHCPGENNPHVLRVGWSVDNSD
YQLGEDKLSWGYGGTAKSSYDSKFLDYGKKYTVGDTITCYIDFESNPKAIFFMLNGEYLGVAFRFG
NELGDKAVFPHITSKNMRFRVNFGKEKPKHHVTNGFRMMQDIPVDQLVLPSPSPKTPKEAEIIM
MVGLPACGKSFWCEKYAKENPDKKYYILGTNNIIERMKVSGLTRKRNYHGRWEMLIKRASLVLN
KLFTVAKNNPRNYVLDQTNVYFTARRRKMESFAGYKKIAAVIINKPDVLASRTEKQQKIEGKMVP
EGAVMEMKFNFTLPEKGPSFNEVWYLEETLPKAQELAANYRREGSNFKTKSKRKPESSPSQPESSP
SSEKKPKLDPKIISRGFDKPFSKPNTSPQQSTFKAPSPAQNNANKTPNQDRFSKNEKSTSKVETNS
DNSRSKAGNFNKGHDGNKSNERPFFSNTPDRGNASNRGNDSNRGNSSDRGNAPNKGNSSDRG
NAPNKGNFADKGNAPNKGNSSDRGNAPNKGNASDSANKNSKNEKPKEESKKTPKRAIRGTLD
QLNSIINSEARKTENNSGNIRDSAQSGKNEKMGSLMDIDRTPQRESDSYQNLQSRNRDALSNQG
GKNKESQSAGLMDIRNVPQGNQDYRGKAGILDSSRNTSQDYRGKPGILDSSRNTPQDYRGKPGIL
DSSRNTARRNEYESPVGRGNNSYSDSPARGVSTPRGRASFNDSPARGARGGRGQSDISRSGSLAKS
QGSGGNRGGRGRGRSKHLGDVNKYDPVGNMGGYYSALKALPSVKDLIGNRSSFSSYSTRIDEPSR
FDQLYSSYEPYSFGRTQNANDSRSLNYSFGQTDSYSSLERDGGYRDSQNSKDFLGSYQQRKDSSYS
DNRGSQGGQRGYQDSSYNADGLDAKDQYQNDDYQESYSSQKDKSSYDQNTQSSRSYNQETSYE
ESSDYGRSRNQEQDEYARSGTYERGDTSYGTDDANRSSRRYEDDLQESEPMDGNYSTQDYGRSSQ
SSQRARIW*
>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)
MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN
>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)
SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHRR
>TRINITY_DN34_c0_g1_i1.p1 type:complete len:149 gc:universal TRINITY_DN34_c0_g1_i1:477-31(-)
MDAAQAAEIKKKRTFRKFTFRGVDLDQLLDLSSEQLMELVHARARRRFSRGLKMKPLALMKKLR
KAKKEAPPMEKPAVVKTHLRNMIVLPDMIGSIVGVHNGKVFNQVEIKPEMIGHYLGEFSMTYKP
VRHGRPGIGATHSSRFIPLK*
>TRINITY_DN56792_c0_g1_i3.p1   type:5prime_partial   len:1003   gc:universal
TRINITY_DN56792_c0_g1_i3:3453-445(-)
DNELKVIECNLRVSRSFPFISKTLDHDFVAMATKVIAGLKVERVLNIMNNCNKIGCKVPQFSFSRL
AGADFQLGVEMASTGEVACFGENRYEAYLKALISTGFTIPKKSILLTVGSYKAKNEMLGSVRLLEQ
369

MGFELYASMGTGDFYQEHGVKIQVIDWPFEENGIEGQEQSIQEYLSRNKFDLVINIPMRQTSSKRN
PHFITHGYRTRRLAIDHAVSLITNIKCAKLFCEALYRTIGQIKVKTHIDCVSSGNIIRLPGLIDVHVH
MREPGAEYKEDFQSGTAAALAGGITMVLCMPNTRPSITDTLSFKQAQKAAQKGARCDYALYAG
ASNKNAKHIKQIASSCAGLKMYLNDTFSTLKMDNLSDWMNHFENWPKHMPIVCHAESQTTAA
IILVAELFNRPVHIAHVARKEEIMVIRAAKLRGIQVTCEVSPQHLFMTVDDIGGECEGKYRVKPPIV
TAEDQKALWDNIDIIDCFATDHAPHHVDEKNSENPPPGYPGLETMLPLLFTAVHDGRLTVDDIIL
RLHTNPRRIFGLPEQHDTYVEVDMDEEWVIPDAMTYTKSKWTPFAGRKVKGKILRVVLRGELAVI
ENEVLAKPGMGEDVRTWEPTHCMPPVSTTGLVSSKDAVDPTRSAYLGVTAPSVPVEDIHKTIESPS
SPARKLFGTQKDNEGMHNILETIGPVSVAPSISQPSPLFAQTHLFHGQHILTVESLSKEQLYALFNL
AGYMRQEVRKGKSFDVLKGRVLALLFYEASTRTSCSFTTAMQRLGGSTIEIKPSDSSMKKGESLED
TVQTMSCYSDVLAIRHPKKGAVQNAAEHCKRPVINAGDGTGEHPTQALLDIFTIREEIGTVNGITI
TMVGDLKHGRTVHSLARLLTMYRVNLQYVSPKSLKMPESVKEYVKQRGIPQVEISTLEDALTNTD
VLYVTRIQKERFDNEEEYNKVHGSYIVTPKLLTKAKEKMVVMHPLPRVNEISTEVDSDPRAAYFRQ
VECGMYIRMALLYMLVAR*
>TRINITY_DN1143_c0_g1_i1.p1   type:complete   len:629   gc:universal
TRINITY_DN1143_c0_g1_i1:2539-653(-)
MLRSRTIITNTLPKLKSINRLEPSFSCISNARCFSVSAANKDASESFAMGIFTGQANVSQIFPYPDVLT
DDQREFLSSLVDPVEKFMSEQNNAFNNDALEEIESETLEGLKEMGAFGLQVPAELDGVGLTNTQY
ARLVEVVGRYDLGVGIVLGAHQSIGFKGILLVGNEEQKKKYLPSLATGEKFAAFCLTEPSSGSDAA
SIRTNAKLSDDGKHWILNGGKLWISNGGIADVFTVFAQTPVLDEKSGETKNKVTAFIVERGFGGIS
SGPPEKKMGIKCSNTAEVHFEDVKIPVENILGGVGQGFKVAMHILNNGRFGMAAALSGTQKGLI
AQAIDHAASRTQFGQKINNFGVIQEKIARMAVRHYVTESMAYVICGMMDKGFKDFQLEAAISKI
YASEAAWEVADETIQVLGGMGYMKDCGAERVMRDLRIFRIFEGTNDILRLFVSLTGLQGAGKELR
KLQKSLSNPLSNMGTLLEQGLLRSKRAAGISSGPDLSSNVHPDLRKEADLASKGIGKFGSTSEALL
VKYKKSIIDQQMVCSRLSDSAIDLFGMVCVLSRATKSLNNNVPNAVHEALIAKTFCSEAYKRINTN
LESCKNEHNMATDKLKAQITSDITNHMGVVTTHPLGF*
>TRINITY_DN1339_c1_g1_i1.p2 type:internal len:183 gc:universal TRINITY_DN1339_c1_g1_i1:546-
1(-)
ENELGVQAPLGFWDPLGLSSDGDVYSFKRRRSVEVKHGRICMLATMGYITPEVAGKFGGYISPSSK
LAFQDIPNGLAAIGKVPGVGWLQIFAYCGWCELTYDFDEEVNTEPGNVGWKPPLLATSDPEVRK
RRLNAELANGRLAMMAIIGMFFQDGLTGSAWGDWANYTDSPLRAFENELGVQ
>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)
MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*
>TRINITY_DN19618_c0_g1_i1.p1 type:internal len:223 gc:universal TRINITY_DN19618_c0_g1_i1:3-
668(+)
AEGRTRKLNAELANGRLAMVAIMGMLFQDGTMGTAGPEMWGFSPAFEKELGVQAPFGFWDPA
GLTKDGDIDAFKRRRNTEVKHGRVSMIACLGYIVPEFAKFPGYLSPSQGIAFADVPNGLAALSKVP
GAGVAQWVLFCGLIEKSLLVYDPSRAAGDFANGGVLGVPNGSTMPEGEGKTRKLNAEIANGRL
AMVAIIGMFYQDGLTGSAWGDWSLYVDSPLR
>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)
MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN

LNKGRGEGCYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYVIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD
LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN57_c0_g1_i1.p1 type:complete len:712 gc:universal TRINITY_DN57_c0_g1_i1:140-
2275(+)
MGHDGSTLPSFLPKMSFERQTTLLKLLILSIAAILSFSTRLFSVLRFESVIHEFDPYFNYRTTRFLAEEG
FYEFHNWFDDRAWYPLGRIIGGTIYPGLMITSAVLYHFMHFFHVTIEVRNVCVFLAPLFSSLTALVT
YQLTKELKDAGAGLIAASMIAIVPGYISRSVAGSYDNEGIAIFCMLLTYYLWIKSVKTGSLFWSTFCS
IAYFYMVSSWGGYVFLINLIPMHVFALILTGRFSHRIYVAYSTVYCIGTILSMQISFVGFQPVQTSEH
MAALGIFGLCQIHAFVDYLRYRLTPSYFEILFKSLVIISATIAGIIGAILTVTGKVAPWTGRFYSLLDPS
YAKNNIPIIASVSEHQPTTWSSFYFDLQMLVFMFPVGLYYCFAKLTDANIFIIIYGVTSIYFAGVMVR
LMLVLAPVACILAGIGISSVLTTYMRNIELSNDKPKPIKKAKQADPSYPIKSEVARCMVALITFFLITY
TFHCTWVTSEAYSSPSIVLSAKQSDGSRVIFDDFREAYYWLRQNTPEDAKVMSWWDYGYQITAM
ANRTILVDNNTWNNTHISRVGQAMASPEDKAYDIMRELDVDYVLVIFGGLTGYASDDINKFLWM
VRIGGSTDTGRHIKEHDYYTPAGEFRIDKDGSPVLLNCMMYKMCFYRFGSVYTEQGQPSGYDRVR
NAEIGNKEFELDVLEEAYTTEHWLVRIYKVKDLDNRGQ*
>TRINITY_DN371_c1_g1_i1.p1 type:complete len:173 gc:universal TRINITY_DN371_c1_g1_i1:157-
675(+)
MASAVRQNYHEECEAAINKQINMELYASYVYLNMAYYFDVSDVALEGLFKYFKDQSDEEREHAQ
KLMKYQNLRGGQIVLKEIKAPEPVDFNGKAHLTALENAFQLEKKVNESLLNLHGVASKNNDPH
LCDFLESEFLDEQVKSLSEINRLITKAKRCGDGLGVFQFDKLALE*
>TRINITY_DN26249_c0_g1_i1.p1 type:5prime_partial len:477 gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*

371

>TRINITY_DN172571_c0_g1_i1.p1   type:complete   len:104   gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)
MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*
>TRINITY_DN8707_c0_g1_i2.p1   type:complete   len:564   gc:universal
TRINITY_DN8707_c0_g1_i2:2751-1060(-)
MSGFVRQSKYRHVFGSPARKDGCYEGFRVTNCAFDGNFIAANKHFIAVCVEVGGGGAFIIVPVGS
TGRLDVNIPKVSAHKEYILDLQWNPYNDFMLASCSEDGTIKIWEIPEKGLFMNIGDEKALLSLEYH
EKRCTQVLWHPSASNVLMSVSQEPKVCVWNLDEGSVEVEILEHPELIYNATWSQKGDKIGTTCK
DKKIRIFDAREGTLLVQGMGHEGAKPSRVIFTFQDKYLFTTGFSKMSERQYACWNAETIEQLGLEE
LDTANGCLVPTYDADSQLVFLNAKGDSNIRYYELVDGDPYYFYLSTYQSSAPQRGFGFIPKRCINV
NANEISKGYKLHGTKTGYIEPVSFTVPRKSETFQQDLYPDAIGDEAALEPDDWFSGKNAEPKRIA
MSTFFKGKTKPTGAAGGGLKKGGLKGLKAKKEAKTAAKSAAKSEPAKPAPVKTESKDKVDAAP
PAAAAVEQKSSSTAVAAPAAAAPVVVSGVDEKVVKELQNEIKSLKDGDKKLQKEIISLKDKLKDY
DTLRSDIKLLCDAVKKNDERITALESLVAEETDEEETGEGGDE*
>TRINITY_DN2113_c0_g1_i1.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i1:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN32763_c0_g1_i1.p1 type:internal len:104 gc:universal TRINITY_DN32763_c0_g1_i1:2-
310(+)
GQERPGHVGRDADPGRLPVVVRRGWARRGPVRRQRGARGPGPQRIGLAQRRGRVTFGRFADRE
SLARPRGRVAQHAVVARWAGRALRQPQWAGGGRHLGADRG
>TRINITY_DN1130_c0_g1_i1.p1   type:complete   len:317   gc:universal
TRINITY_DN1130_c0_g1_i1:1199-249(-)
MDSSQRILVSFFCLIGLAYSASWNYDEGAATGPDAWQNSYPKCSGKSQSPIDIITADVTYDELPTIQ
FGSNWDMLLDNSSLELSNNGHTAVVNVKHPTQITTTQGGKTYILAQFHLHWGTTDDTGSEHKI

DGKFYPAEVHFVHYNSKYADLGTAVPKADGLMVLGYFIKVDNSALTSSFLHLIMEGLDDVVYKD
EKTSLPANGRSLYDLFHPFSTTKYFHYSGSLTTPTCDESVAWNVMHPENGLTITSTMMAKLRAMS
QNKRGEAMKVQSGNYRPVLALNGRSVRRNFDKSSASSIGSLLSITIPMLAIAIKLSS*
>TRINITY_DN116_c0_g1_i1.p1 type:complete len:297 gc:universal TRINITY_DN116_c0_g1_i1:72-962(+)
MGFVKAIKNKQYFKRFQVKFKRRREGKTDYYARKRLVTQDKNKYNTPKYRLIVRFTNKDIVCQIA
YAKIAGDVIVCAAYSHELPRYGVKVGLTNYAAAYCTGLLVARRLLHKLNLHETYSGQTEVDGDEY
NVESVDDGPAAFRCYLDIGLNRTTTGARVFGALKGAVDGGLEIPHSVSRFPGFDSESDDFNAEVH
RNHIFGKNVGDYMRALQDEDEDAFKRQFSKYIKEGVKPDNIEGMYKKCHAAIRADPAHKPSGK
EKFKGKRYGRKKMSFAQKMDSVRQKKEAFKRKMEQDED*
>TRINITY_DN4525_c0_g2_i1.p1 type:internal len:111 gc:universal TRINITY_DN4525_c0_g2_i1:1-330(+)
RLAMMAIIGMFFQDGLTGSAWGDWSLYTDSPLRAYESEPGVQAPVGFWDPLGLSTSGNEFDYKR
RREVELKHGRVCMFATIGYIVPEYTRLPGFLSPSYGVKFDDVPNGL
>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-550(+)
LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN41662_c0_g1_i2.p1 type:complete len:289 gc:universal
TRINITY_DN41662_c0_g1_i2:168-1034(+)
MNNNYNNKQYPQIEDGNYSISTENDEKKFSKCTWVLTILSYVVVICLFPFSLLFCLKIVQEFERAVI
FRLGRLLSGDARGPGIFFVLPCIDTYMKVDLRVVSFDVPPQEILTRDSVTVAVDAVVYFRISNPIWSV
VNVEDAQRSTKLLAQTTLRNELGTKNLSDLLLLERESISQSIQRILDVATDPWGMKVERVEVKDVRL
PQQLQRAMAAEAEASREARAKVIAAEGEMNAALALKQASEVIVESPQALQLRYLQTLQTISAEK
NSTIIFPLPIDILNAGLRDRKTQ*
>TRINITY_DN413_c0_g1_i4.p1 type:3prime_partial len:463 gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR
>TRINITY_DN2963_c0_g1_i1.p1 type:complete len:116 gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN6_c0_g1_i1.p1 type:complete len:196 gc:universal TRINITY_DN6_c0_g1_i1:843-256(-)
MIFTVFLIGLQFVGIYNHAIPHLHPGFHPFHHYQPQGLLNQMDKEFTFSCPNGKAISFIGSVHDNR
KEDRQWTVYCANDVMEPRGTSTWTYYVNDFDGEMDFACADGNIVTGIASFHKNKYEDRRYKF
RCTYMPGTIRKGCSWSKYSTYDAMFSEHIEPGRYLTGMRSSHDNNKEDRIFQIETCRFDHYYEQQF
H*
>TRINITY_DN33328_c0_g1_i1.p1 type:3prime_partial len:1422 gc:universal
TRINITY_DN33328_c0_g1_i1:4264-2(-)
MLLKYFFLFLCLLLLNDIVYGKRRGGKKPARRPPPARRPPPSRKPVRRPPSRKPSPPSRAPSPPSPPSS
PPNRKPSSNKPANQASNDQGGPGKPASNAQGGGKAQELPDLNAILRAFAGKQTDSGSTQYEYG
GCVLDIGKDKCKIKFIPKKQSCHNKLALGKLFDKFVPKGKIKTLFKKYAPVDVFQVTRFEVDKCQ
GDLDFETEAKEAFNVINDKLKVNSGKLSVSFDYKKFMAAPSFDKLGIDIDGEVQLFGKKVPLTLK
KKRDSGEGIFSIKTASIKASDFAKLFSTKSVANAQSPPQTKMFTDAVIQNPSISGSRDDDGGFELVVK

GQVTGIKGIGAISLFVIIQKSSDSPVSVAIVADIKKIQPTVLLSSLTGKNLNSIPIIKDITANLAVEFANN
DMMMLKDPELNKLLGKYIANGKTIASGTKIKVELPIKEILTKVKTTASLSHVPSTIYMQMFLNGGK
VCFKFPDNIAMDLANVLVALLPKVPDLLFSKVLKTPPKIVIEKFDVNVATKYVDMVLEAPEEIVLG
SDLFKIKNAKFELKHEENKPWDFNIEATKQIGKTMIDINVKSEAKNYIFKATIDSLTTKELATTFGS
KATADGILTKMSFLNFGIRTLTVTAEFGDKFTLNIKGNPVLFNWEGAFFEGFIVGSGLNKKMAFGI
VVKNIRIDDIVFKLFKKRILQTTWMSELTATFLISNTDPDDNIDFTLPELKEHVKLKQGVFFKSELTI
PTDCRAEKICEVLRDKMKPGTKLYLEGEITLNGFKLTAGYKGHGLNFATDLTLTSAKLVLTVGTST
EFYLEGEVQMKNPNVKFIGKLGVGVTGIVELSLIMEGMWRTPFGLSYIAFGNLQLAVAIQPGVPVP
KLEFTAEMWVGKIGNNQEIKTKTAVGINPSNPLDMYFYGEINKLTLAEVAKAFEFKSTLPKVVQET
GFPEGLAAGYTTNPKGKTISHLKVNLKTGFFFRGAINILGYKLECEILVQIPKAIKVSVDMGPIKIAK
GLIKLAKGAKDLDNGPSLYVAISSNEVAVKIQAYAELLGLGAEVNIDVSDKGMKFFVYGNIFNLIE
ANVTVNAPYGNGDLAKSEFSVSSCISAGISDIQNTAFEEVDEGAKESQKIQKVADDEVKDASSWY
NSAMDKLLSYEKKLEEKTAIINRKSGKLEKLKEYLDASCVDHCPDVCQGGPVMRKRKGRFFNKK
PGWDDCKEMVKSIVCLGKCKGKKAYYQGKAAKKVVTMEIIEGSVKIAKKLIVIAKGFAERSKGL
MDLTQKAANKVVSLTKAGKDALGALAKYTKENLINIHLLCFDTTLAKAEGACFGVNVDLTVLG
NKKLQYEGEVCFNADFFKNMAKQVADKVFPGIISIKDKIMQAKNLFSDSDSKKKELEEYEKQSAQ
EEKNLEGQLERQNEDDDDDDDEEFNGKYKASFDP
>TRINITY_DN201860_c0_g1_i1.p1   type:internal   len:221   gc:universal
TRINITY_DN201860_c0_g1_i1:1-660(+)
LTAITKVVCSTTSGSATGSKDGSLSSGDDYISRDLSDKLSIITFDTNETAQYCEVQIIDDSFYEEEEQFT
VKITPYFGGEVDEERADVNIVILEDKNDEPKIYLKSTLYEIDESDGVVKVAVQRTGSDLSFKSYVIIST
KQTEPVSAKANVDYYPVVKTLEFGIDEKEKLVDIGIIDDKGRPRIEGEESFEVLLGLAKNGELLDGQ
SKGVVIINDEESDK
>TRINITY_DN76040_c0_g1_i1.p1   type:5prime_partial   len:383   gc:universal
TRINITY_DN76040_c0_g1_i1:1-1149(+)
RTSSKAGHRFAEITKMASEQETDAEMIKECEDYVKKHNIQVLLKDAIVQLCINKPDNPYQFLRDH
FEKLENEHGGKTGKDDHVSATEPPPQATTRRRRGAVSAAVISEEDAASYVKKVIPKDYKTTAALS
KAIEKNILFSHLDESERSDIFDAMFMVKHSEGEVIIQQGDEGDNFYITDSGEVDVYVNDNLVVSISP
GGSFGELALIYGTPRAATVKAKTDVKLWAIDRVTYRRILMGSTMRKRKMYETFLEKVSILESLDKW
ERLTVCDALEPCNFNDGEEIVVQGEPGNDFYIISEGQAAVLQRRSPNEDPIEVSRLNVSDYFGEIAL
VLNRPRAATVVARGTLKCVKLDRQRFERLLGPCGDILRRNIQQYNSFVSLVV*
>TRINITY_DN10706_c0_g1_i1.p1   type:complete   len:213   gc:universal
TRINITY_DN10706_c0_g1_i1:122-760(+)
MNIFRLIGDLSHLLAILLLLWKIWKTRSCAGVSGKSQCLFALVFITRYLDLFTSFVSLYNTVMKCIFL
AATISTCYLILVKFKATYDSNHDSFRAEFLVVPVAGLSVLVNHELSVMEVLWTFSIYLESVAILPQLF
MISKTGEAESITSHYLFSLGSYRGLYLFNWVYRYYFDGFFDLIAIVAGCVQTVLYCDFFYLYITKVLK
GKKLSLPA*
>TRINITY_DN129732_c0_g1_i1.p2   type:internal   len:112   gc:universal
TRINITY_DN129732_c0_g1_i1:2-334(+)
WDPAGYTNDGSVENFKRRRATEIKHGRVSMLACMGYMTPEITGKFPGYLSPSLKLQFSDIPNGLG
ALSKVPGVGWAQIFAYCAYCELSQDQSAASPGGAGDFGFKAITSSD
>TRINITY_DN464_c0_g1_i4.p1 type:complete len:717 gc:universal TRINITY_DN464_c0_g1_i4:2167-
17(-)
MLLHFGKSLHYLKFGTLFWRLKLVAIPRDTSNIINNIFLESKSQRYIRMSANILNEYSQNVGKMEDE
ISGLTSQLNALKRKLNGEIEDEDCSDQLKELRSKNQKLHYQKNIIQRALKKEQEKADSKMLNVQ
AALNVLFESAIRSAYPQIPNPPVALTIAHNPKFGDYQCNSAMAISKMLQKLTGEKIGPHVVAKTIV
ENIPSNSFIKKVDVAGPGFINLHLEKEFLKGVLEKVIKEKVYPPGIGNKKKVVIDFSSPNIAKEMHV
GHLRSTIIGESLSRLLEFVGHDVLRLNHVGDWGTQFGMLIAHLEDKYPDYKTVSPPIGDLLLFYKA
SKKRFDDEEDFKKRAYQRVVDLQGGNPDVRKAWQMICEVSRNEFQKIYDRLDVTLIERGESFYN
DLMSKVVENMKKSGICQKSDDGRWVAFAPNMKVPLIILKSDGGYTYDTSDMAALQQRLQEEHG
DWLIYVVDAGQGDHFKQIFGVGEAAGWYNSSITRVDHVAFGVVLGEDKKKFKTRSGDTVRLIDL
LDEGLKRSMEKLLEKGRDKELTKEELLAAQESVAYGCIKYADLSHNRVMDYVFSFDKMLDDKGN

TAVYLLYAYTRVRSIQRNAKKGRSEIEEYMKSNSLHFDHEKEWKLAKLLCRYPEIVVRCLDDLTLH
LLCEYLYELSSTLTEFYDACYCIEKNRETGEIISVDMNRIALLESVARIFEAGFHILGIKPISRM*
>TRINITY_DN1091_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN1091_c0_g1_i1:200-835(+)
MKLILICLFAVLVYSIHCDQPSDPVWPNLFQQSFREKFYYPVIGTHYTNGTYYYDYKNLRYRLDRD
NGRYDRYCGLNGIRAFQNTPCTHLVLDGTRWLVYPEKKECCECCHAANGCGVLKPTWLTGAEF
VSKSNGIYKWNQKGLQDNFYSERVTDRIMTEIDQVPNDTQYYDPDSFKTKIENIEDVFKLPSYCKR
GTKCSFFSACRAVGFF*
>TRINITY_DN1653_c0_g1_i1.p1   type:complete   len:1122   gc:universal
TRINITY_DN1653_c0_g1_i1:180-3545(+)
MMRRSIKGSEDNWVEMQNDTFKNWVNANLKSRGLEVDNFETDFEDGVRLINLFEAVSKKSIGK
YAKQPKFANQKLENVSLVLRAMESDGVKLVSIDSDHVVNGNSKMILGLIWQLILRYQISGSDDKSF
KIALKKLLLIWLQHVIPEQGIRNLTTNWNNGIALCNLINVLKPGIFPEYNNLDKRTPVENLAKGM
QLAESELDIPQIISPENMASPNVDELSMMTYLSYFTQDGGIGESWTVDLVNFWNSSLSVTNFNTD
WNDGMRLGRLVETFLPGAMPIMESTDNLDNCRIAMDVAHEKLGISKIITAEEMSNPQIPELAVMS
YIVQFTKVKRVERASDKFSASGPGLVEPKIGIVNEFYVRSDAGYPLDGLQVTIIGPNNNYIPIEIDDS
DPQLRNYSYSCEEQGQYHINIIYEGEDIPRSPIIVTSQQDLNTIRVYGERLEVSHAYEETEFTVDVGSI
NSYVTATIDGPEGSQPTPQTINNNDGTYTVRYIPSTVGTHRIYLAVNNQQLPGGPIETNITYPIVSEA
ELIETVAFSAKYEEDKHLYAELYERIGISVDTSQSGDGRITSKTIGPDEKEIYSEVDAEGDGSYTVSFTP
EVIGEYHTNVFWSGKPIHGSPFVVWVSDPNKVFARGKCLYETRVGVESSFEVATNGAGPGHITGY
AETNGVEYPINVRKREECLHDISFTANQVGIYYVYINYNNVPIKDSPFQIKVGNPSLIEIEKHEEAIM
ESNQPQSFIVNVLKDAGFGDVLCVVRGPAGEDVQCTIKDVNDSLKEIMFLPNYPGTYEVFVYYAG
GLVERSPFIFAISEPKLAIYPENIRVSGNGLSRAKLNELARFQVDTTNAGPGHLTVQIEDEKDDVEA
GIRDNNNGTYDVTYTPKRSGKYRVIIKWSDQHITDSPFEIIVDNRAEEVLVEGYGIKEGTAGQPVLF
TLDGRNAGPGQLSCRCRAPSGKMTYVLISDNKDGTYTVDLNATEPGLHTVEVEWDNQAIPGSPF
LVRIMQAPDVKKVRASGPGLRSGTLDSFNGMFQVDSKGAGPGTLKVRIHGPKGAFKVEMSRENP
KDRIINVRYNPTEPGTYTANIYWSDEHVQGSPFEIFVGQNDQEVDRWDRNKEELSKSQVNVY*
>TRINITY_DN2230_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN2230_c0_g1_i1:796-50(-)
MKLNVAYPANGTQKLLEIEDEIKLRSFYEKRMAQELSVDFLGDEWKGYVVRITGGNDKQGFPMK
QGVLTPGRARLLLSKGHSCYRPRRTGERKRKSVRGCIVDGNLSVLNLVVIKKGDNEIPGLTDRVIP
RRLGPKRVGKIRKLFNLSKEDDVRQYIIRRPIATPEGKPDPKKPKTKAPKIQRLVTPQRLQRKRHVK
ALKRERANKAKLEAATYAKLLAKRHKEAKEKRHQEHMKRRRLSSLRESKSQ*
>TRINITY_DN109115_c0_g1_i1.p1   type:internal   len:125   gc:universal
TRINITY_DN109115_c0_g1_i1:3-374(+)
NEFLTRELAEDGYSGVEVRVTPIRTEIIILATRTQNVLGEKGRRIRELTSVVQKRFGFPEGTVELYAEK
VATRGLCAIAQCESLRYKLIGGLAVRRACYGVLRFIMESGAKGCEVVVSGKLRGQ
>TRINITY_DN247_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN247_c0_g1_i1:38-
1156(+)
MKLVLVIFVILVYTWNVSAGGKKCISNKDFMTPYPTNFWTEHYPKFVNNRPTIGIVAMEVLGQKM
LVNVPWSWNKDYFGSSFVKLVESAGGRAVPIKEDITEDDLDKLMRKLNGVVLPGGDADVGDSGY
ERISKQAIAFSKKMAKKNVTFPVLGICRGAQMMMMAEAGKDFLEVTDSLNLSIPLDFTSEQKESR
LFGNAPQGLIKSLSEDAITFNAHAMGIPTLNFYNNSGLQKAFRAISTNYDRNGTKFISTFEGRDAPI
YGLQWHPEKSLFVFNPVLAVDHSIKGVMASQYIANFFISEARKNNHTFRDRVEEEEHLLMSYYPS
YVGNITETPYEQIYLFDFVKPFQNPKYTPGKVNKNDDDNSGDDDDE*
>TRINITY_DN751_c0_g1_i1.p1 type:complete len:227 gc:universal TRINITY_DN751_c0_g1_i1:731-
51(-)
MAMKIVLCTLAALMCCAYAQDGITAITDIINPENINTALDAAEKLKNLIHTTSESKIQSREKTQGFE
FLNMKANAQYTRGMKKHHLMRMMNRYLVPFSRSSADMKEVVDTLKEFIEDDVEEHQEQFFGL
MTQGGGGTTEAIFVYYKLRDDGKYNFKRMTFRGTFRLAADLVITHSSKSGFFSSESKDVINWLPRR
GVTAQNVQELLDIIVPKLATVMSEFAPKDSI*

>TRINITY_DN3153_c0_g1_i3.p1　　　　type:complete　　　　len:196　　　　gc:universal
TRINITY_DN3153_c0_g1_i3:154-741(+)

MANDKSIREKVDEFLHQKNYFTDGLVFIEQKTGINRLYLLVGCVVFLALYLVVGYASGFIVTLLGFL
YPAYASVKAIESSAKDDDTQWLTYWVVYTAFSLLEYFSDIFLSWFPLYFLFKCSFLAWCMAPFSWN
GSVLIYRRLIKPFVLKHESKVDEYLHKGEELAKEYYGKAKKDVTKAVVEGMTADSDESKKDE*

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN1189_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:449　　　　gc:universal
TRINITY_DN1189_c0_g1_i1:1554-208(-)

VSAKSQVIAKMKFFLFSIAAILLVNSALADNAVQIPKTCEDVLAMETCDRLRAVAKKFHEKVGTV
NQAVTDAFKHHKTKAVEVLTYVKEYLVDKAVNFKCEDVLPADQCHNLLEFAKRLNVKASEASIA
LREAIADGSEQAKQLYQRAVSFLVNDVPNLKCEDFFKKDDTCDKIRNFATKVNAKAKDVTAAVK
KAIVENLENAKDGLKKAKQFLKAKISCDQVLNEKMCNTIQSIGDKFSVSMKKIDAALREAYANG
VRKWSELYEAAIKYIMDKWSIFGDDEPQRERREIQPENVKKAIKNLLDSLKVKSKKVRAAIMKLIE
SGKVKFGNLRKTVKQLLASLKGDKKSEDAVTAVYKRSVVDTLKETLQKLKEQIKDLAGKAKEQA
KAKIAELKELIKGALGSLDQDQSDELDQDFEMISDVLEAAADESFDEIANNALENHLGQYY*

>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-44(-)

MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*

>TRINITY_DN146208_c0_g1_i1.p1　　　　type:5prime_partial　　　　len:284　　　　gc:universal
TRINITY_DN146208_c0_g1_i1:876-25(-)

TDSHIRTTSAFIPCAKPSKMPPKTKKIKVKKVAAAPFQTSKPAPKKSVNVLIERRPRNFGIGADVQP
KRDLTRFVRWPKYVRLQRQKRILYQRLKVPPSINQFTQTLDQQTATQLFKLLHKYRPETKAEKKQ
RLTQLAETKAAGKQESSRKKPVTIKYGINHITNLVESKRAQLVVIAHDVDPIEIVVWLPALCRKMG
VPYCIVKGKARLGKLVHKKTATAVCLTAVRQEDRHSLEKVSDAVRTNYNERFDEIRRHWGGGIM
GGKSQAKVAKAERAKAKELRV*

>TRINITY_DN165536_c0_g1_i1.p1　　　　type:complete　　　　len:249　　　　gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)

MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*

>TRINITY_DN13856_c0_g1_i2.p2　　　　type:5prime_partial　　　　len:292　　　　gc:universal
TRINITY_DN13856_c0_g1_i2:3-878(+)

GAGRQAWSPSVSRQHGAAGGGAWAGAPESAATLTSSLAVGLSAGVVVAGLSSRRARTARRAVE
NKSQNGPFGELATVEPRTLELTEKVKAVIKQKGSLDRESYREIFLAPKPDAVFAGGLVGSEYHGWG
TYQWDPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPTLTLENAHNK
LIYGLGSGPMWWLLLFCGIIESLRFKQLGLDFGKLTLENAGDLDFGKGFLPKTKEGIVQMKIKELK
NGRLAMLAVSGALTQSMAYGVYTFPWTLPSPN*

>TRINITY_DN21847_c1_g1_i1.p1　　　　type:internal　　　　len:133　　　　gc:universal
TRINITY_DN21847_c1_g1_i1:397-2(-)

DTKKRKLSAELANGRLAMMAIIGMFFQDGLTGAAWGDWELYVDSPLRAFENELGVQDPVGFW
DPAGFTADGSVENFKRRRQTELKHGRVSMLATMGYITPEITGKLPGYLSPSAGLKFADIPNGLAAI
SKVP

>TRINITY_DN166344_c0_g1_i1.p1   type:complete   len:360   gc:universal
TRINITY_DN166344_c0_g1_i1:93-1172(+)

MQKPKKYDWKDSNMALFGSDTEKKVKKESAESEPAWQGAGADVGVQVWRINKFKVEHWDKE
QYGEFYNGDSYIVLNTYKEPDTDELKYDVHFWIGKYSTQDEYGTAAYKTVELDTFLDDKPIQHRE
VQGHESSKFKTYFPTLTLLKGGADTGFKRVLPEAYEPRLFHVKKQNRTQITCTQISLKRGNLKSED
VFIIDLGDKIYQYNGSSCSADEKYKATQEVARLKSVRGKARAETIEERTVSDEHPALMVLKDGSSK
EKSTVEGEKKMLRVSDADGSIGMDEVASGDDISKDKLTSDDVYIINTGSHVYCWIGSGASIDERKN
GLSYASNYLNKTETPWLPISVVGQGKEDSQFQKAF*
>TRINITY_DN484_c0_g1_i1.p1 type:complete len:554 gc:universal TRINITY_DN484_c0_g1_i1:164-
1825(+)

MASMILNGERTTGNDVREQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLE
VEHPAAKILCELADLQDQEVGDGTTSVVIIAAELLKNAGNLIKYKLHPTSIITGYRLACREACKYIQ
ENLAVKTADLEREHVINCAKTSMSSKLVGVDSDFFSTMIVDAAMSIKRTGNKGETKIPIKSINILKA
HGGNMKESISVPGYALNCTIACEGMPKKIENAKIALLDFSLQKAKMHLGVQVLIEDPEKLEAVRQ
REMDITKERIEKVLASGANVILLSGGIDDLCMKYFVEAGAMAVRRIKKVDLKRIARATGGTVCLSL
ANLEGEESFEASYLGHADEVAQERICDDELILIRHPKTKAAASIILRGANDFMVDEMERSIHDALC
VVKRVLESKSIVPGGGAVEAALSIYLENFATSLASREQLAIAEFANSLLVIPKTLTVNAAKDSADLVA
KLRAYHNASQTQSDKAHLKWVGLDLINGVIRDNKKAGVLEPTMSKIKCLKFATEAAITILRIDDL
VKIEPEKKDDPNSYQNAIAGGRMG*
>TRINITY_DN82805_c0_g1_i1.p1 type:internal len:381 gc:universal TRINITY_DN82805_c0_g1_i1:2-
1141(+)

FILANVRFPKETRYQRACMDKIIADVSNVNSEYEKKLNVLVMGDFHFDRLSGADAKGELYKIITN
LQIDGENYHSPITYLEKDPITTVYGRRFDNILSNINSKGNIKTIGPDFPLEPESVILPITLQRLYNNYIT
ALYTTDSDESDKIYECIKAFQMAGKKELEGDMCKNTWVPSSYISDHLPIQFKVKMSLPGKTNPVE
VKLASWNIQGDTFKERLLDPSVRRGFLNALKQYHVAVFHEFPPHDRIIDDQELGSSDIVRLKQGTI
TTEFGIYVSENVKDGETDMYVLRKKFKDEPNGVEDVVNEVTPEDSKNLITTVGLFAPKIVVDTVKI
RPCLYTVKTSKTQTSGVDFSRIINAIDKDVQERKCDFKVMLASLNLEE
>TRINITY_DN131028_c0_g1_i1.p2   type:5prime_partial   len:104   gc:universal
TRINITY_DN131028_c0_g1_i1:2-313(+)

FDKYHPGYFGKVGMRNFHFIKHGKVIPTINVERLWSLVSEQTRTYYKEHTDKAPIIDVLKAGYMK
VTGKGQLPEQAVIVKARYFTKEAETKIKEAGGVCVLCA*
>TRINITY_DN1272_c0_g1_i1.p1   type:complete   len:262   gc:universal
TRINITY_DN1272_c0_g1_i1:957-172(-)

MRCQLFLLVACMAIATCSAYDWRNKVQNMLKYAKVNIFDRAAYILGDKRQHQLGKPWFCHKL
DCPAFQVVGNYTNKKDGFEERCYPETAWVMTSKEVDANENDIETRDMFMKLFKYIQGENEKQE
KIEMTVPVFTYSQLKKDDPSKRYISMHFFVPPSQEKNIPKPTRDDVTIMDVKADCYYVRSFGGYV
MSFGSKIMNEEKKIHAALEKNNLDFEARKTMAAGYDSPFRLFNRHNEVWVAKRKTMDSGCCTP
RKSTNVMY*
>TRINITY_DN95381_c0_g1_i1.p1   type:complete   len:192   gc:universal
TRINITY_DN95381_c0_g1_i1:70-645(+)

MGKQNSKLKPEVINDLREQTEFSENELQEWYKGFLKDCPDGTLTVEEFKKIYGNFFPYGDAAKFA
EHVFRTFDANADGRIDFREFICALSVTSRGTLEQKLKWAFSMYDLDANGYISRDEMLEIVCAIYK
MVGNVVKMPEDESTPEKRVDKIFSQMDKNVDGKLSLAEFIEGAKSDPSIVRLLQCDPHAPK*
>TRINITY_DN59667_c0_g1_i1.p1   type:3prime_partial   len:225   gc:universal
TRINITY_DN59667_c0_g1_i1:673-2(-)

MGKAKKGQKIDESKFEGKGTDFKCKLIGFVNVPSARGDDICQEAITKLKHLALKLNKEKKEHKQ
KITVNITVKGIRLIDEPTERIEHAHPINRISYICHDNDDKRTFGYIVGTKEGYKLFAIRTMKEAEYITK
TLKDLFQVVFERHQAQKAASDTSEIKGQEQVEEKDDEEKFEVGEEQNEEPTESPLLDWEHGINEQ
IQAMQNDAMSTSGFPDPFGDAQFDSA
>TRINITY_DN72959_c0_g1_i1.p1   type:complete   len:216   gc:universal
TRINITY_DN72959_c0_g1_i1:54-701(+)

MGRRPARCYRYCKNKPYPKSRFCRGVPDSKIRIFDLGKKKTGVDDFPKCVNLVSDEYEQLSSEALE
AARICANKYMTKTAGKDAFHIRIRVHPFHIVRINKMLSCAGADRLQTGMRGAFGKPQGTVARV
HIGQPLISVRCKDQHEATAIEALRRAKFKFPGRQKIFTSKKWGFTRWDREEYLERRQDGSIKPDGT
NVQYYPCKGPLKDWKWRESR*
>TRINITY_DN4815_c0_g1_i2.p1 type:complete len:638 gc:universal TRINITY_DN4815_c0_g1_i2:79-
1992(+)
MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI
DGIAIVEKCENVKCNVTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEETCQAFTCNLNAECSNTENGPDCKCESGYKAINGTS
GKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGTRGRDTICEDINECAIKNICGGL
KVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSCSKTCGAGDQKQTRSCSNPSRE
APHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKTGEEPKKDFSSFNGLSITDGETS
RRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKKYSSTKMEMQDIIDCNANIDIE
KNLWDVYDVLAEHSICNYQVKDLEMKADRIQAEITRCNNRGWYSTILDAII*
>TRINITY_DN22594_c0_g1_i1.p2   type:internal   len:268   gc:universal
TRINITY_DN22594_c0_g1_i1:801-1(-)
DFQDPTLNLETAHNKLIYGLGSGPMWWLLLFCGIIESLRFRQLGLDFGKLTLENAGDLDFGKGFL
PKTEEGIVQMKIKELKNGRLAMLAVSGALTQSMAYGVYTFPWTLPAPNAVQSRTALRAVEFKGQS
GPFGALDVAEPKTLELTDRVKAVIKSKGSLDRESYREIFLQPKAETVFAGGLVGSEYHGWGTYQW
DPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPSLDLENAHNKLIYGL
GSGPMWW
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN15599_c0_g1_i2.p1 type:internal len:206 gc:universal TRINITY_DN15599_c0_g1_i2:1-
615(+)
KALTSSDPAERTKKLQSELANGRLAMIAIIAMFVQNGITGTTGPEMWRGGGAFENELGVQAPVG
FYDPVGFTLDGDVQSFRRRRSVELKHGRISMLACMGYLTPEIVGKWPGYISPSLGLKFTDIPSGLDA
IGKVPALGVAQIVAYFGFVEFAAGFDDYKPGGTPGDYGWKALTSSDPAERTKKLQAELANGRLA
MIAIIAMFVQ
>TRINITY_DN98420_c0_g1_i1.p1   type:5prime_partial   len:286   gc:universal
TRINITY_DN98420_c0_g1_i1:1007-150(-)
LHKEARSTVINKMASRLLNSLGKVGVGLAVVGGVVNNALYNVDGGHRAVIFDRFRGVLPDVSG
EGTHFLIPWVQRAIIYDVRSKPRNVPVITGSKDLQNVNITLRILFRPVASELPKIYMSLGEDYDERVL
PSITTEVLKAIVARFDASELITQRDNVSLNVQEALVERCKAFGLILDDISLTHLTFGKEFTEAVELKQ
VAQQEAERARFLVERAEQQKQAAIITAEGDAVGAQLLSDAFKKAGNGLIELRKIEASEEIAQNLSG
SRNVVYLPDGQGMLMNLPAP*
>TRINITY_DN35672_c0_g1_i1.p1   type:3prime_partial   len:668   gc:universal
TRINITY_DN35672_c0_g1_i1:2001-1(-)
MLKFYLSLILTWTIATAINSQNINRPFQNVYRQYNSNQNNQQKQTQVRNGHYPSNRNSNFRSRN
SKYYSMPTTNAGPNRCQGGQVCCPGWSLNPSTRMCTIPTCRNPCGYGFCRSPNLCQCNNGRFG
SRCGGQGGGHIGCQQRCMNGGQCQGDQCNCRQGYVGLSCEQPICAQPCLNNGRCIGPNRCAC
PYGYTGQRCELDHRIGPCFTRIEDNMCRGQLVGVKCSRDSCCATVGAAWGVPCSRCPSKRECKL
GFFKDPRTGKCEDMNECRGIPNICAMGTCINTIGSYRCECGQGRVYNAEKFECSAVETFKGCFSD
HTCRAGTQLSNRLGKSKCCCGKPGRSFGLCDKCPVKGEEAYRSLGCSDDVGNIGEGGDGKDGV
GDGKEVKPEVNECKLNPGLCEFGKCVNINGGDFKCECNDGFEPTDDGKRCAAKQTFDKCYIDH
SCNGKSVEGVSQKSCCCGKPERAFGFCKKCPVKGSDAYRTLVCSDDQGNIGEGGDGKGGIGDDD
NDDHDDDGGGDGRDDKKEVDECALNNGLCEFGKCVNIDGGDFKCECNDGYEPINDGKRCAA

KQTFDRCYKDHSCSVKYSNDGISKKSCCCGRPENAFGICKKCPVKGSDTYRELGCSDDQGNIGEG
GDGKGGIGDDNDGDDDDDDDDDDDDDDDDDEN
>TRINITY_DN79_c0_g1_i1.p1 type:5prime_partial len:478 gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)
VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLDKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN
EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*
>TRINITY_DN1559_c0_g1_i1.p1 type:complete len:311 gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)
MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*
>TRINITY_DN10890_c0_g1_i1.p1 type:5prime_partial len:963 gc:universal
TRINITY_DN10890_c0_g1_i1:3568-680(-)
NEFFAGFQISPKILDLSEKDKPRKIILENTVPIVCQDGTENCRVLVELAQTNTDNFMDYCTISFKPGP
AGQTNEVEVVAKRDFIDDGDQTMFLKLHIPDHIDPVDWNCYKNITDIKIKTTDVKTSRCLSTGDP
HITTFDGHYYNHYLVGDYTLVESKARKFKIHVRTWKCGSVSCNCGVAVQEGDDVIVVDMCRDR
VPRARFASTVEPQKGTTIERNNNGKSFLLSFPSGAFVRITCKRNYADFQIQLPSDDFQNTVGLCGTF
DRNRNNDLTSKSGQVFNSRRGRNGPNGFTESWKLSSRDSLFYYRGGPKKCLATRPKSYCTCKETC
CGKRTVNCDYEGYSQRPKYKQGFRGWKSLTFPGAEHCGRRKRRSLDDSSVVLPDDGDTAIYDYK
PAPVIPNEGRFPTPKGKSESQARNTCTRKIKESTIGKACLKIITGFDVQDYIDQCVIDVRVLDDFIVP
VESAVTNMASNCEEETLRDVKKYWKKDAEGKDAPPQDIGDSACLNDCSDNGVCRNGTCICND
GFITDDCSMTKGQQPVLLGIPNDGLCDIRRQDCVRTRVTGDYFIDSSTLQCKATEAKVSDTTPPEK
FGSGVIEQGQLLSFREIGCLLPKVPLVINGNPDYSRGKPTGAFYISVSNDGNNFSKEDTTYPDSKSET
VMVVYDSKCMDCTKEGTCSWKKNSCKMNEYCFANGDPKPDDWCQVCDPDRSRTEFVKRLDN
QPPVFNGGSTQYIFKGQQWKYELPAEDPEKQPLMYSFIGENHGMKISSAGILTWTPTELKVYSFKV
EIEDPCGLKASQEFKVDVRNCSCEGQNGGRCEWLKSNTPEDHKCVCPDGCKGISCTDPIDGRICR
VKVSPQSGDDDSSSNGAVIAVIIILLIILIVIAVVGFLIIRYLKKENKDVNMKNIKTTIADAGKNAKD
RVADAGRNAKDRVIPNKNAKDDINANDKMRSSIRINLRPQSGTSAK*
>TRINITY_DN1183_c0_g1_i1.p1 type:complete len:193 gc:universal TRINITY_DN1183_c0_g1_i1:54-
632(+)
MAAIRKKLVIVGDGACGKTCLLIVFSKDQFPEVYVPTVFENYVADIEVDGKQVELALWDTAGQED
YDRLRPLSYPDTDVILMCFSIDSPDSLENIPEKWTPEVKHFCPNVPIILVGNKKDLRGDENVKWELS
KMKQEPVKIDQGREMTDKINAFAYLECSAKSKEGVREVFETATRAALQTKKKKGKKCLIL*
>TRINITY_DN12304_c0_g1_i1.p1 type:complete len:195 gc:universal
TRINITY_DN12304_c0_g1_i1:1971-1387(-)
MSSSSEPTKFKMVVVGAGGVGKSALTIQLIQNHFVEDYDPTIEDSYIKQVVVDGAICILDILDTAGQ
EEYSAMREHYMRTGEGFLCVFAVTSLKSFQEIDNFRTQALRVKDAETVPMVLVGNKVDLPKRDVS
TKHGNEKAQSFGIPYVETSAKTKQGVEEAFFTLVREIIADRRRRESQMKNDMKNKKFKCTIL*
>TRINITY_DN119684_c0_g1_i1.p1 type:complete len:662 gc:universal
TRINITY_DN119684_c0_g1_i1:2182-197(-)
MKLEIILFTLLVALTVHCSEKKDDSKKDVGTVIGIDLGTTYSCVGVFKNGRVEIIPNDQGNRITPSYV
AFTEEGERLIGDAAKNQLTSNPENTVFDAKRLIGREWGDKAVVHDMKFFPFKVVEKGKKPHVQ
VNVKENEKKTFAAEEISAMVLVKMKEIAEAYLGKKVTHAVVTPAYFNDAQRQATKDAGVIAGL
NVMRIINEPTAAAIAYGLDKKEGEKNILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDF

DQRVMDHFIKLYKKKKSKDIRKDNRAVQKLRREVEKAKRALSTQHQARIEVESLFDGEDFSETLT
RAKFEELNSDLFKSTMKPVQKVIDDSGLKKKEIHEIVLVGGSTRIPKVQQLVKDFFGGKEPSRGINP
DEAVAYGAAVQGGVLGGEEDTGEIVLLDVNPLTMGIETVGGVMTKLIGRNTVVPTKKSQIFSTAA
DNQQTVTIQVFEGERPMTKDNHLLGKFDLNGIPPAPRGVPQIEVTFEIDVNGILRVSAEDKGTGK
KEKITITNDQNRLSPEDIERMVNDAEKFADEDKKVKEKVDAKNEFESYAYSLKNQISEKDKLGGK
LSEEDKGVLEKAVDEAISWMDSHQDASVDELKEAKKKLEDVATPIVSKIYQQQGGAPPPPGGEG
GEEKEDKEEL*

>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)

MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*

>TRINITY_DN252_c0_g1_i1.p1 type:complete len:182 gc:universal TRINITY_DN252_c0_g1_i1:1409-
864(-)

MASTLVILLICFVGGTFAQGCPRNKTCRCDNVIKYTTGNQPNKDLSSFPGLSLSDGPTARSYVQTY
TKMYIDDKIKEAKCDNNKLRAVDMDLNPIVMSLKTMNTNYVDKKTEMQDIIDCNPNLDIESDL
WDVYDVLADHCVCISQIHKDLKMKMEMVEAEMKRCDERGWYRSMLESFSIIS*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN22219_c0_g1_i1.p1   type:5prime_partial   len:427   gc:universal
TRINITY_DN22219_c0_g1_i1:2-1282(+)

YISKDYCKGKKNPSVCTLHIHNEFSQIKHFQHQTPVTSENAPGIILAHGQAGDALTGAGNVWFSR
NGGYNWTRIAKGSHHYAIGDNGNLIVLVPKFNSTGKTLIYSLNQGRNWYHNEFDLFDENITIHG
LAAEPHSKERSFSLWGHRLVKGKKLWHTFTVNFRKLITKECQEEDMKTWYPHINNGKDGCFLGE
RTIYKVPHKDSLCYLGRSYKPEKKVEKCSCTKDDLECDYGYERNRAGNCHRNEDIPLIEICKNGEE
MQEAFSKGYRRVPGDNCIAQSSNDEVVRFIDEHKKCVPNKEDIFGDFNRERAEVIREEEEEKEKK
MDETQKATKTKKSKKKGPNWPVIILSIILMCIIIGGAYWYWRKNYRPNNVHHVMYNASSFDNVG
MDNNDGDVDADDLFDPRPKSLREYHDETDAEDEQLLLP*

>TRINITY_DN15248_c0_g1_i1.p2   type:3prime_partial   len:250   gc:universal
TRINITY_DN15248_c0_g1_i1:748-2(-)

MARVWAFALPAAVALGTRLAAAAPLNFTLLSAPVKLRYGEVYNRMQVPMPLPPDVVSRFADGD
KVMAVSGFEVDMVRIAADGTESRVPLYDHYVHHYVLRIGRRPSMESLFDAAAKDRASAQMLTG
CHAMTGADLHAFDARLGGQAAVFGSGAGAEYRGTPNSLEAPFRRLLHRPEGWAPVLHIINTNR
PVAGQTYSPLAECPCTAQRRINASAGTIDGQVSRPPIHCSPEFAATGNPSCQLATYTGGL

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)

MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD
NGFKGPKGDPGKLPPGNRIEDFKGETGGSLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN785_c0_g1_i1.p1 type:complete len:289 gc:universal TRINITY_DN785_c0_g1_i1:1062-
196(-)

MIIESKMLSSIMLKMIFVVVFLCGITLSEGIEKCDLQLEPIGCFKDDVWKRTMPEQILNERDPLNKV
YNNRMINWKKFDTYLPGFICRCAEAAFKKGYRVIGMQFWGECWSGPEAHLHFDSLGAADTCSN
QKFEREYDNITQCVSAIGMDSTNYVYRIAPTVCDTHYEPVGCFKDEQKVPRPMPHYISTDRDYSL
KIFSGKTIDWRNWNTYSPEMICRCATLAKSKGHALFSIQFWGECWSGPETNGYMRDGVTTDCRG
KDFEMCPCNGYHCVGKAYTNYVYRLGHHH*

>TRINITY_DN1534_c2_g1_i1.p1   type:complete   len:547   gc:universal
TRINITY_DN1534_c2_g1_i1:1914-274(-)

MHRVNSSFVKVAERTSKLCGNLGIKNSKIPSSLIARSSSTDTTDGVGESEPGFLEMVSIFTENAHSIT
LDKLLSAKPAPGKRAEDTGVREKRIKGILDIIKPTNTALAVNFPLRRDNGDYELITGYRAQHSHHR
LPCKGGIRYAPDVNLDEVKALAMLMTFKCAVVDVPFGGAKGGICIKKSDYSENEVEKITRRFTVE
LARKGFIGPGIDVPAPDMGTGEKEMSWMADTYAMTLGYGDMNSSGCVTGKPISQGGIHGRMSA
TGRGVYHGIDNFANNEEYMNLIGLKPGLKGKTFIVQGFGNVGLHSCRYLHRYGARCIGVIEHDG
SIMNPNGIDPKDLEDYKLDNGTIVGFPGATDTTEDLMVAECDILVPAANELQITAKNAPHIKAKII
AEGANGPTTPQADKILQQRKRLVIPDLYINAGGVTVSYFEWLKNLNHVSYGRLTWKYEESSNYNL
LSSVQESLEKHFGGNIPINPSSTFLQSIQGASEKDIVHSGLAYTMERSANRIMKTAKDYDLGLDVRA
AAYVVALEKIFNTYSEAGLTFT*

>TRINITY_DN3619_c0_g1_i1.p1   type:5prime_partial   len:1653   gc:universal
TRINITY_DN3619_c0_g1_i1:5108-150(-)

ISSRKKSKMGKWDDFVTVAIFVFTANYVVCGEIDKRSSLNTIDFNRYQNALVSGGCSIRRRGQTFN
LNNQYCSMKVVVNGIKDIFTSRPNAKIPNIKDATRNFIDPDIFKACQSIRFTENTASTVKILISEVTN
GESSSPLLPWISIMEVTVDVEITVDLTSQKEATVGLVFSETTFPAELTGNHLPSTPGLQIRITKENAYD
DINYSILQLATLEMSLEDFLRGIGVKTEYMLDDLDFRVRGPINGVVAEGLWTVRINGDNFFNQISD
KSKKFWSGSNAFLFCQYNKEDEKGPKCSLNSEQISGTDWWNLVTTVDMPNKFLGGGSFDDSPIS
VLQSSKVEIDVAFSTEVKQKLLPFSERSFSVLYGSRRNRQENQAYVSTGTCLRYLRESFQYTYSDGNS
YGTTLIPYIFNVCLEQNSVTGTFLPAFSLPLDMLIAIVMHQPMRDALKTKIDNYGILVKSMKYIGSQ
TCATFTSLTEKHHEFIKDQFPFENTVVTVCGDDNMATITAEGREKVLDAETSVDAKLMSEYYTDD
PAATVISTGWFLTGSVKIFDIEYVLEKTGQHFMGEGELEWFPSFKKFALTDTVFKAPSSSQLYLTLEG
TTHINHNKFKFELVSRSENTNDEIPASLALCLRKEGGTSDEIFSIFYKEKYKELPYSFEKTVISVQKDV
NFYTNHQASGTGIIFRCQNVEIKHKEEGVRITGSHAGSVRAMLETLVFGCDASGEGSKKSSSCQVI
KNGFGGGDTLEGNWYGRVAMRDLRLSALINKPFIVADGIEIKSGLQHVLIQNTNDEVQEMLRNQ
ISGQIDLGSHTTTASIIFNDDTAVFELHEYTSETSFNLYGVGGISQNRIFKSKTAMTNTRWSNLEIQG
NIILGSAPGFEIDIENDFEGAVRQFMYGDTTKNRFYACAPTKKEFTMSLVLQAFGAYDGTSLFSTTI
LKEVCVAYHNDENDWDIKFQGFKAKQGLRLYGTITSLFGYEQLKANVKLDGDVEVNIELPVLKF
GARTKVNERTGQTETRYAFTFSKMKSLEDYGPTFTAIFNNRNSFGQGKLTGHIKLPMYEGQVTLTF
NSYGHINQDIQLVNSESGDSKIKPGKINLSGTLLLGNVLTMGASRFTFSADLLLAAQANLAESCTK
EFTEINKRSALALTEIGNQYTSVLSNITSMETQIRLVNGNRLKRSIQELETQMLTEIRKVKKQNQEH
CKPLKLSGFKLEKSCGKRNSLQNATCLKFIDDAFDATDTTCLEESKNNRKGAHQNALKKNNIIRA
SSLSLREKRTCYDLFDQINNHYKAARDFLLTAKSTDLPNKINSLQSLGTYFSLRVAKYRTVNPMGL
SSIPNDVCIDFELEYNTGTPHTETKKLCALDSMFDDLGKRIVTEYIRGKEDERNEVYNEAITKAAH
EIYMANLIKKKNEDDYELCKRVQRARKREKVFVPEFFRSGYKNQAFRTNAENTESMMKYYAPW
NVMKRNNPMTIMSNSKPNRYLRMNHVEGSGPCSDARNKIESYGTMVDYMKTWVDNYQKGLA
KFKKINENVVRGLKKRNMTQHQGFAEFTKETESQLNQLNHFAPSYMKNELNALINPKQQDQLE
NFLYQTSTDTSNLIKKSFPQNDQTFSNLSNMLIQQFSGNKTLDEMAPSVKEMEKMMTALNKRTLV
CHDEL*

>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)

MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*

>TRINITY_DN757_c0_g1_i1.p1 type:3prime_partial len:218 gc:universal
TRINITY_DN757_c0_g1_i1:653-3(-)

MNAALVAIVFLLLSTVYGKTTPTPSTDKATTPTPKSPVCPKQGKDFYVQIKVLSLGEYVPEMSRVES
QSFQDIREKIYGCELKTYEDYDFYEDVIILDIQNSTAGFIVAFAIRYTKEGDGHLNRLSQAVASGKLC
DMEVSPKFFECKELDPSILYPMANCPAPCGGDLNCWPTCDATCCGTQEQTIYIPAAAPPPPPPPPP
PPPPPPPPPPAPQMVM

>TRINITY_DN578_c0_g1_i1.p1 type:complete len:429 gc:universal TRINITY_DN578_c0_g1_i1:379-
1665(+)

MDMKALFLSLALVVVAWNTAYGSSNHKLVAYWGQNAVYNLKRDKQYWEKDLSYFCDNSKYDV
IVLAFMHVFFDRRQKDALPGLNFAFHCETSMSADLPFLLRCPQIEAGIKRCQANGKKVILSLGGA
TGGYGFANDGEAKTFAHTVHNLVLAGNKMQNIRPFGSAVLDGIDLDIEGGSNVGYATFVRELRA
LQGSNHYLIAAAPQCPFPDHFLGPSPGTAFGEVADLFDEIYIQFYNNYCHTGDAKQFYPNFQQWI
NFSKKSNGPKIFIGMPSHERAAFGQGYWRTPAEVAAIYENVKNEPGFGGFMLWDASFDDVNRFN
GRPYSDSIAALFKNGGGPRPTYRPNTMRPNPVTRPTPKTRRPNTQRPVTQGPVGPVSCSAGADGL
IPHQDCSKFIECSHGRATVKSCPPGLKFSSAKKYCDWPRNVQC*

>TRINITY_DN10907_c0_g1_i1.p1 type:complete len:206 gc:universal
TRINITY_DN10907_c0_g1_i1:1010-393(-)

MAKKAYDYLFKLLLIGDSGVGKTCLLFRFSDDAFNTTFISTIGIDFKIKTVEVDGKKIKLQIWDTAG
QERFHTITTSYYRGAMGIMLVYDITQEKTFDNIAKWLRNIDEHASEGVERMILGNKCDMEEKRM
VSKEKGEGIAREHSIKFFETSAKENICVEEAFMQLTQDILRKHQAGATHEQSPSGVVIEKDSHNRS
KGGMNCCN*

>TRINITY_DN1280_c0_g1_i1.p1 type:complete len:426 gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)

MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*

>TRINITY_DN598_c1_g1_i1.p1 type:5prime_partial len:745 gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)

RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*

>TRINITY_DN164469_c0_g1_i1.p1 type:complete len:184 gc:universal
TRINITY_DN164469_c0_g1_i1:45-596(+)

MDGLFDISSWFDEVKRMNKRQLYYQVLNFGMIVSSALMIWKCLIVVTGSESPIVVVLSGSMEPAFF
RGDLLFLTNDNTKPIRAGEIVVFRIEGREIPIVHRVIKVHEKDSGYVKFLTKGDNNNVDDRGLYVP
GQMWLEKKDVIGRANGFLPYIGIVTILMNDYPKIKYFILAALGFFVLIRKE*

>TRINITY_DN614_c0_g1_i1.p1 type:complete len:183 gc:universal TRINITY_DN614_c0_g1_i1:194-
742(+)

MGQMFGKLFSGLFGKKEMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNISFTVW
DVGGQDKIRPLWRHYFQNTQGLIFVVDSNDKERVTEAKGELAKMLGEDELREAALLVFANKQD
LPNAMNAADLTKQLALHDLKSRSWYIQATCATSGDGLYEGLDWLSTELKKKKN*
>TRINITY_DN1613_c0_g2_i1.p1   type:3prime_partial   len:1062   gc:universal
TRINITY_DN1613_c0_g2_i1:70-3252(+)
MWLRIYFALAAFALTANAYDFKTCAKTYKKIGCYEDKNHDMVMLENYRDTRRDDFHQLSPVYW
KKFNQTMHSLACECIKIAQSKGMDYIQIGFYGECKGGKDFASDIITRKEIPNDQCVNTKFKKCVTA
SDLDCVGKAHTGYIYLVEGGRDRNERKVDGGYSYWSEWTECSSSCGRGIQERERQCDSPLPKGG
GKDCSEIGEPFEIKDCNLRECPVDGGFTDWSQYEKCSATCGGGFQKSTRSCTNPAPKFGGQDCVG
DVEKTRDCGTKPCPVDGGWSLWDDYGECSKECGGGVQVSKRSCTNPSPAHGGKECVGVDERSR
ECNTFACPVDGGFGKWSEYDTCTATCGGGTQTSTRQCDSPSPAHGGQDCAGESERVKECGMKP
CPVDGGFSAWSDYSACPVTCGGATQTSTRTCTNPTPAHGGEKCVGKTTREKSCANNPCPVDGGF
TAWSEYGSCSEECGGGIQESKRSCTNPAPEHGGKDCVGDTERTKQCNTQACPIDGEFTVWSEFTK
CTVSCGGGVQESRRSCTNPAPEHGGEECFGPVMRTRACNTKKCPINGGFSKWGEYSVCSEECGG
GTQSRTRTCTNPKPQYGGEPCSGDSLEERDCNVQPCPVNGKYSSWSAYSKCSASCGGGSQKSTRT
CSNPAPAHGGAQCQGDAERTRECGTKPCPVDGGLTKWSEFGACTASCGGGEQTATRSCTNPSPA
HGGKGCLGELEKVRECGTAPCPVDGGFTDWTQYGECTKSCGGGSQTSTRTCTNPSPAHGGQEC
DGSTMKTRTCNSDPCPVDGGFSKWSEFDKCSTTCGGGYQTKTRSCNNPAPAHGGKSCSGETEMT
QSCNSNPCPVDGGFTAWSKYSICSATCGNGIATSTRSCTNPAPANGGDDCVGLKIKSKKCFVKHC
PVNGGLTDWSEYDTCTEKCGGGTQTSTRSCTNPRPAHGGDDCDGELERTRSCGMDPCPVDGGL
TKWSDYDQCSKPCGGGYQTSTRTCTNPLPAHGGKECTGETDRTRECNTHHCPVDGGLSQWSSY
GKCSDECGGGIQERRRSCTNPKPMYGGKPCTGLFMET
>TRINITY_DN932_c0_g1_i1.p1 type:complete len:475 gc:universal TRINITY_DN932_c0_g1_i1:1940-
516(-)
MGFKFLELLKPFISVLPEVSKPERKIQFREKVLWTAITLFIFLVCCQIPLFGIMSSDSADPFYWLRVIM
ASNRGTLMELGISPIVTSGLIMQLLAGAKILEVGDTPRDRALFNGAQKLFGMVITVGQAIVYVMT
GMYGEPSELGAGVCLLIIIQLFCAGLIVLLLDELLQKGYGLGSGISLFIATNICETIVWKAFSPATVNT
GRGTEFEGAIIALFHLLATRQDKVRALREAFYRQNLPNLMNLLATVFVFAIVIYFQGFRVDLPIKSA
RYRGQYSSYPIKLFYTSNIPIILQSALVSNVYIISQMLSAKFAGNFLVNLLGVWNEQGGPSRSYPIGG
LCYYLSPPESLGQIGQDPVHALLYIVFMLGSCAFFSKTWIDVSGSSAKDVAKQLKEQQMVMKGHR
EKSMIHELNRYIPTAAAFGGLCIGALSVLADFMGAIGSGTGILLAVTIIYQYFELFVKEQSEQGGMS
TLLF*
>TRINITY_DN76073_c0_g1_i1.p1   type:complete   len:107   gc:universal
TRINITY_DN76073_c0_g1_i1:794-1114(+)
MNTNVENDYDQCFIGSQLKDECHKKNYLRTTGTILLQDLLEKDRSLLQWRCEVKTSDSDLEKRIC
YHHEKIYLTRYVGLQKYCCDPCNMHGNRFVTSKWKDFSQYF*
>TRINITY_DN11097_c0_g2_i1.p1   type:internal   len:222   gc:universal
TRINITY_DN11097_c0_g2_i1:665-3(-)
GEAKVCESSRLGDSKHLEQPSTLEFDANENHVRGSDLMTTGSRIQKSEPHWLSKEALQSGVSPIHS
TPLPVSKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFIRNLAIEHKGISIFCGV
GERTREGNDLYSEMAEAGIIQVDGGYCYDLDSKDKQFVKDFTFTSSSVTLVYGQMNESPGCRMRV
AHAGLTVAEFFRDVFKQDVLVL
>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)
MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT

PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK

>TRINITY_DN3052_c0_g1_i1.p1 type:complete len:362 gc:universal TRINITY_DN3052_c0_g1_i1:45-1130(+)

MAHLSQEQRNELKKNAESIVAPGKGILAADESTGTVGKRFAGINVENNEENRRLYRQLLFTADKS
ISNYLGGIILFHETLYHKDDNGKPLVELIKELGINPGIKVDKGIVPLHGTNNEGTTQGLDGLAERC
KQYKQDGCTFAKFRCVIKINTPLGVPTDIAIQENAQVLARYANICQANGLVPIVEPEILIDGDHNL
ATSQRVTERVLACVYKTLVDHHVYLEGTLLKPNMVTPGQSCPEKASAEEVGVATVKALRRTVPA
AVPGITFLSGGQSEVEATKHLDAMNKTDLARPWALSFSYGRALQASVLKAWGGKKENVAEAQK
VLLHRAHLNSLASLGKYEGENASGATGDSLFVANHQY*

>TRINITY_DN10385_c0_g1_i1.p1 type:5prime_partial len:968 gc:universal
TRINITY_DN10385_c0_g1_i1:2-2905(+)

TATPKGGSEPEGNAFKKPSSDNPNESPLPIDGSEKKPAQKPLEPVESKNPLEKPSFSNTPESANKPK
EEEAKNPLETPEEAKSPLSLPEEETKKPLDQPEIGKNPLEEPLNEGKNPLEQAPNPQEQPKEGKNP
LEQPPEQEGANPMEKPKSSNTPSENPLGVENPSEEGKNPLDKPNDNAPEKQSDDKFPLQQTGEK
NPLAKPTTEKNPSLEGKNPLEQPNDNAPGKQPDEKNPLQQAEGEKKPLAKPATEKNPLQEGKN
PLEQPQEGKNPLEPPQGGAKPQELPNNVPNTPLGKQPEDQTPLKKPNEKPLEKPQEGKNPLDQP
EEGKNPLEQPMGEKNAAGGKPGDENPLNKPEDAKKPPKIPQEAKNPFGKPSEEPSEEAKNPLEK
LEEGKNPLENPQPQETPSNKPEDNNSPSTPGEADQSQSKPLGNTTAPGSPNGAEAPKKPTGIPEK
VSGTEEGEGPSSPAPAMSTSLKNGLAAHNALRGIHGSKRMKPNEDLEAKSREIAASIADAGGKM
ENKKRQDIADFGENVNVNCDTSSKTVEEEATLKWWSQDFCDTGPSTISDKRMGAGTQVIWDAT
DEIGMATSAFMKDGKLCYVVALYTPKGNDRKTYDQNVFQGDFDFETMCDDKNNTLQTAKEL
DKDKNQEATEPQTPSSSESTPAGSEPNQTTGGGAAQKPGGGAVQKPGGGAAQKPGGGAGQKPG
GGADQKPGGEGSGKPGGGEEKKPEKGQPEAAGGKGLDQKKFAQEGLEAHNKLRKIHGSPPMA
LDDQMNKEASEYAAKIAKLGELKHSTSAERNDDGENLAYVCGSLANGYKGEQPTASWYNEVCE
YNYPFSNEVVGSTLHFTQVVWKQSVKLGMGYAKGTKYGMTCYYAVGRYRIAGNMMGNFQENV
QKGSFSKATTCSEFWKMLNVTPDKRSKVRTHVGHALMNKSKKHKTPGSTANIQTMKGTLKKKG
YIQQKRAKSKKA*

>TRINITY_DN1070_c2_g1_i1.p1 type:complete len:209 gc:universal
TRINITY_DN1070_c2_g1_i1:1431-805(-)

MSGSEFGNPLRKFKLVFLGEQSVGKTSLITRFMYDSFDNTYQATIGIDFLSKTMYLEDRTVRLQLW
DTAGQERFRSLIPSYIRDSSVAVVVYDITNINSFQQTNKWIDDVRAERGNDVIIMLVGNKTDLAEK
RQVATESGEAKSKELNVMFIETSAKAGHNVKQLFRKVASALPGMENTPDKKEDLIEVQLKDTPLD
QNQQETAGCAC*

>TRINITY_DN5397_c0_g1_i1.p1 type:internal len:161 gc:universal TRINITY_DN5397_c0_g1_i1:2-481(+)

CSVVCDYSPWQDTQSCTKTCDGGVLIQSRTERSFNKVESREGSTPCNTQACGSGLSEERFRKCNA
NQCGTNTGLQEVYKVCNAANCRFQGIDYTRNQEINIRTQACTTACDYTPWQDTTACSKSCNGG
VLVQSRTERTFNKIETRDGTTPCNTQACTQEL

>TRINITY_DN11662_c0_g1_i1.p1 type:complete len:398 gc:universal
TRINITY_DN11662_c0_g1_i1:75-1268(+)

MALSRPVYIIAAKRTAFGSFGGSFKGLTATQLGQKAAAAAIVDAKLDPSLINSVIFGNVAQSSSDA
AYVARHIGLGNDIPFASTALTVNRLCGSGFQAVVNGAQEVVLGEADIVLAGGTENMSQCPFAIRN
ARWGINLGETREIEDTLWSALTDSFIQTPMGITAENLAEQYGITRLECDEYALASQQRWAAANDN

GLFKAEIAPIEVKQKRKMVPVDKDEHPRAGITIEALNKLPPVFKKNGTVSAGNASGICDGAAALV
LASEEACKQHNLAPLAKVVSYGISGVEPSIMGIGPCPAIKQALSRADMSLSDMAFIEVNEAFAAQY
LAVEKELGLDRSITNACGGAIALGHPLATSGARILTHLVHTLKRTKENHAIGSACIGGGQGIAVLL
ENVM*

Band 10

>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)

MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML
AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG

VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIVRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN
IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE

QPIFSVNPAVVEVYENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS
FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL*

>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)
WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS
KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN3986_c0_g1_i1.p1   type:complete   len:446   gc:universal
TRINITY_DN3986_c0_g1_i1:252-1589(+)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEEDA*
>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)
MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK

FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*
>TRINITY_DN776_c0_g1_i1.p1   type:5prime_partial   len:201   gc:universal
TRINITY_DN776_c0_g1_i1:692-90(-)
RAGKTPHTASMVKNVCSKTYVTPRRPFEKARLDQELKLIGEYGLRNKREVWRVKYTLAKIRKRA
RDLLTLPEKDNRRLFEGNALLRRLVRIGVLDEGRMKLDYVLGLKVDDFLERRLQTQVFKLGLAKS
IHHARVLIRQRHIRVRKQLVNVPSFIVRLDSQKHIDFSTNSPYGGGRPGRVKRKNMKKGTGGGDG
DEEDED*
>TRINITY_DN36_c0_g1_i19.p1 type:complete len:223 gc:universal TRINITY_DN36_c0_g1_i19:826-
158(-)
MIKLAIIVTVIAACVFESSAARCYVGYSAKGLPLAIGVRDVECGKGFDYCTTIKYRLGGIEVTQGNC
ARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTTGLIT
KFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNIDNC
NKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-
5942(+)
MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREAE

CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*

>TRINITY_DN80458_c0_g1_i1.p1   type:5prime_partial   len:157   gc:universal
TRINITY_DN80458_c0_g1_i1:519-49(-)

SKSAKMGRMHANGKGISGSALPYRRSVPTWLKLTEEDVKDQIYKLAKKGLTPSQIGVILRDSHGV
AQVRYVTGNKILRILKAKGLAPSLPEDLHCLIKKAVAVRKHLERNRKDRDSKFRLILIEARIHRLAR
YYKVKRVLPPNWKYESSTASALVA*

>TRINITY_DN2217_c0_g1_i2.p1   type:complete   len:254   gc:universal
TRINITY_DN2217_c0_g1_i2:884-123(-)

MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*

>TRINITY_DN3036_c0_g1_i3.p1   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i3:1643-3(-)

AFAGAARASPARQGSVARRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN
NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
SPLAKQSSVARRALDQSSRYADLSLTEEDLIR

>TRINITY_DN3991_c0_g1_i1.p1   type:3prime_partial   len:219   gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)

MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ

>TRINITY_DN286_c0_g1_i2.p1   type:3prime_partial   len:106   gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)

MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN

>TRINITY_DN1616_c0_g1_i2.p1   type:3prime_partial   len:3398   gc:universal
TRINITY_DN1616_c0_g1_i2:218-10408(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCNPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME

EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS
IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAE
>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)
MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*

>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)
MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPKQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE
LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*
>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-
2618(+)
MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*
>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN

GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN95248_c0_g1_i1.p1   type:complete   len:124   gc:universal
TRINITY_DN95248_c0_g1_i1:197-568(+)
MAPKTKKVSKKKSTLNFNIDCTLPVEDGIMKVDDLKKFLQEKIKVDDKLNNLDQITLEVAKTKVT
LVSERPFSKRYLKYLTKKYLKKNNLRDWLRVVASSHTDYELRYFQINNDEEEDEEDNE*
>TRINITY_DN240_c0_g1_i4.p1   type:5prime_partial   len:397   gc:universal
TRINITY_DN240_c0_g1_i4:1327-137(-)
LKAAAAFSGVSPFALVQPRARVPSRSRVAMVRRSPLPVLGLAGAACFFARSPCFIPGGPLRRQPWA
AAAGSAAVLGATPALADPIGDAAKKLADASYPFAKEVDWNSGIYLQAPGKLAPLEALKAIDKMI
VLGSQADPKLLKAAADAHHKAISSASGPTGMTSKADWEAVNAALGRVFASVPESSVMDVYNAV
AKITDPGVPAYLKSKVNGADAEKAYAAFLEFKDVVKANQVSSAAAAPVPAAGGDKIGAAAQAL
ADQSYPFLKSVDWTSDLYLKPLPGVSAAKALKAVDKAIVMGSAMDGNLLKAAASAHHQAIGSI
DAAGVTSAADYASVTAALGRAIASAPTSKVMDVYNAFAGIVEPSVPNTLFSKVDPLAANAAASA
FYEFKDVVKAAQR*
>TRINITY_DN1112_c0_g1_i1.p1   type:complete   len:200   gc:universal
TRINITY_DN1112_c0_g1_i1:740-141(-)
MSTLKLQKRLAASVLKCGKKKIWLDPNEASEIANANSRQNVRKLIKDGLIIKKPQVVHSRARTRA
NLEAKRKGRHKGFGKRHGTANARMPEKVIWMNRMRVLRRLLRKYRESKKIDLHLYHELYMKA
KGNVFKNKRVLMEYIHKKKAEKKRSKELSDQAEARRNKVKAARTRREERQAQKRAEILQAYAK
EDTAATPAS*
>TRINITY_DN116_c0_g1_i1.p1 type:complete len:297 gc:universal TRINITY_DN116_c0_g1_i1:72-
962(+)
MGFVKAIKNKQYFKRFQVKFKRRREGKTDYYARKRLVTQDKNKYNTPKYRLIVRFTNKDIVCQIA
YAKIAGDVIVCAAYSHELPRYGVKVGLTNYAAAYCTGLLVARRLLHKLNLHETYSGQTEVDGDEY

NVESVDDGPAAFRCYLDIGLNRTTTGARVFGALKGAVDGGLEIPHSVSRFPGFDSESDDFNAEVH
RNHIFGKNVGDYMRALQDEDEDAFKRQFSKYIKEGVKPDNIEGMYKKCHAAIRADPAHKPSGK
EKFKGKRYGRKKMSFAQKMDSVRQKKEAFKRKMEQDED*
>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-3209(+)
MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE
LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN477_c0_g1_i7.p1 type:3prime_partial len:1130 gc:universal TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN1386_c0_g1_i1.p1 type:complete len:596 gc:universal TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL*

>TRINITY_DN250_c0_g1_i5.p1 type:complete len:452 gc:universal TRINITY_DN250_c0_g1_i5:131-1486(+)

MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYP
RIHFPLATYSPVISAEKAYHEQLTVSEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDV
NAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARLD
HKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVDAEDEEEGDEY*

>TRINITY_DN5633_c0_g1_i1.p1 type:complete len:848 gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)

MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*

>TRINITY_DN1613_c0_g2_i1.p1 type:3prime_partial len:1062 gc:universal
TRINITY_DN1613_c0_g2_i1:70-3252(+)

MWLRIYFALAAFALTANAYDFKTCAKTYKKIGCYEDKNHDMVMLENYRDTRRDDFHQLSPVYW
KKFNQTMHSLACECIKIAQSKGMDYIQIGFYGECKGGKDFASDIITRKEIPNDQCVNTKFKKCVTA
SDLDCVGKAHTGYIYLVEGGRDRNERKVDGGYSYWSEWTECSSSCGRGIQERERQCDSPLPKGG
GKDCSEIGEPFEIKDCNLRECPVDGGFTDWSQYEKCSATCGGGFQKSTRSCTNPAPKFGGQDCVG
DVEKTRDCGTKPCPVDGGWSLWDDYGECSKECGGGVQVSKRSCTNPSPAHGGKECVGVDERSR
ECNTFACPVDGGFGKWSEYDTCTATCGGGTQTSTRQCDSPSPAHGGQDCAGESERVKECGMKP
CPVDGGFSAWSDYSACPVTCGGATQTSTRTCTNPTPAHGGEKCVGKTTREKSCANNPCPVDGGF
TAWSEYGSCSEECGGGIQESKRSCTNPAPEHGGKDCVGDTERTKQCNTQACPIDGEFTVWSEFTK
CTVSCGGGVQESRRSCTNPAPEHGGEECFGPVMRTRACNTKKCPINGGFSKWGEYSVCSEECGG
GTQSRTRTCTNPKPQYGGEPCSGDSLEERDCNVQPCPVNGKYSSWSAYSKCSASCGGGSQKSTRT
CSNPAPAHGGAQCQGDAERTRECGTKPCPVDGGLTKWSEFGACTASCGGGEQTATRSCTNPSPA
HGGKGCLGELEKVRECGTAPCPVDGGFTDWTQYGECTKSCGGGSQTSTRTCTNPSPAHGGQEC
DGSTMKTRTCNSDPCPVDGGFSKWSEFDKCSTTCGGGYQTKTRSCNNPAPAHGGKSCSGETEMT
QSCNSNPCPVDGGFTAWSKYSICSATCGNGIATSTRSCTNPAPANGGDDCVGLKIKSKKCFVKHC
PVNGGLTDWSEYDTCTEKCGGGTQTSTRSCTNPRPAHGGDDCDGELERTRSCGMDPCPVDGGL
TKWSDYDQCSKPCGGGYQTSTRTCTNPLPAHGGKECTGETDRTRECNTHHCPVDGGLSQWSSY
GKCSDECGGGIQERRRSCTNPKPMYGGKPCTGLFMET

>TRINITY_DN1369_c0_g1_i1.p1 type:3prime_partial len:1577 gc:universal
TRINITY_DN1369_c0_g1_i1:93-4820(+)

MRIQLTIFVTFSIILVSGQNSPPGICSTWDGSHYQTFDSYSFNYHGTCSYALALDCRPGSDDFAVHV
ENDEKCDNHGGTDCTRAVSLYVNDIEYKLGSNNTVLVDGKSNIVLPYFNEGVRVSKHAEYYFIDA
LEGKVVVKYDGRSSIYVQLDSSYQAGVCGLCGNFNGNKKDDLKLPGDKGLTKSLKEFGKSWEKP
RIGQVCKEVTEEHFDQCTNKSKMLVYYAEKECEILRTSSEFKKCHKIVDPTPFYEKCREDLCLCGS
GDKYCKCDVLEQYTRKCAHYGTVLEWRQQNLCYKNCTGNKVFSECGPACSSVCSAIGSKSVCK
DACIDGCHCPPHTSLSGDKCVPDDECPCEHNGDMYDHGDVINMKCKSCKCNGGKWKCNPLP
CDGEASVYGNGHFVSYDGKTYNYPGKCLYLTYLSDRSFAVYLDRTSCDSLACHMNVMILFRGD

RIKLSASNSTLALEVNRNVKSFPYISSTGYRMYRFSTVFVRFEATNGIKVDWDTYSRLHVLMPHSL
KGKVFGLSGNFDFKTKNDFLTPRKDLAHSAIEFGNSWMMYSSRLNCSALAPDYRMTSCEANHQ
VAKYAESKCSILMSSLFRECHKVVDPFIYYENCKDDTCECNGDSKCYCSVIAAYSKACSSAGKPTE
GWRKYTPCEEKCSNGMVFTECGNSCLKTCDDQTDPNPFCEKECVEGCLCPVGQVLDKITEQCV
DIKHCGCTYGNRTISNGGTVAKDCNTCKCTKGVMVCTKKECRDKKAICSDGKEWSSCMSPCPK
TCQTKDDICPETGLDCIEGCQCKKGYIESANGTCVELSKCPCYHNGKEYQETQTISKDCNTCKCT
AGEWSCTEKLCDATCSVFGDPHYKTFDGKIFDFQGKCGHVMLTDKCANNDNATENIRISVKSST
CGSQGVTCTREITLNYHDTVVHMKRGARKIDIVSNKRQDHEKDQVKVYRHAGIYVHVLTPMGV
SILWDNATRLYITAPPSLSGKICGLCGNFDGSETNDFVTYQGDTAGNAVSFGDSWRTENNCPLTKE
IEDTCHNRKHRLDPSKRECAVIKSDVFKKCHTLVDPVPYYDRCVFDACGCDSIGDCDCLCAAIGA
YAKECIDEGVYINWRKGHNICEKEMCCPTNMTFVPKGTGCPKTCKYPNGLHHCPTKYVDGCQC
PEGLVQNNDANGDVTCVRPEECKVCKLDGKIYNEGEVVLYKCKECVCRDGKMTCSGNYCPTTL
PPTTTTESTTTPSTTPETTIPSTTTTESTTTPTTEPPTTTTTASTTTASTTTESTTTEATTTTKPTTTTTEST
TTESTTTQSTTTPSTTPSTTMKPIDTCVYSNGTHNVTLERGDVIQVNECTKKTCVKDEVTGLHEIKV
TTTQCENSTCDTTCEASKSNRAILVKTPGECCPQCKKPEDLCDNPNEVPCNSTYCIPKSWFCDGN
KDCSNGRDEECCPNYCKVEGEIKKPGEVWTNKEKCLTCKCEGYYTKCRRMECPELDCPEERQVK
SEGECCPHCKPQTEPPTTTTEMTTTTTESTTTPATTPSTTSKETIIITEEPKSTTASPQEKCDCKVLQPV
GVSDGRIPDNQMTANSV

>TRINITY_DN3545_c0_g1_i2.p1   type:5prime_partial   len:236   gc:universal
TRINITY_DN3545_c0_g1_i2:3-710(+)
SGPGRSSCRPILSVIKISKINNIDSGKVEGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGK
HCDGVSFETRECNINQCPVDGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGKPCDGVS
FETRECNINQCPVCPEIVGTYDISSRHHYGGAKYGTVVFKKLSNSKTVEAYYTINDGRRGVLTCKIE
SAQPDQCSGHGYYGKYFTYYKNRCQIIWSNDVIYTKQNC*

>TRINITY_DN332_c0_g1_i1.p1 type:complete len:246 gc:universal TRINITY_DN332_c0_g1_i1:940-
203(-)
MGALTYIFCLFLISSSFAKEEESCRTYAGGQVYPDERKSGVEHALHWSKAQISKPAPHWEGKAVV
NGEFKDLKLTDYKGKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFKKINTEVIAVSVDSVFTHLAWTNT
PRKEGGLGKMKIPLLADLTKQISKDYGVLLEDAGHTLRGLFIIDDKGVLRQITMNDLPVGRSVDE
TLRLVQAFQYTDKHGEVCPAGWKPGSDTIIPDPKEKLNYFNKQKEEI*

>TRINITY_DN577_c0_g1_i1.p1   type:5prime_partial   len:269   gc:universal
TRINITY_DN577_c0_g1_i1:1086-280(-)
PCQNCADMAVGKNKRLSKGKKGSKKKIVDPFTKKDWYDVKSPSNFQIRNIGKTVVSRTVGTKIA
SDGLKGRVFEIAQADLNKDEVAFRKFKLICEDVQGRCVLTNFHGMTMTTDKLRSLVKKWQTCIE
AHVDVKTTDGYLLRLFAIGFTKKRQNSVKKTAYAKTTQVRAIRKKMVEIITREVSTKDLKDVVNK
LLPDSMGSDIEKASQGIYPLHDCYIRKVKCLKKPKFDVHKLMEMHESSGTTTTDATGGVVVERPD
NFEPPVLDSV*

>TRINITY_DN673_c0_g1_i1.p1 type:internal len:100 gc:universal TRINITY_DN673_c0_g1_i1:1-297(+)
AKSHTLQVYEFNCKLDIYKFIRMSSPDKPSYMAFFGAMGATSAMVFSSLGAAYGTAKSGTGIAAM
SVMRPELIMKSIIPVVMAGIIAIYGLVVAVLIAN

>TRINITY_DN194146_c0_g1_i1.p1   type:complete   len:190   gc:universal
TRINITY_DN194146_c0_g1_i1:165-734(+)
MKTVLASQTVTIPEDVSVSVNGRTIVVKGPRGTLKRNFNHLNLVLTRVNKTTIRVDVWFALRKHL
ACLRTICSHIENMMKGVRFGFLYKMRSVYAHFPINIIVNDGGKVVEVRNYLGENYVRVVKMREG
VICKPSGNKDEIIVEGNDIELVSNSAALINQCVKAKNKDIRKFLDGIYVSEKTTIVPMTE*

>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-
372(+)
MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*

>TRINITY_DN2126_c0_g1_i1.p1 type:complete len:114 gc:universal TRINITY_DN2126_c0_g1_i1:55-
396(+)

MAPVKKKTAESINSRLALVMKSGKYTLGYRSTLKTLRQGKAKLVIISSNTPQLRKSEIEYYAMLAKT
GVHHYTGNNIELGTACGKYFRVSVLSITDPGDSDIIRSMPSEQETK*

>TRINITY_DN7504_c0_g1_i1.p1 type:complete len:414 gc:universal TRINITY_DN7504_c0_g1_i1:87-1328(+)

MAKIPGGIVVEMDGDEMTRVIWDMIKTKLIFPFVDLDIKSYDLSIQNRDNTDDKVTVDAAEAML
KYNVGIKCATITPDEKRVEEFNLKKMWKSPNGTIRNILGGTVFREAIICKNIPKLVPGWTKPIVIGR
HAHADQYKATDFLVPEAGTLEMKFTPKGQTEPTISYVVNNFAGAGVAMGMYNTDKSIRDFAHSS
FQCALEKNYPLYLSTKNTILKKYDGRFKDIFQEIYDNEYKGKYEAKGIWYEHRLIDDMVAYALKVE
GGFVWACKNYDGDVQSDTVAQGYGSLGMMTSVLMCPDGKTIEAEAAHGTVTRHYRLHQKGQ
ETSTNPVASIFAWTRGLAHRGKLDGNERLMNFAKLLEEVCVATIENGSMTKDLAICIKGMKNVTR
ADYLNTTEFLQKIADNLTTKLNLSHL*

>TRINITY_DN141338_c2_g1_i1.p1 type:complete len:720 gc:universal
TRINITY_DN141338_c2_g1_i1:2850-691(-)

MSEADETETFAFQAEIAQLMSLIINTFYSNKEIFLRELISNSSDALDKIRYQSLTDSGVLESNKDMKIE
IIANKDEKTLTLFDTGIGMTKADLVNNLGTIAKSGTKAFMEALTAGADISMIGQFGVGFYSAYLVA
DKVEVVTKNNDDEQYIWCSSAGGSFTVKRDTINEPIGRGTKLVLYMKEDQLDFLDEKKLKDIIKK
HSQFIGYPIYLETQKTRDKEVSDDEADEEESTDKKEDEENEDKEDDGPKIEDVGDEEKEKEKKKKT
IKENYTEMEQINKTKPLWTRNPDDISTEEYAEFYKSLTNDWEEHLAVKHFSVEGQLEFRAILFVPK
RAPFDLFENKKQKNSIKLYVRRVFIMDNCEELMPEWLNFVKGVVDSEDLPLNISRETLQQSKILKV
IRKNLVKKCLELFAEISEDKDNYKKFYEQFSKNVKLGIHEDTQNRNKVAELLRYSSSASGDELTSFK
DYVSRMKENQKDIYYITGESKEIVAASAFVERVKKKGFEVLYLVDPIDEYAVQQLKEYDGKKLVCV
TKEGLELPEDEDEKKRQEELKAQFEDLCKVIKDILEKKVEKVVVSNRLVDSPCCIVTSTYGWSAN
MERIMKAQALRDTSTMGYMAAKKHLEINPEHQIMIALKKKIEADKNDKSIKDLIILLYETSLLSSG
FSLEDPQNHSSRIHRMIKLGLGVDDDGDVEEIETDDLPPLEGEGDDDEDKARMEEVD*

>TRINITY_DN3078_c0_g1_i1.p1 type:complete len:1109 gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)

MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL
EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*

>TRINITY_DN1989_c0_g1_i1.p1 type:complete len:546 gc:universal
TRINITY_DN1989_c0_g1_i1:150-1787(+)

MRGNNRGSGGQRKSFDGNRTPNNNSNRGNYGGNKRNWSPSPYKKPQETPPKVSKDEPKHLTP
PVASMSKPTQKNTPDVIITKEVDIPKAQPDFMRHNDPVGKVPMNMKNDMAPPVMQGNPNNG
QGNNELENTKKEEKAPVNRVKYTGREGEKKFSGRCRLFIANMNNGTTEEDLRELFGQFGETGEV
FVNKEKGFGFIRFDFRHNAEIAKSTLDKTEFKGRNIQVRFATHASALEIHGLDRFASNEFIEKAMSI
FGKVERAVVVCDDRGRSKGYAIVEYEWKKTAQKVLDRFKGEMFVLGRLPKPVFAKPLSQVDEEE
GVREEDLERLQGIEGEREFPPRFISPSSFEYTWAKKWRDLYIEEEDKKARLDQELRDSRYKLELEME

SALQEQEALKMREGLIIELRSRQEELRRLEEGLMRRQEITARITRDQDDRKQEFNRSRDESQYPME
GMADTNQSDYNIQQQTEFDTHQGNFDVNVRQDLMHQNANIPISGVAGFPQHVVHRMPHGIIQ
AGGKPLPPPPAIPGIHLSNVYPYIDEALPFDE*

>TRINITY_DN3339_c0_g1_i1.p1 type:complete len:131 gc:universal TRINITY_DN3339_c0_g1_i1:31-423(+)

MVRVNVLNDALNSICNAEKRGKRQVLLRPSSKVTVKFLTVMMKHGYIGEFEVIDDHRSGKIVVN
LTGRMNKCGVISPRFDVKLKDIEKWASYLMPSRQFGYIVMTTSAGIMDHEEARRKNTGGKILGYF
Y*

>TRINITY_DN15847_c0_g1_i1.p1 type:5prime_partial len:166 gc:universal
TRINITY_DN15847_c0_g1_i1:3-500(+)

NRQGATQYKMSEQTERAFQKQPTIFQNKKRVVGKESKGKEQRFSKSVGLGFKTPREAIEGTYIDK
KCPFTGNVSIRGRILSGIVQSMKMKRTIIIRRDYLHFIKKYQRYEKRHKNLAAHMSPCFRDVQLGD
LVTVGQCRPLSKTVRFNVLKVNKSTSAKKSFEKF*

>TRINITY_DN7659_c0_g1_i2.p1 type:complete len:359 gc:universal TRINITY_DN7659_c0_g1_i2:82-1158(+)

MASAATDNRKVALITGVTGQDGSYLAEFLLDKGYEVHGIIRRSSSFNTGRIQHLYKDRTAHLEGN
LHLHYGDLTDSSCLLHVVSKAQPTEIYNLGAQSHVKVSFDLAEYTADVDAMGTLRLLEAVKICGL
MHKVKFYQASTSELYGKVHEIPQTETTPFHPRSPYGAAKLYAYWIVQNYRESYNLFGCNGILFNH
ESPRRGETFVTRKITRAVAKIHLGLQEELVLGNIDSVRDWGHARDYVEAMWLMLQQEQPETYVIA
TGETHTVREFVEKSFGLIDVKIRWEGTGENEIGYDAASNKVRVRISSKYYRPAEVEYLHGNPAKAE
KELGWKRKVSFDELVKEMIDSDIALMKKDPEA*

>TRINITY_DN172571_c0_g1_i1.p1 type:complete len:104 gc:universal
TRINITY_DN172571_c0_g1_i1:30-341(+)

MSGRGKGGKGLGKGGAKRHRKILRDNIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKVFLENV
IRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYGFGG*

>TRINITY_DN22077_c0_g1_i1.p3 type:5prime_partial len:151 gc:universal
TRINITY_DN22077_c0_g1_i1:520-68(-)

SVCGTAVVQLGDPPPPPCAPLALPRLSLRAMSSAAASSSKASKGDKFSMGRESDKAPIGKGGATR
TKKVLRESIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKSFLENVLRDSITYTEHARRKTVTALDI
VYALKRQGRTIYGFGV*

>TRINITY_DN6390_c0_g1_i1.p1 type:3prime_partial len:1941 gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)

MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQCFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC
VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCHYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYCH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG

LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN162_c0_g1_i1.p1   type:5prime_partial   len:206   gc:universal
TRINITY_DN162_c0_g1_i1:654-37(-)
LSTNCGPSPASFFKIIKMGIDLDHRNDKKKHRKEPVSQDPYLRLLVKLYRFLARRTNAKFNEVILK
RLFMSKTNRPPVSLARVTKRMGKPGCEGKICVIVGTVTDDNRLLEVPKLKICALRFTEGARTRILK
AGGEILTFDQLALKAPTGQNTLLMQGPRNSREANRHFGKAPGVPHSSTKPFVRAKGRKFEKARG
RRASRGYKV*
>TRINITY_DN22492_c0_g1_i1.p1   type:complete   len:1026   gc:universal
TRINITY_DN22492_c0_g1_i1:171-3248(+)
MLQKTLIYTLLGCWITLLSHAAIVRKSGGDDFSLKVGKPQKPIGQPKLKDAKKEVKEEPTSDVIPQ
QDENNDTTDRQKHKEQVSPDAVESGMPPRYPLKAMSAEVSAHDNEIGGCRDHPRASRVCKNC
GNRNFAAEHESYTYSYCRKSCRHCDPELSSFHTFWRLRAASQFDPTWMVKEIEFYPKPTEYDNLA
TDPQRAYASSSYPGFKPSYAFDGNNKTSWYPSGWGLHDNNDDWIGFEFPVAVRVHAIRMVLDE
MHRTAAPQRIFVEASDKKDGPFTTKWKISNPTYEVDNVYKLLQCPVLWRKFESDEGSWCFRLIAK
FETWEVARNECTVEGGDLATIATEEEKRFLTDELNLGGFAWIGLNHKDQAYYWQDRANSSYKN
WKAGWSYSEVQKQNLNCVATDQDGFWYNFHCTNKYYFVCKKKLEPQAAPREDLILKAWPYEP
EIPPMIFLYPNITVPVINTKNLEPGVFPDENGKVPEEEEEETTADDLFYEQTVEHLKEKGLKPSEEIS
NDVDKEETDYTQQLNKIALKTQSRDDFRNETESDKLKFNSTEAVKQAKDLEEQKSVNLDQNFN
QYNSTDGVKQQSQPVVAAPSDGPSGNSGDNNTLPRIVNGKPVESPSVNPNNVGKPNTPVASPES
PENTDFAQPGDTTFTTPTPTVQSGDPGNAEKSNPQKATNDQQAGGQQPNQESGSNANQSQVQ
QQSQQQQPQQQQQQQAQNNNNNQNGQQNASNQQNNNNNNNNQNNNNNQQQNNQQQ
NNQNNQQQNNQNNQQQNNQNNQQQNGNNNGGNNNDLPNGLPPVMGGPAPQKIPEPPAP
KEGTKDNDSEKSVGGQADVMPDDAPSNDNDGGDETTTGNEENNDESNNNNNNNNNMNNV
NNNNDNNQSRTLDKPLPNQGKNSSETVDKATNVGGTNKQENNDFMKLQKAKPGIRTHKIGHK
KSAGLKKTHMKNVVSPLKKVKTEKKINKQVKTVKKIKAVKVKHHKKALKKEVVIHKSEDDEEE
GSGSGDEGDQEDVDDILESITNGLW*
>TRINITY_DN2113_c0_g1_i1.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i1:5257-146(-)
MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIICDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET

QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM
GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN909_c0_g1_i1.p1   type:5prime_partial   len:313   gc:universal
TRINITY_DN909_c0_g1_i1:1-939(+)
RRVLFRSLTFIESLRLSRLVNKKNKTFMEMSEKGGIYNDNEREMNFTGNSDYESGDLGFCGWFLTV
LSFIIAVCTFPLSLFFCIKIVQEYERAVIFRVGRLLSGGARGPGLFFILPCIDTYLKVDKRVISFDVPPQE
ILTRDSVTVSVDAVTYFKIQNPVASVCNVEDAQRSTKLLAQTTLRNELGTKNLSELLLEREAISRNI
SNILDQATDPWGVKVERVEVKDVRLPPMLQRAMAAEAESSREARAKVIAAEGEMNAARALKEA
SDVISESPQALQLRYLQTLTTISAEKNSTIIFPLPINMLQSMMNK*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN464_c0_g1_i4.p1 type:complete len:717 gc:universal TRINITY_DN464_c0_g1_i4:2167-
17(-)
MLLHFGKSLHYLKFGTLFWRLKLVAIPRDTSNIINNIFLESKSQRYIRMSANILNEYSQNVGKMEDE
ISGLTSQLNALKRKLNGEIEDEDCSDQLKELRSKNQKLHYQKNIIQRALKKEQEKADSKMLNVQ
AALNVLFESAIRSAYPQIPNPPVALTIAHNPKFGDYQCNSAMAISKMLQKLTGEKIGPHVVAKTIV
ENIPSNSFIKKVDVAGPGFINLHLEKEFLKGVLEKVIKEKVYPPGIGNKKKVVIDFSSPNIAKEMHV
GHLRSTIIGESLSRLLEFVGHDVLRLNHVGDWGTQFGMLIAHLEDKYPDYKTVSPPIGDLLLFYKA
SKKRFDDEEDFKKRAYQRVVDLQGGNPDVRKAWQMICEVSRNEFQKIYDRLDVTLIERGESFYN
DLMSKVVENMKKSGICQKSDDGRWVAFAPNMKVPLIILKSDGGYTYDTSDMAALQQRLQEEHG
DWLIYVVDAGQGDHFKQIFGVGEAAGWYNSSITRVDHVAFGVVLGEDKKKFKTRSGDTVRLIDL
LDEGLKRSMEKLLEKGRDKELTKEELLAAQESVAYGCIKYADLSHNRVMDYVFSFDKMLDDKGN
TAVYLLYAYTRVRSIQRNAKKGRSEIEEYMKSNSLHFDHEKEWKLAKLLCRYPEIVVRCLDDLTLH
LLCEYLYELSSTLTEFYDACYCIEKNRETGEIISVDMNRIALLESVARIFEAGFHILGIKPISRM*
>TRINITY_DN3202_c2_g1_i1.p1   type:5prime_partial   len:263   gc:universal
TRINITY_DN3202_c2_g1_i1:949-161(-)
WSQGNRGCYIHTQEVARGNNARRHMCWVFSKCSKNPDVNLKSCPIESGLCVKENGLDQNSGV
RKLHHYDVTTPYAEADCFKRCSTYRYGEITGCEVIWNQGNRGCYLHSQPISRGNGIARHMCWVF
SKCTTSKVPATTAPKALSMTDTYFGKTELDPIIGVKRIGCYRMHRHRFRKKVNMKGSMDPLSFIDR
VKQCRDIVNNKEAEFEIFGVSRYGSQCDFYLPAEVKNEKPKPDSEDCHFDTMGGDTAYYVYKLCK
DEKQC*
>TRINITY_DN2230_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN2230_c0_g1_i1:796-50(-)
MKLNVAYPANGTQKLLEIEDEIKLRSFYEKRMAQELSVDFLGDEWKGYVVRITGGNDKQGFPMK
QGVLTPGRARLLLSKGHSCYRPRRTGERKRKSVRGCIVDGNLSVLNLVVIKKGDNEIPGLTDRVIP
RRLGPKRVGKIRKLFNLSKEDDVRQYIIRRPIATPEGKPDPKKPKTAPKIQRLVTPQRLQRKRHVK
ALKRERANKAKLEAATYAKLLAKRHKEAKEKRHQEHMKRRRLSSLRESKSQ*
>TRINITY_DN197343_c0_g1_i1.p1   type:complete   len:124   gc:universal
TRINITY_DN197343_c0_g1_i1:399-28(-)

MAKLKAHELRGKRKEELCHQLTELKTELQQLHVAKVTGGAASKLSKIKIVRKSIARVLTVISHNQ
RENIKKFYKTRKYKPLDVRSKKTRAMRRALTTHEASRKTLRQIKKDKHFAIRKYAVKE*
>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-
559(+)
MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*
>TRINITY_DN4329_c0_g1_i1.p1   type:5prime_partial   len:735   gc:universal
TRINITY_DN4329_c0_g1_i1:2240-36(-)
LTFIESLRLSNNMKEKLDYVVLCFFSWMVVGSCVDRGNFKTCKDSSFCRRNRAIQAGGSPFALLS
DTLVFGSDSITGDIYNTNTNVSFKLTIDTLVKETARIRITELSPIRPRYIVQESLVREPQHIKYEKVKSD
SDGFKVKFGSSLMQVTFKPLKVDFFDAEGVLLMSLNNKGLLNFEHYRVKNSSPQDSVEKTNESEK
GEDADQNSENEGKENTEEEKPENTNTVREDINEEGMWEETFKDHTDSKPYGPSSVGFDVSFIGFE
HVYGIPQHADSLSLKQTSGGEPYRLYNLDVFEYELNNPMALYGSIPFMTAHSAYKTVGIFFNNAA
EQWIDISSSKSVLSSLISFFKSGDTPEVDTHWMAESGIIDLFVMLGPKPNDVLNQYSTITGTQTLPP
MFATAYHQCRWNYNDEDDVKNVDAGFDEHDIPYDVIWLDIEHTDGKKYFTWDALKFPDSKRMI
DHIASKGRKMVTIVDPHIKRVGGYRIHSEAESKQFYVKKKDGADYEGWCWPGSSSWIDYTNPDA
RNWWASKFFLDQYQGSSLDLFTWNDMNEPSVFNGPEVTMHKDAIHYGDWEHRDVHNIYGML
QHMSTFEGHLLRSDGKARPFILSRSFFAGSQRAGAHWTGDNTADWGHLKMSIPMLLSLNVAGFP
FVGADVGGFFGNPDSEMLVRWYQMATFFPFFRAHAHIDTRRREPWLFGEENTQLIQQAIRKRYM
ILPYIYTLMRNSFDTGMAVMR*
>TRINITY_DN1194_c0_g1_i1.p1   type:complete   len:555   gc:universal
TRINITY_DN1194_c0_g1_i1:101-1765(+)
MAARLGGGMMQPQIILLKEGTDSSQGIPQLISNINACEVVAEAIRTTLGPRGMDKLIVDKNGKSTI
SNDGATIVNLLDIVHPAARTLVDIAKSQDAEVGDGTTSVILLAVEFLHQIKSLVEENVHPQILIKGY
RKATKMALEKIKEINVQIKKDDQEEMRKLLQRCAETALSSKLVAGHKEFFGKMVCEAVMHLDEL
LPLNMIGIKKVKGGALEESQLITGVAFKKTFSYAGFEMQPKKYKDPKIALLNVELELKAEKENAEV
RVDNVEEYQKIVNAEWNILYEKLEKIVASGAKVVLSKLPIGDVATQYFADRDVFCAGRVVEEDLL
RTMKACGGSIQTSIHNLVDNVLGTCEDFEEVQIGCERYNLFQGCPRSKTVTLILRGGAEQFIEETER
SLHDAIMIVRRALKNDAVVAGGGAIEMELSKHLREHSRSIAGKEQLIIAAFAKALEIIPRQLCDNA
GFDSTTVLNKLRQKHAQGGKWFGVDILKEDIADNFEAFVWEPAIVRINALTAASEAACLVLSIDE
TVQNPKSDMSGDDNPITGKRGRMPQMGR*
>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-
2701(+)
MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*
>TRINITY_DN2637_c0_g1_i9.p2   type:5prime_partial   len:340   gc:universal
TRINITY_DN2637_c0_g1_i9:3-1022(+)
GYCARDALVACRAQLSDAGVPSAEETDAHIEELKAAAQRLVAGAAAAVVFATTAAGDAFAYPIF
AQQNYKEPRDATGKIACANCHLASKLIEAKMPSEVLPDTIFKATIEIPAKYEKRYQPIADGSKAKM

NVGAIAIMPEGWKLAPRDRLPKALKKEMKGLAWAPYSKEQPNILVAGPVPGERYETMVLPILAP
DPATNPNVVFDKASIFFGGNRGRGQVYPEGNQSNNNQFFSAATGTVLAVEGTKVSVTLADGTVA
TQEVLPGATIVVKAGDAVQKDQPITTNPNVGGFGQAEKEVVLQDMSRVYAYCALSVSIFLSQLSF
VLKKKQFEKVQLAEGF*
>TRINITY_DN72959_c0_g1_i1.p1   type:complete   len:216   gc:universal
TRINITY_DN72959_c0_g1_i1:54-701(+)
MGRRPARCYRYCKNKPYPKSRFCRGVPDSKIRIFDLGKKKTGVDDFPKCVNLVSDEYEQLSSEALE
AARICANKYMTKTAGKDAFHIRIRVHPFHIVRINKMLSCAGADRLQTGMRGAFGKPQGTVARV
HIGQPLISVRCKDQHEATAIEALRRAKFKFPGRQKIFTSKKWGFTRWDREEYLERRQDGSIKPDGT
NVQYYPCKGPLKDWKWRESR*
>TRINITY_DN535_c0_g1_i1.p1   type:5prime_partial   len:162   gc:universal
TRINITY_DN535_c0_g1_i1:712-227(-)
GKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFRALGCDVLACSVDSHFSHLAWTQQSRKKGGLGQMK
IPILSDLTKSISRDYGVLLENDGIALRGLFIIDDKGILRQITVNDLPVGRSVDETLRLIQAFKFTDEYG
EVCPAGWKPGADTINTGKAHEYFEKQ*
>TRINITY_DN167384_c0_g1_i1.p1   type:complete   len:316   gc:universal
TRINITY_DN167384_c0_g1_i1:1004-57(-)
MDQLTLGGTLKGHNGWVTQIATTPQDPNQILSASRDKTLILWELTRDDQMNYGVPKRSLTGHN
HFVSDVVMSSDGQFALSGSWDKTLRLWDLSAGITTRQFVGHTKDVLSVAFSADNRQIVSGSRDNT
IKLWNTLGQCKYTIQDESHSEWVSCVRFSPNTQNPIIVSCGWDKMVKVWNLTNCKLKTNHFGH
AGYLNTVTVSPDGSLCASGGKDGKAMLWDLNEGKHLYTLDGGNIINSLCFSPNRYWLCAATGPS
IKIWDLESKSIVDELKPEIISISTKAKAADCISLAWSADGQTLFAGYTDNLIRVWQVTRM*
>TRINITY_DN72625_c0_g1_i1.p1   type:complete   len:1964   gc:universal
TRINITY_DN72625_c0_g1_i1:173-6064(+)
MKLAFNIFTISLLIGNTIAQNNDVVQVCKSQADVVAVLDSSGSVGVQDYEELKKFVGFVANLLTIN
ENGNRLGVVTYSETAEVDFNLNEIYDSDQYGREALTRLSVRPREFKTNHYAGLKVGSDLLFNKAA
GARDNAAKFLIFTTDGRNNFDETNNRNRASQLATQLKADGVNIYVIKAEVMSDNNGRLDSRLYS
TDPNKFYRFINRFGEITNENFLDEVGLEFCELVQLPDNQQATVREDRNIGTLVTTIRAPGLNNPTFE
LIPQDNLPFIVDPLTGEIKTIGLLDFEQVQQYVFQVRVRATNPDVEKIITVTINVLDVNDNDPIPETA
NYRMSVAETTPLGQRILTVKANDPDGGTNGNVEYFLISGGDGKFEVDQATGEIRLIGQLNKRIKD
TYLLTLEARDMGIPTRKAPITVAIDVTSLNNFPPQFNEMSFVRTIPENFGAGTVINAAATDRDGDT
MVYSLIGENIPFSIDQNGLITVSGNIDFETIPNNVFQFQVQAEANGDLVTQDVIITITDINDNVPVYS
MTTYSGSINENSAAGTVVNFDNVIIATDADKTNANNMITYNIIDGNDGDRFQVTKNERGEAVISL
KSTPLDQETQGQYRLTLQAIDNGVDPRSLEMNSLLIIDVIDQNDNDPIPEESVYSIAVAETSPVGQSI
LTVRANDADSGMNGKVEYFLISGGDGKFQVDQATGQITLIGMLNKRVKESYTLNIEARDMGVPT
RNAPITVNIDVTSLNSFLPEFAGAGDAFERTIPENFGSDTVIKAAATDGDGDMVFYSLVGDNLPFA
IDQNGMITISGSIDFETIPNNPIRFQVKAEANGDMTLKDVVITITDVNDVTPEFTQQVYAGKIEENS
QTETVVRFDQPVIATGDDKSPANNVVTYRIVDGNVDNIFKIVKNAQGEAVISVNNAGLDREILNQ
YTLTIEAKDNGVDPGSLSSTTQVIIDIEDVNDIPPLINTSENKAVGEADFTATISEDSPIGTSVVKVEA
TDPDSNNDDLIFTIANDVPVPFTIDPKTGLITVSGPLDADDQDEFEIAVTVSDGVNNSTAIVKVNIA
DLNDNKPIFTTDTRDITIPLDTPNGQEIIKFTGSDADKTSPNNQFEFSLVDGDGKPFTITPDGSLIIN
GPLMPGDYMLTVKIMDKGTNPGPLSNVIIYNVKVVDTNDPPTFQNNEQTVTISENTADGTDVITF
AATDPNGDAITYEIVNPGSVPFEIDPITGVIRKMGLIDFESPVRSYTLDVKATDAKGKSTMGRVFVQ
ITDFNDNTPTFGPGNTDNFILTEGVYSNQLVSSFTATDLDATSPNNVFEYTLVGAPSMFLLTTNPNT
GAADLTVNGDIDAEQNMSFNFIIRATDKGNPALSMDYPVTITVGDINDNAPVFAANTPESIDLME
GDFNNQIVATFTANDDDTTAPNNLVDFELVGAPDFFKLIVNPETGTADLVIDGNVDIDGLDPTINF
IVRAKDGGNPALVKEFPLTVNIADINDNAPVFTLEAYNQVINENTPIGTKVVEVRATDSDSGPNG
DITYRIVDGDGTFGIDPKTGDITVLKNTDFESGVRSYEFTVEASDNGNPKQSATAKVKIDIRNLND
NDPIFTSIPITGNINENRPAGSVVQNIQPVNGILNQNNVKILREPPPGAQETEGVGFDAPFEIDPVT
GEVKSTRPFDFEEEKVFTMMVQAADGDNNPMLTTMTVMVNNLNDNDPIMKKANFEITLNQDT
PVGTFVLQVQATDIDQENQTKITYSIINIDGGNMNDFTINPDTGVITLNTDLSMNTVDIYNITIQAE
DQEIQGVIRRSTALAEIKILRPAEAEPDISTLCTNSCDIPEERLKCLDYSKFEITRKFNGTCYVDKLKA

AIADVKNNTMEIMNLNASFLECRNKVQNEITNPNTQFPVNGLFDLHRKCTVAIECKLEQLAFNL
MRKTTELTNNLKAEEEGFSMYDMSLSAFFQHISKMVSMSKSSRVD*

>TRINITY_DN1559_c0_g1_i1.p1　　　　type:complete　　　　len:311　　　　gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)
MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*

>TRINITY_DN119684_c0_g1_i1.p1　　　　type:complete　　　　len:662　　　　gc:universal
TRINITY_DN119684_c0_g1_i1:2182-197(-)
MKLEIILFTLLVALTVHCSEKKDDSKKDVGTVIGIDLGTTYSCVGVFKNGRVEIIPNDQGNRITPSYV
AFTEEGERLIGDAAKNQLTSNPENTVFDAKRLIGREWGDKAVVHDMKFFPFKVVEKGKKPHVQ
VNVKENEKKTFAAEEISAMVLVKMKEIAEAYLGKKVTHAVVTVPAYFNDAQRQATKDAGVIAGL
NVMRIINEPTAAAIAYGLDKKEGEKNILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDF
DQRVMDHFIKLYKKKKSKDIRKDNRAVQKLRREVEKAKRALSTQHQARIEVESLFDGEDFSETLT
RAKFEELNSDLFKSTMKPVQKVIDDSGLKKKEIHEIVLVGGSTRIPKVQQLVKDFFGGKEPSRGINP
DEAVAYGAAVQGGVLGGEEDTGEIVLLDVNPLTMGIETVGGVMTKLIGRNTVVPTKKSQIFSTAA
DNQQTVTIQVFEGERPMTKDNHLLGKFDLNGIPPAPRGVPQIEVTFEIDVNGILRVSAEDKGTGK
KEKITITNDQNRLSPEDIERMVNDAEKFADEDKKVKEKVDAKNEFESYAYSLKNQISEKDKLGGK
LSEEDKGVLEKAVDEAISWMDSHQDASVDELKEAKKKLEDVATPIVSKIYQQQGGAPPPPGGEG
GEEKEDKEEL*

>TRINITY_DN15274_c0_g1_i1.p1　　　　type:complete　　　　len:1822　　　　gc:universal
TRINITY_DN15274_c0_g1_i1:87-5552(+)
MECIRRSIIRLLLILGFYTLYISSQEECKRGGCFPATGDLLVGREKQLLANSTCGLNGPSKYCILSFLD
KTDKCFYCDSRRQVDERPDGYKNSHLPKYMVTREPSKRLQGWWQSVNGRQDVTIQLDLEAEFIF
THLIMTFKSFRPRAMYIERSSNYGNDWSDYRYFAYNCRKSFPNIPRGPQRKIDDVICEERYSKVEPS
TGGEVVMKVLDPIIQKKEDPYSLKVLNLLKLTNLRVHFKELHTFGDDILGDSPKVNQKYYYALYE
MVVRGSCSCYGHAEQCIPTKGTPANVNMVHGQCNCTHNTKGRNCEMCKDGYNDEPWRPAYQ
DQLNVCRKCNCNGHTDKCHFDPAVYKATGNTSGGVCDDCNHNTAGRQCELCKPLYYRDPYKN
IFDEDVCKPCDCPSGSFGGGECETISDPNNSSALTVAGRCICKPNAQGLRCDSCKDGYWNLLES
NPDGCQSCNCDDKGTVELNKCDQQTGTCRCKRFVIGLTCSKCLEGFWNLGNTPEGCEPCNCDV
GGSLNAKCDDITGMCMCKPNIIGRKCDQVAPGSYFGNLDQVISEAENSLVRSDSSSVEIVREILNPT
DSRSFTGDGYLRVSDGTLVNFTNIRVPSTGFQTFVMRYSRPTPGSNNNVMVRITKTDGTILGGNGC
VQTNEREIILNGVLNDDNFLELGDMFCLEKDTDYSVQLVVSNRNSPNDGGVNRGVTNLDSIVM
MPNIDNLAIFQGREGMRLKSQYDLNNCRQYYLEPNGAANAPEICKKIQFSISAEINNGALKCNC
DPTGTNSSGSSDILTCQKSGGQCPCKPGVVGRRCEKCAPGYFGFDSNGCTACACNDTGSEKLFCN
GITGQCPCKNRIKGRQCNSCPSNHFGFPNCIACQCNEHSSTCDPISGECTNCKDNTAGPSCNLCA
EGYYGDATAGTEKDCQRCQCPGGSSLNQFSNTCHLKPDGKVVCNNCTEGYTGDQCDKCEDGY
YGNPLVPNGSCNKCDCNGNIDPFADGKCNAENGKCFNCINNSDGDHCENCKEGFFGNAKNQS
CRACVCNKLGTNSATSDSCDRETGQCECLPNVEGVECDRCKSGYYNIASGNGCVSCNCDKGGSL
SSHCNQLDGQCNCLNGYGGLDCTQCEDFYFGDPKQNTCQACGCNPVGSITLQCNRTTGVCMC

KDNVVGEKCDMCAPQTAGVMPQCEECHVCNDQWEDIVNDIEKNITTILTLKGSSPLNVSEIRAY
TNDIADLKNRLDKIEEDFGKQMVDPNKINRLRDKVYRFSYNLTGINRDADFYMEMVNETITRDE
KANDILDGLELRLATLQTNTEDFKNNVTKIVESNIGGALNSTRESLEKSRKAQESVNDSDLKIKES
KKMRKKIKKEIQNGDPEFEVMHNRSSEFVNNLADRENYLEGELEKLNRLLCGSDKRCGGCTKGG
CDTCGVSGENYTCDDGIKMMSMMASDKALEAKEAIDQKLENASELLENVNRAKQHVIQANISA
NMAEDKAEEVNKIGQAVLKNITTLIKDIQDFLATDFNHPNASKDLAMQTIALNISLTPDEVVELG
RKIRDAVKSLTGVDKILNESRNDYDTAIGLKEQALAAKERAIEVMNQTMAIIETLSQAEELQNSTL
AGVNVARADIEDVKDLLKKLKEKLDAADNDLQMADNSTASAEDKRNAILDQNLENREKLDLSE
KKIDEAEELGDKVQGSVDKMNEKYNATKAKLNEKEDMIEKVRARIKALADKTIKLYENADRKLR
RINKMKDSYIINEERAKDLYYEIRRLEIKEFFINTKLEGTAKCYSTCNPIIPESFCRDVYKNIAVKETN
AYAELEAEKASTTSLLI*
>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)
MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*
>TRINITY_DN899_c0_g1_i1.p1 type:complete len:375 gc:universal TRINITY_DN899_c0_g1_i1:70-
1194(+)
MVFRALLALSFCVASRGFVLPYIGWKLPSMQIPSLDMSMQFPSIFGAEDPLGQAMESNTEAAMDR
EFNMDDNMPSYKYAFKMPEVNTTSNDTKTSRKVKHKDGYKIITTETKFPGGQSVMQTMEKEGN
DTGKSFSMSNLEESIGESDLSKMNQFIPTETKGKCKCGKDEFCDPLFGKCHKKLPEGATCAMKKQ
CKAGLMCVWGKCNKGKAGDPGTFCKKKEECKGEACCVKKPGQYHAICTPLGAETAICGNKME
GFLNIFQVKQVKETCNPCKKGLKCATTGDSTYKRCLPESFVEEPKLEDKKGKDDDKKDDKSDGK
DDGSSDEDSSDDDDDEKSKLSTNAAGKIPIKLDPPNKSAESKKKKPKSKREKNAE*
>TRINITY_DN1614_c0_g1_i1.p1 type:complete len:218 gc:universal TRINITY_DN1614_c0_g1_i1:56-
709(+)
MHKTKICIWLVVRYRSNPFRGYNRRPDLKSAGAKMTKYSTEPENPSKSCKARGSYLRVHFKNTHE
TAQAIKKMHIRKAYRYLKDVVDMKQIIPFRRFNGGVGRKAQAKAHGCSQGRWPKKSAQFLLQL
LKNAESNADLKGLDVDSLVIDHIQVNRAPYMRRRTYRAHGRINPYMSSPCHIEMILAEKEQVVPR
AEEEVEVKKVSKKKLAREKLKSRE*
>TRINITY_DN11097_c0_g1_i1.p1   type:complete   len:730   gc:universal
TRINITY_DN11097_c0_g1_i1:2348-159(-)
MVRPQGVTQEHSSKPSTSERNSFVFSALSKSGCFETLPSIYDSIIQRSHWLHTEGFSMRTSSTGSQQ
TSRRAFYEELQAFSSTIPFYESLSWALLSLSGCLNPVSTPNIREEILADLEGRSVDESREVLLVFATLFD
VYKSYQNSIVVEISAILPGGILRCISLGQTEGFNSYNTVGLINYQPIVYPVGRNVLGRLFNVTGSCID
LYNEVTMDMPFVRSVSTEETHTPQKTTLIKTGANADTSSDSDCVKANALFKECTSHINVKETSLD
HLISLYCGCYMGMTSAPIAPISRLPIEAESSRAPEHMVQKLQECMGTYSGSADPSTPNQIGSKKQPF
WLSKEALESGVSPIHSTPLPISKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFI
RNLAIEHKGISIFCGVGERTREGNDLYSEMAEAGIICKDYTTMKPSDPSSNGGPTGSIDQHSVTFTR
SSVTLVYGQMNESPGCRMRVAHAGLTVAEFFRDVFKQDVLVFVDNVFRFLQAGSELSTLLGRMPS
AVGYQPTLATEMGAFQERIIAALWGSITSIQAIYVPADDLTDPAPVTIFTHLDAVSSLSRELAAKGIY
PAVDPFNSTSRMLDPQCLTSEHFRVALEVQQILQRYRELQDVIAILGIEELSEEDLKTVERARKIERF
LSQPFSVAEVFTKIKGIFVPLEATIRSFAMVLSGALDDVPEGNFYMKGGLDTLKL*
>TRINITY_DN73067_c0_g1_i1.p1   type:complete   len:831   gc:universal
TRINITY_DN73067_c0_g1_i1:3714-1222(-)

MHWFVILLLFGVIFVTVSNYEIDVLSTFELSEDIAGISPLDNKYQAYQFAADGKELLLDDSIKTEIVR
GVTNFKDFFIAVNIRHDKQKPSSLLSLQTKTTGKQKFTLWINAEEEKIGIRSHSKESKKGKKNLTFR
KVPLNTGQWHRIVLNFKKIDTDEPVVDLYVDCKFHDSKTFPFSIGHALIEDALISELRLGQLKHLP
EKDPIRFIGAMQDFRLVSNRDVHWYNRPQHCYNMMIEVKGMKAYHEPVSTISHDVDNMAAAM
KNMQKQLKLQLDEIRDIKNWLQQCTACKTAAENVLGGEIPKACSQNRCNENANCIESNGGSAF
RCECKAGYAGNGEKCGLDSDSDGVPDNKLDCLGKECSQDNCPGFPNAGQEDADEDGSGDACD
IDDDNDGVLDGDDNCQFLSNRDQKDSDADNRGDACDNCPFESNYNQLDSNNDGLGDACTRD
ADGDGIRDKSDNCPRVYNRDQIDRDSDGIGDACDNCIDIYNPIQKDVDNDNLGDACDSNVDID
NDGIQDNKDNCLYIANANQQDIDNDGIGDACDPDDDNDNIIDENDNCRLIYNPDQSDSDGDG
QGDACEDDADKDETVDLKDACPENPEIQNTNFTNYKHIMLDPEGTSQVDPEWEILNKGAEIKQ
WRNSDPGIAIGDKVFGGVDYSGTFYVHDDKDDDFAGFVFSFQSNSKFYALMWKKDKQTYWFET
PYKVTGHAGIQLKVVTSSTGPGEHMRNALWSSISIPGQTKIIWSDPSKEGWKPKTSYRWTLMHRP
SEGLVRITIKEGSQVRADTGYLIDKTYKGGKLGVLVFSQKEIVFSALQYRCTEQIPADYNPNSPN*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-923(-)

MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*
>TRINITY_DN168534_c0_g1_i1.p1   type:complete   len:226   gc:universal
TRINITY_DN168534_c0_g1_i1:774-97(-)

MIRSAIIAIVIASHLYESSAARCYVGYSAVGLPLAIGVRDVDCQKGMDFCTTVKSTIGGITVTQGNC
ARKYGQATCQFMQNSHKAMTDCKETLCRGDYCNSALIEAEQKERKRVGPYKNTLKCTTELKTR
FPLIPFATADIPIGIDECFPGTTRCVTVEYDYIYKFKTKIATRHNHFVLPVIQKMCNRPNIDDCNKW
CTIMSIHQFMHSSCRAKCCTGDNCNAKD*
>TRINITY_DN15599_c0_g1_i1.p1 type:internal len:206 gc:universal TRINITY_DN15599_c0_g1_i1:1-615(+)

KALTSSDPAERTKKLQAELANGRLAMIAIIAMFVQNGITGTTGPEMWRGGGAFENELGVQAPVG
FYDPVGFTLDGDVQSFRRRRSVELKHGRISMLACMGYLTPEIVGKWPGYISPSLGVKFADIPSGLD
AIGKVPALGVAQIVAYFGFVEFAAGFDDYKPGGTPGDYGWKALTSSDPAERTKKLQAELANGRL
AMIAIIAMFVQ
>TRINITY_DN58867_c0_g1_i2.p1   type:complete   len:354   gc:universal
TRINITY_DN58867_c0_g1_i2:80-1141(+)

MVSLYGDMMFNIENGYLEGLVRGFRSGILNRTDYLNLIQCETLEDLKLHLQSTDYGNFLSNEAGP
LTVSVIDEKLREKLVIEFDHLRIQAVEPLSQFMDYITYSYMIDNIILLITGTLHQRSISELIPKCHPLGR
FPEMASINIASTPAELYNAVLVDTPLAPFFVDCISEQDLDEMNIEIIRNSLYKSYLESFSRFCDSLGGT
NSEVMKTILQFEADRRAIMITINSFGTELNKDDRSKLYPKCGKLYPDGLARLARAEDYDQVRQVA
DCYAEYQPLFEGTGTNPGDKTLEDKFFEYEVKLNVNSFMQQFHFGVFYAYVKLKEQECRNIVWIA
ECISQRNKSKIDNYINIFE*
>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-2(-)

GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE
>TRINITY_DN21847_c0_g1_i1.p1   type:internal   len:384   gc:universal
TRINITY_DN21847_c0_g1_i1:1150-2(-)

LSADGDVTAFRRRRSVELKHGRISMLATMGYITPEITGKFPGYLSNSMSLKFADIPNGLAAISKVPA
LGWAQVVAYCGFCELSAGSSDWKTGTPGDYGFKVLTSSDPAEKEKKLAAEVANGRLAMMAIIG
MFFQDGLTGSAWGDWALYDASPLRAFENELGVQEPLGFWDPLSLSADGDVTAFRRRRSVELKHG

406

RISMLATMGYITPEITGKFPGYLSNSMSLKFADIPNGLAAISKVPALGWAQVVAYCGFCELSAGSSD
WKTGTPGDYGFKVLTSSDPAEKEKKLAAEVANGRLAMMAIIGMFFQDGLTGSAWGDWALYDAS
PLRAFESELGVQAPLGFWDPMGYVTDGDVEAFKQYREAEVKHGRVSMLACIGYIVPEYF
>TRINITY_DN4497_c0_g1_i1.p1 type:internal len:160 gc:universal TRINITY_DN4497_c0_g1_i1:1-477(+)
NELGVQEPVGFWDPVGFTNDGDVTSFKRRRTVELKHGRISMLATMGYITPELTGKFPGYISNSLAL
KFDDIPSGLAAISKVPALGWAQVVAYCGFCELSAGSEDWKSGTPGDYGFKVLTSSDPAEKEKKLA
AEIANGRLAMVAIIGMFFQDGLTGSAWG
>TRINITY_DN478_c0_g1_i2.p1 type:complete len:152 gc:universal TRINITY_DN478_c0_g1_i2:99-554(+)
MADERTFIMVKPDGVARGLVAKIIKRFEQRGYKLVAMKFMQASEDLLHQHYGALKDLPFFAGLIK
YSSSGPVLAMVWEGRGVVLQGRAMLGETKPSESKPGSIRGDYSIDVGRNIVHGSDSVETAQKEIKL
WFKDEELVAWENPLDHAIHE*
>TRINITY_DN40728_c1_g1_i1.p2 type:5prime_partial len:124 gc:universal TRINITY_DN40728_c1_g1_i1:1-372(+)
KTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGVIEPSLAVFARKYNCDKMICRKCYARLPARAVNCRKKKCGHTNMLRPKKKLK*
>TRINITY_DN195631_c0_g1_i1.p2 type:internal len:145 gc:universal TRINITY_DN195631_c0_g1_i1:2-433(+)
EEWRCMYRLDLPREDADALLIEHWVEPEAADGLGIVLHTLGQVRNSTEDDWLDVELHLVANEL
MILGAGGGARGRELTNALQEVAAPRDGGTMQIFIKTLTGKTVTLDVSASDTIDAIKAKIQDKEGIP
PDQQRLIFAGKQLED
>TRINITY_DN8227_c0_g1_i1.p1 type:internal len:135 gc:universal TRINITY_DN8227_c0_g1_i1:404-3(-)
GPGRAGGRWKPPGGGGAAARHGAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQ
QRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGVIEPSLAVLARKYNCDKMICRKCYARLPAR
AVNC
>TRINITY_DN152_c0_g1_i15.p1 type:internal len:141 gc:universal TRINITY_DN152_c0_g1_i15:2-421(+)
FGSRNIGPSHHCSHAGVAQHHQFDRRPIAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGI
PPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLDVEASDTIDNV
KAKIQDKE
>TRINITY_DN585_c0_g1_i10.p1 type:3prime_partial len:236 gc:universal TRINITY_DN585_c0_g1_i10:705-1(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKES
TLHLVLRLRGGMQIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRG
GMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD
>TRINITY_DN554_c0_g1_i3.p2 type:complete len:268 gc:universal TRINITY_DN554_c0_g1_i3:1464-661(-)
MQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDY
NIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPSDTIENVLEVEPSDTIENVKSKIQDKEGIPPD
QQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVTITRRDANFCQNLNWKNNNTRS*
>TRINITY_DN1465_c1_g1_i1.p1 type:internal len:102 gc:universal TRINITY_DN1465_c1_g1_i1:2-304(+)
QRAAMQIFVKTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQ
KESTLHLVLRLRGGVIEPSLAVLARKYNCDKMICR
>TRINITY_DN585_c0_g1_i2.p1 type:internal len:184 gc:universal TRINITY_DN585_c0_g1_i2:549-1(-)
KIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGKTITLEVEPS
DTIENVKSKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLRGGMQIFVKTLTGK
TITLEVEPSDTILRGGMQIFVKTLTGKTITLEVEPSDTIENVKSKIQD

>TRINITY_DN173718_c0_g1_i1.p1 type:3prime_partial len:112 gc:universal TRINITY_DN173718_c0_g1_i1:37-369(+)

MQIFVKTLTGKTITLEVEPSDSIENVKTKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLH
LVLRLRGGAKKRKKKNYTTPKKIKHKRKKVKLAVLKYYKVDEN

>TRINITY_DN1819_c0_g1_i5.p1 type:complete len:432 gc:universal TRINITY_DN1819_c0_g1_i5:79-1374(+)

MILQLLLILSIWNVAEGLDNGLALTPPMGWLQWERFRCITDCKKYPKQCISDSLFKRTADRLVSDG
YRDVGYEYVNIDDCWAELQRTKKGEMVANHERFSQGIKALADYIHSQDLKMGIYTDFGTKTCG
GYPGSIFYMKEDTMSFADWGIDMIKVDGCYVCGDLYADGYKAFGFHMNQTARPMLYSCSWPAY
LNDKGKPYKEIAEHCNIWRNWADIQDSWDSVLSIINYNGEHQDEIVPYVGPGNFNDIDMLLIGD
FGLSQEQCKTQFALWAILAAPLFISADLDTMQDWQKEILLNKEIIDVNQDVLGKMGKRYYNENN
QQTWMRPLSNGEMAVAMMSTRTDIPVQMGFTLQQLSLNGIYNVRDLYTHEDKGNITQGYEAEV
NPTGVVMLKLTPVKSEEVEPAVIHSGYENAEVNEIKEKIEEMYEYIIY*

>TRINITY_DN2636_c0_g1_i1.p1 type:complete len:314 gc:universal TRINITY_DN2636_c0_g1_i1:986-45(-)

MSAIAVVVIVIAAVLLHFSVHKIEEGHVAVYRGGALLSSVSGPGYHLMAPMLTKYKSVQTTLQT
DEVKNVPCGTSGGVVIYFDRIEVVNLLSVDKVHDIVKNFTADYDKALIFNKIHHELNQFCSVKSL
QEVYIDLFDQIDENLKRALQQDLNEMAPGLKILAVRVTKPKIPEQIRKNYELMEAEKTKLLIRIQH
QKVVEKEAETERKLAVIQAEKQSQVAGIQYEQKIMEKESMKRMSEIEDLTHLAKRKAMADAEFY
THQKQAESNKMKLTPEYLELMRIEAISKNNKVYYGSNIPNIFLNEGGLSQKTK*

>TRINITY_DN5107_c0_g1_i6.p1 type:internal len:138 gc:universal TRINITY_DN5107_c0_g1_i6:1-411(+)

FWLKRLPQPQRSSLPVRVRITMGKKSYQNYGKTFRKPKRPFEKERLDSEMKIIGEYGLKNKREVW
RVNYALAKIRTAARTLLTLDEKSEQRMFQGEALLRRMVRLGLLLESEKKLDYVLGLTTAKIMERRL
QTKVFK

>TRINITY_DN3589_c0_g1_i1.p1 type:3prime_partial len:548 gc:universal TRINITY_DN3589_c0_g1_i1:63-1703(+)

MDVTKVETKPFEGQKPGTSGLRKPVMTFFQENYTENFIQSVFNAVGPQLYGRTLIVGGDGRFFMS
EAIKVIVQMAAANKVGKLIIGLNGILSTPAVSCLIRKRKAIGGIILTASHNPGGKDGDFGIKYNTSN
GGPAPETITNDIYNETTKITEYELCKDVTVDLSKSGYSNFDVNGKKFYVEVIDSVKDYLGMMKRVF
DFKLLKEFLSQEDFKFVASGMNGVTGPYLKRIFCVELGAPETSLMNAEPLEDFGGEHPDPNMTYA
ASFVDKMRTGEYNIGAAFDGDGDRNMILGHKGFFVNPSDSVAVIAAHHSIIPYFKKTGLKGLARS
MPTSGALDRVAEKLEIKLYEVPTGWKFFGNLMDSGKISICGEESFGTGSYHVREKDGIWAFLAWLS
ILASTKKSVEQILEDHWATYGRNFFTRYDYENVEDESGNKMMTKLRELICTNELKGQQLGAYVVD
TLDEFKYVDPVDESVTEKQGVRLLFTDGSRIVFRLSGTGSQGTTIRLYIESYVTDAIKIKENTQSALK
PLIDIALKISNLPSLTGREK

>TRINITY_DN10026_c0_g1_i1.p1 type:3prime_partial len:105 gc:universal TRINITY_DN10026_c0_g1_i1:284-595(+)

MVYFFTVSRKEDVSEFFDIKEEVGRGATSVVKIVVQKGSQQKYAMKQIKKNIDKKIIRTEIGILLRLK
HPNIIRLKEIFESENELFLILELVTGGELFDRIVAR

>TRINITY_DN384_c0_g1_i2.p1 type:complete len:314 gc:universal TRINITY_DN384_c0_g1_i2:1018-77(-)

MRIAVALFLVFYLYPTEACKDYLNPTVCRIGVKQKGDCEYYKRLCMKTCGGCGGVIRPTQGPGPG
PVIPAGDCGVSSFQGGRIISGTTAREGAWPWQILLKANGRAGCGGSLISANWVLTAAHCITGGSYS
VVLGEHDRRRRSGHEQEIRVSRAIVHPRWNKRSFEYDYALLRLSQPARMNQYVKPVCLPTGEPRP
GQSCYITGWGKTSSRGQMHYILQQAPMQVIDSNTCNRKNYRAIRIAIRPSMVCGGGSGRISGCQG
DSGGPFVCNEGGKFVLHGDVSHGSRECSSSKTYTVFGRVNHVRSWIRQTANV*

>TRINITY_DN22_c0_g1_i1.p1 type:5prime_partial len:353 gc:universal TRINITY_DN22_c0_g1_i1:3-1061(+)

ISNYYFHFQYQTAIFEYHTVFSLVKIINMKFAVALLVVCYFYSTEACKDVLHPSICADVKSIGNCGV
YKDLCMKTCGNCGGVLPPTRRPIFPTRGPGPGPKTPPPIVPTGECGVSSFAGGRVIAGTTAREGAW
PWQILLKSNGRAGCGGSLISANWVLTAAHCMNGGSYTVVLGEHDRNRRSGNEQEIRVSSAITHP

QWNRRTFEYDYALLRLSRPAQLNRYVKPVCLPSGDPQPGTSCYITGWGKTSSQGQMNGLLQQAP
MRVIEQNTCHKKNYAAIRVAVRPSMICGGGSGRISGCQGDSGGPFVCNEGGRFVLHGDVSHGSR
YCRSSETYTVFGRVNYVRRWIKSTANV*
>TRINITY_DN12632_c1_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN12632_c1_g1_i1:165-1676(+)
MGNCLRKPKKQRQKEEKKLDATSLEPSLVEPNPQPPNSFPAPAPLGNSNGVQGATVFVALYDYD
ARINEDLSFRKGERLQIINTADGDWWYAKSLQTGREGYIPSTYVAPEKSYEAEDWYFGDIKRAEAE
KRLMMRSLPTGTFLVRKAESAPGNFSLSVRDGDSVKHYRIRKLDSGGYFITARAPFSSLHELVQHY
SRDADGLVCALNIPCPNNDKPLTMGVAKDVWEIPRESLRLTKKLGAGQFGEVWAGVWNNTTQV
AVKTLKEGTMSPAGFLEEASVMKNLRHKHLVQLYAICSDCEPIYIVTEFMCHGSLLDYLSKGEGQ
NLQLPTLIDMSAQVAAGMAFLEAQGYIHRDLAARNILVGENYVCKVADFGLARLIEDTEYTAHE
GAKFPIKWTAPEAALYNKFTIKSDVWSFGILMTEIVAKGRIPYPGMTNAETIHQVDRGYRMPQPP
GCPEPLYQILLNCWNKDPEARPTFEYLQLTLEDYFVSTEPGYRDLNQTDS*
>TRINITY_DN1080_c0_g2_i1.p1   type:5prime_partial   len:8617   gc:universal
TRINITY_DN1080_c0_g2_i1:26447-597(-)
VVIRRVVRRPVPIVTRRRVYRKVILDLDGTEKGVEEKVEESLPGMQGLDEDPITAPVVAEEQESVPD
MFGDLTEQSIVSRRSDFPKEGELDGVVDIADGKIGDTDENENETNFEIAFKREVYRLAVLDKKSIPV
ERRIIRKVIKLPNGEQKVLSEEDVLIPLEEEGVPISNTEKCKIVSTRIVTKRIMQYPDGKEDVLDETIES
ETERTQPLTSPEQAYVLVVDKPDGVGSIIEKPVEIAPLEYSYSEFDEDKVDSDIVEKGKTGKIVLRRQ
TVSTSKELHRSHLNKDTEKSVIVDLITYPSEQTEDSVIVTDEQDLSKSPEIIKDEKNERGIVFRRVVRR
PLPVTTKRTVYRTIVLNDEGITTEFEASQEEPPVEKKNVLQKIISSVKPKTDGKDVPEVDDSKPEEVE
RHLIDRVVKHKDGKEELIDQYELINSLEMPAVNVEPITKRVTDSKGRVIKTQVIRRVYITVKTIVVRK
VVEKADGTEIELGSSYEESPDDSTEETPYPERSVIHRVLPQDTPRVVEESDDISPLETSYKKGQEKEFI
SKNVLDDGTIENTVYKKDEITKKKLVTRKTIEYSKGKKAKKEEPIEEIHEHPVEFGSDVKFVESTEEI
KNEKGEIVKRVIHKEKPVHTRRMIYKKLTYTPEEMNKIKLEQMGEEKVLPKESKDDKKPGKQTTA
KPLAKPSTKAKPSTKSKSVSSVKPESKESGKPSKISIEKPSKKLSTKVTTKPSTESDGKREAPPSPTKST
TKPSTDSSGKHEAPPSSTKSTTKPSTESGGKREAPPSPTKSSATKPVMKTSGVKLSKPSNEKRIVKRP
KIPGDSTKSESKSKENDPAKKNRADEKDGAEADEIISKSKNVLDVKSVPTEMNVDIDTTDKRQSE
KAAEILKEKNQKHEADEIMQPVDIEEVQSSPLDLEKPMIFDDVVKSVDMEDVQSSPFDLEKAKISD
SAFKPVDMEDVQSSPIDSEKPITSDDIVEPIDIEDVQSMPFDFVKPMTSDDVVEPINVENTQSLPYDT
KGVKGREDVFLDQGEGLSDSNDENDFIEPGKVSLMRRQSSLRKRNRPYDEKKEDIRRNSLPLQEL
FIKLGRHDSGLSAIWESLLSDSKEEYISYDDYMTWLNFLEKEYSSSKFIPGKHDLLTKEHDYNKSLK
VDLRKRKAIVDHINKMKPVLQDLAVGQDKELISQELNELTTRFDKVYVTCEHRLKEINNMVPLSK
EHEDHYVPVSTVNEIVEDELKVKPRTGVDSKKIQAEIDRVKKLKDKLDNCKPAVRQLRKSLNSVQ
KHQTDIIDKEQIEEEAVNAVSKHDDLCNNVGQYNDTLERQLEKAKKFFGECDMIKKWAPVVEA
QLYNNETDSKNPEDLKKELKQLDMLKNEIDKKRPLIMAIDENGQWLMQNLYVTDKAGRRKSTA
SEVQLSLAEITSIVHHLSEQLNGRRDKINALLADTMSFEDSATKFEKWLIVIEEKVSSQKTLVLKSNE
LKDEILRYKPLLDEIVEHKPMIQSLVHSGEKIMSSANDKDKEKYMNKIALYSDRYDKVLKTATLKA
DKLDQVLPLVREHETNTEIVENIMSLAQPVLTSIEPVGVDSEKGNDQLKKVKNVVDLLDHNEPAV
NTTKRCVVQLTRILEEDLVKSVKETTTNNAIKYEDLRAKLKEGDANLAKQYIECERFTEIFYSIESKE
EYIYVLLKEIKSCSKQPERIDDGLLKSKEISIVIEEVLEQCSVVEEIIIIIQGYCKGHPVVLKTVGEKSSVI
SSKKIMMGKVSKEVQDEQNKMISLQQANKELDQKVIDINCWLPQIEGEVVKQTPVSANYDILKV
QYEKHQPLYQDVVQKESNIKHVLLLAGNILKDKKPGEEKDKLSKSIEDIERRWNDVSEKVNKRQ
NQIQRVMPLASVYKNTSTSFCQWLSNGEKQLKDLTSLSGNLEDIAVRKRELQDLAKDIESEKPNQ
LKVNDTARKHLDVCKNEAVEEPISEKDQVQQEVDHIDARWKKLTINVKEETDRLSQIEDEAVKM
CDKERVLEDLFIEVEKTLTEQKPVNLIPEKSKEELEKIKTLIVKVDEKEKDLTVFNNCSDKLQNLLV
QYDGNKDNVEKVKPVINDKFRKIRSHLTDRHADIDDIYTNVKEFDTDVKSSHTFLHDVTKECED
VFNKKAIPKDENELKSSVDTIDKLIDRLTKKKSDLQKDYEIGDKLIEHSSRDPLVLHDVQSRLQKIQ
DPINELIDKLNDRKSSIVNESRLHQALTGKLDDLDKHLPNLENKITNLKPVSAKLTVARGQQEEFK
PVYDETMAFKPLYEAIEKEADELKSSKSKRNDEEDEMLEKKLPDVLSQWNEQFEKVEKYNNQLK
DVLPTSANYHFTFLKFSPWLENAEKQLKEIKNDSFKTEPSSNLSSDIDKFRRDIGTNEPLLKDYNTS
AGNLFDRCKEVDVTTDVPYLEDEVKHTNDRWNRLKVDFSEMTENSNKLKNALQAYEKASEPVE

ECMIAITENLNNETPSDLDLEGLEFYVDERNADLESMQEKEPALQKVQSKCNEISDLLTANGGDP
TDIRDKAKDMNARWNDTKSKLTGKRDKSEAQLKQLEQFLNATDLLDNWLNVTTTTVTNMGPA
SATSEGVKKQIDQIDAIQEEISKQNVKLLKAEELGDWLCDENKDNPQFCANVNNRLNKIKNPLD
ELRSILSARKSRLHETLVATQDFRVAFDDFSTEIDKLVSRQNKQKPLSVHHQTLKSQDDEQKATEKE
IEALKPTFEKLIENGKTIIKETEKSNERDSLEENIEQLQKKFTGISETSDKRRKSIDELFPRSEKYFTKE
DDVSDWLDKQEKVLEELDIVPVSVADVEKLENDIMKLEEEVNKEEPEYKDCLKSFTDLSEHANNE
KITKDLPETKELDEKMNTRWENLKKKKNDKKLFASKLKTLISSYSDFCEGLKNNLAQFEDAIDKK
PSHGTDSKKCNDELERIDELIRKLDTHEPEMNNVEKLNSELTELIRKEKGDSNTVELTTKNLNGRF
QKVRDTLNERKKSLEKVSRVLLQFNGIVDDVSKWSDQADEQYVKLGRVSKDPEEAKRQIHKIDLL
LEETIRQKSAVTSAEENGKWLTENCLDDKEMRANVRSVLSNVYTPINTIEAKLNDRKAKLENAVL
CGQEFDKSFNDISERVTSLEFQVDRKKPINVDWTYLVKEQQEQKLLMKEIATLKPLYNQLITTAQK
TLNSLEPGDEKEATQQRIDSIVIIWEKISVAIQHRDEVIDQLENVSQSHHDQHRLFKEWIVDPEDSI
KNLEEVPSTRDEFFKFKKSVKEFIVLIENHLPNHSSLNDSFEKIKSETEKFPDDEFVGLNSLEEDIHK
TNDRWEKLTLNMKKYRARVEKLQSPIVKYSDGYDDAGKILEDIEKALEYQPSFGADEQLGKDEL
DRIEELIKASHVASEKVTVISEDSKHLEIVIDENDGDNTNVKESTKILVKRLKDIQEQCSVRKVDVE
KKIKVVCQFHKTSEELQKFYMTITQKLVSIRSAKPTPEQVKEQLNIVNQLEEDLQKHRPQLQALKE
TANWLVEKNADDRVASSDIKNQFSIIEDPFNELADKLNEKQNLLQASLLQTQEFQDTYNNVLDN
LAEYEIKANKSEPLSVKYDKLWKQEEDFKAFETDVLQMEPMFDQLIKSAKKVKDGTDEKEEKEDI
ENKTKDIERRRKNILEKLKERRDSFEKLLPVALEEDKIHKDFKPFVENTEEQYDQIKQAPKTLQEC
KNQLESLNSLKSKVDEGKPKHKTFNTNYNKEKETANTIADIADASTLEDEVNDLNKRWEALSGN
IDTKKDQVNKLHFHFTQYQESTESALHDIKKLEDYLEQAKRFGLDSSEGQKILSNVDDMLKTLEK
TERKVDEVNRSGKDLIGELESCKSDPWEVTTQMNDVNRKLDMLKVNLKECQEKVVDEVQIVNQ
FLKDVKDCESSLTDVNNKQESFEPLSTDPTKIKEQIAAVDELLNGLEKMSPRLDQVGRQGDLICKN
NPDDFSVSTDVNFRISKIKEPTDRCILRLQERKNKLQNLLVGSQEVQDTLDDFNDKLTNFEKTYNK
MKPVSAKFIVVKKQEIITEQVLDDVSQLQPSFKLLEKTAESVLKDAEPKEQVQLTEKINSLKTRWET
TVEDLKKRRKLISKVTPLAQDYYDRDQGFSNWVGDVEKKLIPRTDDFVVDQENVSKELDRLKAIK
KDIDVHKPDYDAILSIHKPLVGTAEDDINDIDEEVKRTTERWENLNVSIDKQANEFVELNNNMN
QVDEQIVPLEEFMNQCEVTLEELEPVGVDKDKAKDQLNTLNVCLTELDNKEKDIESIEKLANDLQ
EKPGLNPDKLKDTVSSLKVRHGTIKHSFTEKKEKLSEYIVYIEEYYVIIEEITEYIIVTKKNPAFTEPISS
EPSILKTQLRNIEAIQDEFISKKPKLERSNELLIIIVQECKHDFTLCNEVKQSFDEVKKPMDEIWTKIE
VRQNRLQDSLLKSQKFQESFDDFLDNIGQLEERYNNGKQVSAKYDVVRTQKKDHDQVHNDIM
QLEPVFEQIMTEANNLIETADPEEKVKLVEKVKGTTDRYTQIKENSISRMKRLSDEIVLTQKYSDET
QSFKSWLTEIEIKIENLEPLPCYGNSVSKQFIYVKSLVEDIQEKQSKLEDIEKIKKEVVENAEIDQSSV
EDDCNQIKVSYEKLSVQINERSTKLTELTVHTQEYTVHLKPIDQLLDKVEHCVVCTLPLYGIDMQK
ISKEQEDVNVLVQQLTDILPTLKDYNDVSRVIADKADKSSPEYDAFKKETDNLNERYKRLRDQLH
DKHDKLHDYANKAAKYQELNEDFDNWMEELGKTPGVMQPIGTEPEVVKRQLNEVEAVLDDLN
KKKLLPQSIEENGHWITEANPQDKNLKSNIDDKVEKNQNSYDKFSTKVEIRYNRLQNALLKSQEF
QTTFTDFTNVLEDIKSRQDKQEPLDARYEELTKLKVENELLQQDIAQKEPVYEKILQNGENLLEAS
EPGEERNALEKRLDEVKSEWNGVKDKCCKRKDDIERLHPLSKDHDCNCVTFTVYLRDAEKRKE
NLKPISSDKNIALLQLKETEELLNDVRNHESLYNGYHQTNEPIYVTCKELNITKGLPELKDEIDDID
GRWKNLNGDLEDRVSNCNDILKRLGECSEKMRPAESLVDEIKDLMKAPTRFGDDLKKGKEAKD
QIKKLKESLNNNKPEIDKLRSEIPELLRQGGIVAEPIEEKFSALLENVDECGMNLDDLDKKVDDEL
DKAAKFQDACDKLNKWLPEANKSTCLTDLSSSDPDEIMRQIEELKALQEDIVNHKPELMDVQNL
AKDMLDANKSDPKVCENIVDKLNNVAKPFDDLVNKLEERQKKLDTIKKVIDNYNHEKQPLEEFI
TATEATVDNLPPFGLDPDEGEKQVSELEDLVKTMDKRKPELRAVNRAGQSLIRQLDSPDEIEKALD
QLSDRYYDVFDKSKGKLNETKEKVNKVKIFIKVIEVLEIWITEVVVIVVKIGKTSSTEPETVKKLLDQ
VQEIRVDILNHKPQLKEAEELKDWINDILKDDENTKNMVNERFDKVKIPMDETSNKLDELEKRL
QDSFSSSKQFVDDIDDIEKLVSKLERVVEEEKPISADKDTCTRQQNDHKYIVEETLLQEPKYENVLK
QGRELLDHTDPGEEKDKLNEKLQKIAERWDQTKKNVVDRKNTLDEVVDHATNIDNDKKDIIPW
LNDAEKLSESLDCISVDPERLGKQKDCIKKLLEDMESKRPLVEHMKEHRTPLIEKAGVDQSPVNEL
VDDVCKRFDNLAKKLKDADEKADQLADGMGSFNSQKKPIEELLEKSKNLVGKQSPLGSDEADK
DIDDMKSLLDELLKHRPDVDKLKKSGDDLIAIEDKPDNVTAIKQVTDGLEKDYDDLLEKLQEKID

EAEKGKKDFEDFNKALKDANAKINGVEDKSKNLEPIGATPEKVKEQLIELENLQAELQAANNRV
AEAESLADKIRSNSNNDPSVIKKIDDELNAEKKRLKELEDLLNDREENLKDQLQQCGALQDQMD
DFNRRLQNLDGRCENQAKKPMSMNPVNMAATKNNVDGISKDLDDEKPVFEELMKNAQKLLD
NTQSPAEKEALEAKINAMKKLFDDASKKIDEEKNREEDLLGKTKTVDDKMNDLEKFLDDQEKK
LRSLEPVAIDKLSQQQKEINSLKNDTKSQQPALEEIGKLIKELEPLCEEDVPGVKEKLAKLKAHFDE
VEKLGEDRQKELTDVQNGLDNFKNISDPLKSKLSKMEALLPSLNMYGADKDKIDEINEELAKLQ
KQIEDADKKLEDMNSITENLVNEHPTADSKALRDEKDELKKRLDKFKEDFNKKSEGVNDILGDW
DALSNDIKAAVGTVKNCSEGIDKSKPTRLAVDEIVGQIENVEALEANLNESKPLFDDIQKRGRKLR
DKGIGADLFGDLLPKIDGQVREIKKDLPEKAKELGELKDTLNDFNDKLKDADQGMTAFEEKLES
QKPVGGDKDTIDKQMKDLKELSSELDKLHGKVSKLNDVRSDIKNKYPEADSSAMDEPLNKLND
RTNNANQKLSDRQGKLDDALVQCGQFTDAVDSLLGWLNETKELVDNQKPISAADENVLKAQM
QEQKLLQRMFADREASVKNLQKTGEELLKTTEDEDKKKEIEKDLEKVKELWESLKDQTDDRKTK
LDEALVASEKFNKNYNNVMQSLDDLDKEINSDKNIPTSDPQKIEEQLDNMKKLSDKIKELEPIIQA
VSGDETELEPYCTPDDLALLQNKLDKMNEKFDKLNEDCQEKEDNLSTAKDLSEEFANKEKELNE
WMDNIGKELKDADGGKLKDLQKDITDHKPDIDRLKELGKDLKKLIKPEDYSKLKKSIEDAEEKY
KNLKGDVDENARSFFMAEGKVQEFDKKLEELAKWTSDKTNQYRTIDPVGVQPDRIKEQMNEQK
QISNELSSKEPLFKELYDLSEDLMMGCNEEEKAEMKEKIENLKKNKHQLDKTSTERDEQLVDALL
LAQQFSDVYNDVASRLSNTENLLEALDKEKGRGVEMQKEKLQNVEDNIGQLLPLMGTLKKTGS
DLIKLSGPGQDSESVQKKIDECNARWDALKTNSEEKGISVGVAAQQSEAVWNDVEDLIEKCQLV
KDDFKNQRPIPVHEEPITEEIGKLEEKEMLLKDLEDPVTSALGSIDEILKDDPKSPASTALKDRQRK
LGNLWKFISTSAKDRRNDLDSSKVAAEKFWPGIEKLNDVLIDVQTKLEDQNDPGMGIEEIEGLLK
ETDMLHNELNSNEDVITELVDATPKLVEKASPEEKTEVHHQLANVRDQWDNLEKSLQKRKGDL
ENVKALATEFDSEKDHVEKWLSEAEAFLKGEDTKPSDVNELKTRLRAMRKFHREITKHQNEITKL
EQKGESLAEKVNDEDSKKINEIVEDITKRWDNLLDQSYEKQHQLEDALLDQGHFSFAIEEILVWIN
QTRDSLKTDDKIPKHKKLIEVEQSKLKIVTNDVEAHKPSVENCRKAAEKLISENSSEKAELEVKLG
QLNEGWDEIQELLKNREGKLQDAFEEALKFQSSARELTIWLSEAKAFLKTKRPYGGKLETVQKQV
DKHQEFIRVVEEREVTYLFIVETFEYLIQSSDVSSSRELQKSLNEISSAWTVVSKLSQDTTDKLNRSLG
DAQFLQDKFNEIEIWIVRIEGTVSMFKPASTVYETIEVQIIEMEEIYIEFAEKRNGMREIRKTTDRILE
HCSPEEGRILNEEIEELTQKWKELSTSLKDRKKTLDENLDQSKIFFEGSEQLMTFLDEIEKKINEDET
IGKDAASVKAQMRIHRDLQNQIGKRQTKLNVVVKLGKTLLEKSPEEDYQIIQAKIEDLQARWEV
VCAISVERQHKLEEALLFHGMFQDAVHALLEWLHAVEPSLKTETAIMGDPDTVKLLMDNHKSFE
RELTKRQKNYNSIVNRGETMIVEGKVDNIEEISQQLEKLKNDWEAVSQMTITKHERLQSAYTLAK
EFQVGCRTCVNNLGELENKLKKQGPISDDVAGVRKQIEEFIVFEELLEIEEVKVNGCLKKGAVILRF
CHPSSLQTIRHQVAVIKKRWNDVSGWARQRKARLDEILIEMIEEEQIVQILIEWIAKQEVLLEDREK
IPLPDSYEVLNQLLDEHKMMQNEAENKNPDYSKITKRAKRKPLTDKQRKLMTPRHGTQPQRDFS
NPMVGVLSKRWQSLWLTLMNRHRRIQDKLDAIRIQKASAEFSWADWRDRYNTWLRDSKSRVLD
IWRKKDSDKDNKLSKEQFVGAIFESAFTTEKWEVELVYDQHKRGVLITYQDFMDALKDRKRRPD
KPQTEAEQIDDIIKSEVSRCCCAKSFEMFQVAERKYRFGETQKLRLVRILRSTVMVRVGGGWETLG
EFLDKNDPCRAEGRTNYELRENFIMPEHASQGMQAFKTSRPGISREGSATGTPKFSRERSGGIQRS
GGMKREKSCGMHQHDRTDGGSNLTTPTFQRRKSDLEREAKGLPSYKGKDYSGVKGSYGRTYN
KRTTKTTSTTPDHSSTQSTPTSSTRIAREKSGDVYSRLYGSTPKTTSATPRSSTPSTTSTGIPKSAGSVS
RGGATPRSSTSTSKTPTKRTSSSSSTTATPKLSVTSPDEVTTPIARSSSNLRKAPSQGSIAKKGTESSER
KTMTKTKSTPKSAEPKKRTSTAKK*
>TRINITY_DN817_c0_g1_i4.p1 type:internal len:176 gc:universal TRINITY_DN817_c0_g1_i4:526-2(-)
TLEISVRKVECPGFATKCATTKFVLDGTTSYRGYCASDYGPYLCTYMESSVKTMTDCKSTLCSGHY
CNIEVERASRKLTINGKGIKCYTGVQMFLPQLPIATGTVPTEVDQCEDQTSQCMSVIFTHLVTDPIR
KIKVKIPTQMRLCQPGYSTCENHCRRLAQHITIENCEASCCK
>TRINITY_DN121866_c0_g1_i1.p1   type:5prime_partial   len:460   gc:universal
TRINITY_DN121866_c0_g1_i1:2-1381(+)
LYIINSCEPPSIFFSCHLHFYTLVEETMSTTTAPTTTGTSAATKRLYVGNLGSTVTTQDLKQLFGLETT
PYLRDTCFVELAVCEKTGKSKNFAFVSAPGHVFSELIKLNGIEFYGRQLVIEEAKTKPEEEGEKKDN
KEKKKTPNNKRKGGSNNNRNNNRRYGNKPKSKFNLPTLEPDQVFHLVDCGVNLTNPKFSQHT

DYVIARALSAGVQKMVITGLKLNGCKAAVVMAKTRPNILYAAVGIHPHFVKDDWSDKALDQLE
EQVKQPECVAVGECGLDYKRDYSPRDQQELAFKKQVQLGVRYQKALLVHERDSHDGIIEVLKEF
EASLPPVIIHCFTGTVEQIKTYIERGYYIGVTGYICKDKYGKTLRDAIKDGTLPLNRIIVQTNAPYMT
PNTPRDEIDPVSQTLLDHCYADNEPCTLSIIVRCIAKCLSQEPRHVADVCTETAIKVFRFQKSESE*
>TRINITY_DN1058_c0_g1_i1.p1   type:complete   len:2639   gc:universal
TRINITY_DN1058_c0_g1_i1:134-8050(+)

MVKYIIWILLLSIFKEAYGGDWAQWQNWSACQDSSGAPIGCGRGNQHRSRTCADNNCGAGAIIE
VRPCLDEICPTFNCQNSSEIAGMCKFDYSNSCVGDDNCHHCICKSEGFKVSGDQCYNYCVEVGC
DEEIEGVSQLKRYCGDQAISCTGTVLNRTCLCNPATSYPSKDGQYCYEATCKTSQEFMTNCGAEN
SCQGTNTSFVCECNGFGYGYEVVANVQNRKKCKLLSCEDGDLNPLEICGQGATACTGNVHNLT
CACNVTAGYIPSEDKKSCIPMPCNTDPAVGVQCLPRNTCEGSKIDWRCICSAYGFRNDPTDPKKCI
EAKCDDPNIDILGLCGTGVTSCTGFLSKRRCVCNTTENYIPTLDGSHCMPAPCNANENATKDCG
GENSCIGSFDSYMCVCNGYGFQKNATINKCEEVPCSSLPTAEVQRICGFGALSCDGTIRNPVCNC
NNDLQYYASEDMKSCIEASCSSKADYDSHCGNENSCVGNITHFECICETEGYKPDPSNKKKCILES
CELNEVDVLNVCGKGAISCKGNVRDLECVCDASKGYVQSPDTNKCEPSSCYGNATVSEQCGEEN
HCLGDLSDWICVCDAYGYKVNATNSMTCDKVMCGDTGADAVTVCGKETTSCSGHIAKPVCTC
NETAQYLPSPDSTRCVKASCKENDAARKACVPGNSCSGSYDEFICICDQFSYHQDPADNRKCIRE
KCEDLAADYDYEKICGVGGISCTGYVNQPVCVCNSTESYHPSNDRTSCVKASCSTSDAVRTQCGL
ENSCFGDIESFMCDCKAHGYKLEPINKTSCVLATCEDGDFSYHFQCGKGAVGCSGNINTLSCLCD
SAKGYVPSADMKRCVPNSCKDNPDVYIKCGMENTCLGSYADWFCVCSGAGYEANPADPKSCQL
MECSKDDAIHVCGYGAIDCKGPVLAPTCSCNYSDHYIASEDGTSCVPITCRKNDTARAQCGEENT
CKGHTDNFKCICDAYGFKADNVDHQKCVERQCTDGDADIIRICGHGGIRCTGPIRSAVCECNSTE
YYYPNADRSRCILASCKANETIMKSCGEFNSCEGNMESHICVCNGPGYKHHPSDDKQCVKETCE
MGEIDPIYLCGKGAVKCNGTYDIYTCECDNAMGYVQAPDGNSCKPFDCHANATMHKQCGDG
NRCIGSLTDWICVCDVAWYKPDPSNLMRCHEKTCKEADLELICGTGATGCSGSATNPTCECDSA
NYFVSSTDRRSCIKASCKTNITAVQQCGDGNSCYGTPDNYVCNCDAYGYRLDDNNNQACVEKK
CDDVGANYVEICGLGGIGCKGTVKNPVCECDQTKHYVASPDSTSCVLSNCRGNKTVMAACGNE
NKCFGSASSFICVCDGPGYKRNPSNLQECLPETCEAGEIKPHMVCGRGATACKGTMYHFECECN
NTLGFIRSPGHESCIPVNDCYANATMHEQCGEGNGCQGSVADWICKCDAPGYKPHKTNFQMC
HQRMCSDADIDLVEVCGVGVESCVGPIANPTCNCDTSKHYVLSADSTSCIPGSCKTNETIMAQCG
EGNSCSGTSENFVCICNGYGYRPHETDKQTCVLKKCSHSDVNAVDVCGQGALSCIGTMRDPICQ
CNNDMFFIPSDDSRSCVLASCSANSDVAVACGKVNGCFGSKSSWICDCSSPGTMLNPNNIRECLH
ETCESGKLDPIIVCGKGALGCNGTMSNVTCECDNSMGYVQSPNGMSCVASDCKTNSTMHELCG
DGNSCVGSLTDWMCVCDAPGYHPHPSDPMRCLQKMCSHANINPVDVCGIGATKCVGSITEPRC
TCDTAAYYVPSPDGTYCIPGSCQTNKTALEQCGNGNTCTGTADNFVCICNAPGYKLDDSNNKRC
IEISCNDADVDLVEICGQGSIGCIGTARQPVCQCDHSKHFVPSLESTSCQLASCRANDTIMDRCRM
GNTCFGSMTSHICVCEAKGFKVNPSDPTECVQETCEDKDIDALSACGKGATDCMGTLMNLTCQ
CDGASYVESPDKTSCLPVGCQQNVDVKKACGEGNTCEGSYDDWVCLCTNPEYIPHATDEKVCS
KKKCTDNPIGSCGIGATSCSGNVNIHKCTCNLTAGYMPSKDEQSCIPIDCKMNPKMNCGFGNTC
RGSFFSYVCECNTLGTMRNISNPKQCIEVDCSTDAVSICGVGATGCAVTPTNDVNCTCGEFYHPA
HDYHSCVLDDCKFNKLVPDACGVENECTGSISSWMCVCKGPKYIQDIKSTQLCAPGPCRIEQCGS
GKASGSFQYYAESCSGTYFEPTCNCKEGFEKDSYGGCIVKSCSRNNQSSVDCNDGAISCEGTYFKY
KCECRAPTHILNPANKRSCIPARCNPQLCGRGLVNGDYMDFASECSGSYTDFTCKCKYGLYGSGT
SKCSLEKRTCALSNDCHPNANCIDYDGHYFKCECKDGYSGDGYQCHRNGGLTPWSVVQPCDKT
CGTGYAQVMRTCDDPKPDTLGKKCNVPSPDVREVPCHQFACTACSVKKTCECENIRPYFVHEYV
EPDESLKYFTNLTAEDVEKALSAIEKWKLSVDEKEFCIKHTLPEIDGLISDINENLRSVDQTKLYTIT
ARDMMRNKLDCNVDLEKKDKYFRVYEAIVKRHFILKQVVSDLQAKEKLMVTYRSSCTKDSKVG
WLSSIFS*
>TRINITY_DN1339_c0_g2_i3.p1 type:internal len:185 gc:universal TRINITY_DN1339_c0_g2_i3:553-
2(-)

NSRLAMVAILGMFFQDGLTGSAWGDWANYVDSPLRAFENELGVQEPVGFWDPAGFTADGNVE
NFARRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVPNGLAAISKVPAAGWAQI
VAYCAFCELSQDQSAGSPAAAGDFGWKLLTSSDQAELTKKLSAEVANGRLAMMAIIG
>TRINITY_DN21998_c0_g1_i1.p1   type:5prime_partial   len:507   gc:universal
TRINITY_DN21998_c0_g1_i1:1561-41(-)
AFLKYLRDKMSKREFFYLFNIAVIGVAGIVFLAVVVLTYAGYIAPWSGRFYSLYDTGYAKIHIPIIASV
SEHQPTTWVSFFFDLHVLICVFPYGLWLCVKNINSERVFIVLYAVSAVYFAGVMVRLMLTLTPVVCI
LAAIGFSRTLDRYLNDQDEEQEKEPEQQEAEPKTNEGDNKKKKKESSKKENKLEAGMQDSTSMG
SHLKMLVVIVILMLLMLFTVHCTWVTSNAYSSPSIVLATSNYDGSRNILDDFREAYYWLSQNTPDD
ARIMSWWDYGYQIAGMANRTTLVDNNTWNNSHIALVGKAMSSNESAAYEIMRSLDVDYVLVIF
GGVIGYSGDDINKFLWMVRIAEGEHPKDIKESDYFTPQGEFRVDRGGSPTLLNCLMYKLCYYRFG
DLKLDYRAPSGYDRTRNTEIGNKNIKLTHLEEAYTTEHWLVRIYKVKPLETRTKSSMKQRNTSMK
KNKKKYYSKKTRSNKAGQIKDKLTIKKGTSAKSTKKTKKGKSKTKKY*
>TRINITY_DN998_c0_g1_i5.p2   type:5prime_partial   len:178   gc:universal
TRINITY_DN998_c0_g1_i5:2-535(+)
LAQGSLRSALPCLLSALDSEAMSVQFQSQNFQHILRMCNTNVDGRQKVMYALTRIRGIGRRISNI
VCKKCDIDLNKRAGELTTDEVNKIVAVISNPLQFKIPAWMLNRQRDTKDGKTSQKYANFLDQAL
REDLERMKRVRLHRGLRHYWGIRVRGQHTKTTGRHRAFADAGGPPKKK*
>TRINITY_DN2142_c0_g1_i1.p2   type:5prime_partial   len:246   gc:universal
TRINITY_DN2142_c0_g1_i1:3-740(+)
WLKPFWLRVPFGRLRDELVASRLPRPMLVLRARQLALQRLADGGRRGVATSAARLGGHPPYMH
MPPAPPPEFEPDGTPKKYPLHQPIWDHGYDWEHWALMPAGVFHTVYYGDFAQDYPPYWAWLQ
KFPMWVVTPFLTLWAITTMVVFQNAGSIGIKPKRYTIEWMQATKERERQENTNPVTRYLDRRRTE
RGGTWIAQYNLPWHPYWIWMTQSHDPDYPEYYLPKPGSPHLHYTDSLTTPFVKDE*
>TRINITY_DN143799_c0_g1_i1.p1   type:complete   len:178   gc:universal
TRINITY_DN143799_c0_g1_i1:576-43(-)
MKCLGQLKEYKIVGRRIPTEKNANPPLYRMRIFAPDVVSAKSRFWYFMKKLKKLKKSVGEIVQCS
EIFDKSPTTVKNFGIWIRYNSRSGTHNMYREYRDVITTGAVTQCYVDMAARHRARASSIQILKVEV
VPSSKCRRPHVKAMHNAKIRFPLPHRVMRTQFRSIFQAKRPHTHLL*
>TRINITY_DN433_c0_g2_i1.p1 type:complete len:144 gc:universal TRINITY_DN433_c0_g2_i1:1496-
1065(-)
MAQQTTVPRSFKLLEELEEGQKGGDGFVSWGLEKDDDMNLEFWTGMILGPPRTPFENRMYNLK
IRCTDRYPLEPPIISFVTRISLSGVDANGKIDRRACNVLKGWQTKDSIKAVLTDLRRMMTLKDNLR
LSQPPENSQYGPSR*
>TRINITY_DN2472_c0_g1_i1.p1   type:complete   len:344   gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)
MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*
>TRINITY_DN45599_c0_g1_i1.p1   type:internal   len:642   gc:universal
TRINITY_DN45599_c0_g1_i1:1923-1(-)
LFQCKIKEATKISEVINNARDRKQSQMLNGNSNGQIEGNYLNQPVVIDKGYQKPETRTQMNLQQ
RHAVARAVEAFQTNNGPVNDAVDGQPSSPRPNGITPLQDAKITRDVDILNKCIEEIENFVVWLKR
INEARKELQSKSKKKKNKKSENILVLQSQPPPEEQIIDIYRKFKHALNLLGKLRQHISEPSAPELIHY
LFIPLNIIVKVTGIERARSVKQPLLSQTCVDQLNSCLDSREYYFWQNLGPNWTLTKQNDNFKDEHI
PPFFPTFADGWVPPEVTISEKQEAAAAAVARMQSSQDMVDSSKMNGHQMTPPQLNTQNSFHER
QSSIESNRSSNSGDLRTQRRLVGIVVYDYLAHNNKELSIRAGEKVYILDNSRRWWLVRNDHGEQG
YVPSTVLEIAAPETPDRNAERITNASLISSYSPSPTHMDKVDANRSSKSSIIYDANQNYVNDNSAVV
NGSPNNRQYNMNPNNQQTVTPVVISVQLPDGGRVETNSDGTRIVATPASVVNQTHNRTSSNGA

AYPQRSVTPVRESPTSYAAVNKQSITRQTSNGTSTYQQTNGYDDVSNRRQSNEPNTYQKQVVAPRI
SQTSQAQISYQRTTPPVQQSANRIVTQSNSPQYGAMPPPPPPPPPPPPPVAQKG
>TRINITY_DN1787_c0_g2_i1.p1   type:complete   len:197   gc:universal
TRINITY_DN1787_c0_g2_i1:144-734(+)
MWCVTMWRIKILAFTSIFLQLSIAEKVLKPIPPSLAKRNDIQPRMLAPGYYSQECNAHKACPEKKY
CHLFLCVHCLKENVACTQNGQCCEGQCTYGRCKAGVSEGQPGTFCDRHEDCAGEGKAACCVR
EPAINPHISICKPPLAENMVCGPINFFRNVYVGAQVQKACGPCKQNLICKQVGLFGIHEICMKED
DKK*
>TRINITY_DN468_c1_g1_i1.p1 type:complete len:191 gc:universal TRINITY_DN468_c1_g1_i1:676-
104(-)
MKTFYTILLLAIVQTNAFFFPKVDTVKDLDLASYTGRWYEVYSSLIQRATFQRNSYCTTADYSLKPS
GAIKVINSGRLKSATGEENTIEGEAKVVDAKEPGALNVKFSTGPQSDKANYLVVKLGPVVDGKYD
YTVITTDYKALVWVLARNPETFKQKYEKDVLAYLKKNGYNWFINKPRPTYQGKDCIYI*
>TRINITY_DN4911_c0_g1_i1.p1   type:complete   len:271   gc:universal
TRINITY_DN4911_c0_g1_i1:896-84(-)
MFSKLLLIVFISYFKSYRLEDPFSCFDGPLGGFYCSNDRTGYIDCSNPVSVPGNVSVIQPCPSGTFCS
CFINTKCQVEESNICQALKKPPLPKSFDITFNLTTNMISPITPQDGSTSYYIQRVALNGDLKKFYLRL
KNLETNEEFFEHIGKEGSLFVKYEGSYPSSCSKKVLESFPPSFINPDDFQLTSKEGSMETFEYKVGSR
NMSNPFLVTKSVLFDMDGEHAVPLIYEHIFDSSRIYAEVLHFHAEEKQADFFKVPEICNQEDIISK*
>TRINITY_DN7314_c0_g2_i1.p1   type:5prime_partial   len:142   gc:universal
TRINITY_DN7314_c0_g2_i1:541-116(-)
AEATEAPVKYVESAADKRLFEQVYVQYAQEYLKGPLYWDPNKLQGIDPQFPGNPITVDGKLTSNT
IGNLKTFSSNELAFFSFLFFGIGLYGNYMFNYGDPQFEKVIRDGGYLNASYIVEAIFLPISFFFHIACYI
QRKNGK*
>TRINITY_DN79126_c0_g1_i1.p1   type:complete   len:115   gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)
MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS*
>TRINITY_DN602_c0_g1_i3.p1 type:complete len:851 gc:universal TRINITY_DN602_c0_g1_i3:3046-
494(-)
MIICRLHGLSLGIILIFSILYTSDARSRHAYGHKDASSPQTGKKRAESDAGAGTEAATGANTGAATA
SDSSSESQTFTNTKVNTRIATSSNARSGANAAAKVKTYAHANTETKVDTQQQKPTPPVPPEALTT
PPPGVTPPGPPGPPGSENNNTSSGSECKEKETKPPIIKVYCPNCPCPCPPPCPCKCPCIKVAPPPPAP
PPCICLPPCPPPCPPPPPPCPPPCPEPLPAPAPCLPPCAVPPCPCNIAPITLDPSLPCPMDCPLPPCAC
PFMKKDNITTTKTKRSVIRKRNLNIKRSHRVGTKRVNAGKSPNLAYAQPDSFEKAAVAADNKKCS
EIGVEILKKGGSAADAVVSTHCCVEIVNSHSTGLGGGGFMVYYDKKSGKSRAYDFRETLPKKYTD
TQNKTQGETILVPGVLRGLEAVWKDFGKLPWEELWKPCIKYAKEGFYVHEALAAGIVKKADYIM
ANLGLRELFAPDGELLQLGSLFKRPKLARTYEQIAKHGADLFYRGEMAKQIVNEIKEAGGVMQL
EDLSSYQVNIRETLKSNINGLKLLTSPAPSSGSLMALALKIMESFKWKPEDLLNNPSLVYHQIVEAM
KFAYAPTSYLGDPRFTNGTDKVEQYMVSPQTAKEMFKRIDNKSHPVEYYKPWSELFSAEKTGTSH
MSLLDQEGSAVSLTSSINAYFGSKLRSREFGFIYNNELADFSEFWPTVYNLTSDKKAPSKRPMSKVM
PGIFLKGKTVQGVWGAAGGFFIPSALTMSIANWLFFKDNLKVAITRPRLHCQLFPPTVVYEPTFPP
SLIPKLQEFGHKYVTNSTYDVSGQLNAIMGVVQAIVRLPNGSYSAEADYRKGGRPAGF*
>TRINITY_DN691_c0_g1_i2.p1   type:complete   len:1673   gc:universal
TRINITY_DN691_c0_g1_i2:5503-485(-)
MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV

TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEP
GLDGDVGEKGEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVR
GETGEEGPKGDRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPG
AQGEKGDQGQKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGP
DGPKGNEGEKGDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVK
HSQTTIVPSCPAGMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVAS
RNDYSFWLSTDEPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAG
YSFLMYNSAGADGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPK
SETLKAGNLKTRVSRCSVCMKTVRNGNFP*
>TRINITY_DN2772_c0_g1_i3.p1   type:complete   len:142   gc:universal
TRINITY_DN2772_c0_g1_i3:476-51(-)
MSDAEGDDVPVQQEVAAGGPMDINTALQEILKLSMINDGLARGLRESVKALDKREALLCVLAN
NCDEQMYVKLIEALCAEHEIKLIKVDDNKKLGEWAGLCKIDKEGKARKIVGCSCVVIKDWGKET
QAHEVLKDYFQSKS*
>TRINITY_DN34765_c0_g1_i1.p1 type:internal len:204 gc:universal TRINITY_DN34765_c0_g1_i1:1-
609(+)
IPDKLLLYDYLGTNPSKGGLFRSGAQIKGDGVVDSWTGHSNFESKALALYVRRMPAFFETFPVILV
DRGGTVRGDIPFRRAESRYSIEQVGISVYFTGGVLDGSSIEKSSVVKAFARKSQFGEIFSFDKKVAAS
DGVFRTTSRGWYSFSHLGLSLCFLFGHLWHSGRAFFRDVWVGLLTSSSAVESIEYGRNEKLGDNTS
KTS
>TRINITY_DN14344_c0_g1_i1.p1   type:complete   len:512   gc:universal
TRINITY_DN14344_c0_g1_i1:191-1726(+)
MATNSSYVRLPWFRVHIVVLNDVGRLLSVHLMHSALVCGWSSSMTLFELIVVDPSDPVFNPVWR
QGAYVLPFAARLGVTSSVYLWSLGATTLNASSLWFFESVSISHLILSGLLALSAFWHWAYWDLDLF
VQSSSGRIVLDLVKVFGIHLLLASIASFGFGGLHLSGVFGPGMWTSDYCGLLGSARSVKPVYSLISLS
PFSYGAIPANHIVTGIFGILVSLWQVSSRPGPALFNLVLMSSLESVLSSSIAAVLSVSLISSAVFWYGSV
TSPIELFGPTRYQWDNGVFSLEAERRVKNNEINSWSQIPDKLLLYDYLGTNPSKGGLFRSGAQIKG
DGVVDSWTGHSNFESKSLALYVRRMPAFFETFPVILVDRGGTVRGDIPFRRAESRYSIEQVGISVYFS
GGVLDGSSIEKASVVKAFARKSQFGEIFSFDKKVAASDGVFRTTSRGWYSFSHLGLSLCFLFGHLW
HSGRAFFRDVWVGLLTSSATVESIEYGRNEKLGDNTSKTSSFL*
>TRINITY_DN2626_c0_g1_i7.p2   type:5prime_partial   len:361   gc:universal
TRINITY_DN2626_c0_g1_i7:1099-17(-)
GVGDLRDGRDGPIVRLLARRVDAAVVAVAHGVDARVALVVGAPNFALARLDGKRHVHQDPTA
AARPLLAQGLRGHEVVRGLHADANVLLVWAVRQADAPVELRVLGVVLQVVKLLHALPLHVPG
AVGRRLRRQRAQALRQRVDDRQLQAGEEVLQLRDPFHADEASAHDQDRGALPVQVADGLVLL
QDVPAAPLQEALVQVRPGALRPRGLVDRWEPQRLAPLVEDAEVAARGDDAIVKIDDLILRREHRL
DRGRPIRPVQLLHLAPDELAAHAPLDDRVQRERQGVEVLRLDVRAEHARRVLEELLGVHDGDE
VMVLEVPRDAQTREAAPDDQDAALGGRHGSRPRARGRLPARDQEWT*
>TRINITY_DN190525_c0_g1_i1.p2   type:internal   len:218   gc:universal
TRINITY_DN190525_c0_g1_i1:3-653(+)

NHPARPEPWGPAALHAARPGARRRADGDLAVPPRALRHLLPQAAVQGTRADGGEIQFAQVLR
APGRGRRPQRVVRVGHRRRPLGLGGHRPQRPLGTRRHGQHARCFLRGGAGRLEADAARDDPG
LHRRARQGGREGHPGGGQGGAGPGEVHPASRGHRPAHRAGDAQEGGLAGAHRRREQAAGLR
LLGLLRRARCPGGGPAVRRGAPHPGEPPGLSG
>TRINITY_DN10563_c0_g1_i1.p1 type:internal len:307 gc:universal TRINITY_DN10563_c0_g1_i1:1-918(+)
GMFFQDGLTGSAWGDWGLYVDSPLRAFESELGVQAPVGFWDPIGFTKDGSAENFSRRRQTELKH
GRISMLATMGYITPELTGKWSGYISPSMGLRFEDIPNGLGALSKVPALGWAQIIGYMAFCEISQDQS
AGSKGAAGDFGFKVLTASDPEALKRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWGLYVD
SPLRAFESELGVQAPVGFWDPIGFTKDGSAENFSRRRQTELKHGRISMLATMGYITPELTGKWSGY
ISPSMGLRFEDIPNGLGALSKVPALGWAQIIGYMAFCEISQDQPAG
>TRINITY_DN95387_c0_g1_i1.p1   type:complete   len:169   gc:universal
TRINITY_DN95387_c0_g1_i1:96-602(+)
MAATLKPYLNAVRATLEAAMCMENFSSQVVERHVKPEVEVQSSKELLLTPVCIARNEKEKVLIEG
SVNSVRVSIGVKQADEIEKILCHKFMRFMMLRAENFFVLRRKPIKGYDISFLITNIHTEQMYKKKLV
DFVIQFMEEIDKEISEMKLSLNARARISAEEFLKNF*
>TRINITY_DN30378_c0_g1_i2.p1   type:complete   len:403   gc:universal
TRINITY_DN30378_c0_g1_i2:1370-162(-)
MDVKFILLWLSSVTMLTCEDYQGYDPTGGVSAENKIKIDDLFKMDDCGLVSDDGDTIHWNYKGT
LLTGKVFDQGKFTATLGQHHVIKGVDVGMRGMCVGDKRMMTIHSDWAYGDRGTEGIPPKSTLR
FEVELTGVDRPGVGSETIDDILKKTGGVSMSQKIKVEDIFKVDPEQCKMQSQEHDTIHWHYKGTF
LDGKVFDEGTFTAKIGHHQVITGVDIGMRGLCVGDERKMIIHPAWGYGERGVQGVIPPNSVLVFV
VVLKSIERPDGTKDVHDDDTEEKYNMGGVSKKNKLKIDITHAVKDCQIRSKEDDTIQWHYKGTF
LDGSEFHTGHFKATLGHGHVIEGVDRGMRGMCVGDKRRITIHPDWAYGEHGRPGSIPPNSVLIFD
VEMTNIQRLDPRKGEL*
>TRINITY_DN6397_c0_g2_i3.p1 type:internal len:130 gc:universal TRINITY_DN6397_c0_g2_i3:387-1(-)
LTSSDQAELTKKLSAEVANGRLAMMAIIGMFFQDGLTGSAWGDWSLYTASPLRAFENELGVQDP
VGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVP
N
>TRINITY_DN16548_c0_g1_i4.p1 type:internal len:171 gc:universal TRINITY_DN16548_c0_g1_i4:2-511(+)
LYTDSPLRAFEGELGVQAPVGFWDPLGLAADGDSVAFRRRRVTEIKHGRISMLACMGYITPELVG
KFPGSLSPSQGIEFADVPNGLAAISKIPSYGWFQIIAYCLYCEASALNFGYFNEAFDQKAPGDYGW
RPPLLATDDAALKTKRLNAELANGRLAMVAIIGMFFQDG
>TRINITY_DN6132_c0_g1_i1.p1 type:complete len:161 gc:universal TRINITY_DN6132_c0_g1_i1:95-577(+)
MTNPHGKRRGTRYLFSKQFRKRGVEHLSTYLKTYRVGDIVDVKGNGAIQKGMPYKYYHGKTGR
VFNVTRRAVGVVVNKKLGNRIIPKKINVRVEHIKHSKCRDDFLRRVKENEIKKKEGKAKGIKVDC
RRQPVQPRGAHFVSSKNNAPSLVQPIPYEFII*
>TRINITY_DN17516_c0_g1_i1.p1   type:complete   len:335   gc:universal
TRINITY_DN17516_c0_g1_i1:1523-519(-)
MNQLLIAVLLVLSVSIVFHECAKTRKSKESVAAQLEQKIQSLVELNHKRPVIRMNGEKFRQYVKSS
PRNYSIIVMLTALAPQRQCGICKEVNHEYQIIASSWKYSSGFFSNRLFFAMVDFDEGSDIFQSLKLN
SAPVIMHFPSKGRPKRVDTYDMARQGFTAEQIGKWVNERCDVSIRVVRPPNYMMAITIGALLVGI
GGLLYIKRKSIEVIYNKDYWAILAVTIAFIMISGQMWNHIRSPPYAHRNPQTGDIAYIHGSSDGQLI
AETYIVLVLYACICVGFIFLNEKSSEQKDIKKARICTVVGWGMVVLFFSLLLSVFRSKYHGYPYSFMI
K*
>TRINITY_DN6294_c0_g3_i2.p1   type:complete   len:134   gc:universal
TRINITY_DN6294_c0_g3_i2:817-416(-)

MGYKRFVEAGRVALINKGKYDGKLVVIADIVDQKRLLCENPVKSVPRHVVRTQDVNLTDLKVNI
PCGARGGKIRKEYEKEEVDSKWEKTVWAQKIKARHVKRTLSDFDRFKSKIQKQRRNRKVKAVLK
SMKKN*

>TRINITY_DN3649_c0_g1_i1.p1   type:complete   len:246   gc:universal
TRINITY_DN3649_c0_g1_i1:2360-1623(-)

MVSQLLEQNLTLGFFLKGLNGPPGPPGPPGPPGEAGPPGLPGSPGAPGHVGEDGAPGPQGPPGA
QGMPGSPGYPGEKGDPGPVGLPGAAGLPGAPGLPGPQGIAGESGPEPVNPDIIITCEGEKNWLQC
KQYELIKVNKVFWGREDHVTCQKVPAGLTADRLCESDPENAKKKIEGQCKNEQGCEVVASNIFF
DDNTCGNVYKYLKVWYECIPDEANSVDILREGGRRRRKRKRSAKEKRSYRDS*

>TRINITY_DN902_c1_g2_i3.p1 type:internal len:178 gc:universal TRINITY_DN902_c1_g2_i3:2-532(+)

AVFKCIKLNYIDHIIKMIKIAIIAIVITALVHESTAVRCNVGYSTADLPMAMSVRQVECGKGLTHCN
TLSYKLDGMSVTQGNCATSGGQASCLFMKNSLQSMTECSEAICNGDHCNKAVKDAENAERARV
GPYKNTLKCTTGLQTDFPDIPFASPNVPVGVDECFPGTKECVTMTYD

>TRINITY_DN4166_c0_g3_i2.p1   type:complete   len:490   gc:universal
TRINITY_DN4166_c0_g3_i2:1876-407(-)

MAASIFIAVYIFMWITYIWETYLSYRQHKIYVVTKEIPNELKDTLDKETFEKSRLYQIDKSRFSFYASI
YSQIESSLILLLDGIPYLWAVSAVVNQYFGYDSTHEIKQSITFTVLGTIFSTITGLPWSLYSSFVIEEKHG
FNKQTIGFFFTDTLKKLLVSMAIMLPVTAALLWIIKWGGEFFFLYAWLFALLVSLFLIAIYHDYIAPL
FDRFIPLPDGNLRTNIENLAKSIQFPLSKIFVVEGSKRSSHSNAYFFGFYKKKVIVLFDTLLKVSPFEE
EKKKEEEVEVIKQEEGGEKETAEVEKVSGDDNDKIELLDKATENEINNVIEGDKKKKEDKGCSDE
EILAILGHELGHWKLNHVLKNLVISQVNLLFSFFVFGLLMNYDTLYESFGFYGERPVLIGLLIIFQFIF
SPYNELFGFLMTALSRKFEFEADNFGKSLGYSVQLQAALIKLHKENLGFPVTDELYSAYHYSHPPL
LERLRALKTKQD*

>TRINITY_DN1566_c0_g1_i1.p1   type:complete   len:4626   gc:universal
TRINITY_DN1566_c0_g1_i1:42-13919(+)

MDTEEVPGEPPPTVLAATEDVINYVKNITCFIFDESQPCLPLDKILKEEQTKDYFRKFISDVQTKTIL
LYRINQLTDDVDGDHDQGVSQPSYGIKLNVQYVPHKESSIAFIKRGMLLESDKKINAQLHVLILD
NSSPFDTLHSYISNAVSPFFKSYVKTSGKSEREGDKMVPSVEKKIAELEMGLLHLQQNIDIPEISLQI
HPVVQSIIQKAEIERRKISPDDYAEKAEDSSFLNALQNGVNRWIREIQKVTKLERDPSSGNALQEIS
FWLNLEKALHRIEEKQQSPEVKLTLDILKYAKRFHAIVSFTNDTGLKQGLQTVASYNPLMKDFPLE
QLLSATELERIKDALIAIFSHLRKIKLSQYPIQRCLRLIEAISKDLMSQMLKVLGTRKFMLMNYELFE
KVMTSAFNVLNCWDDEYERLQQILRDMAKKKKDDSLKTMWRVNPSHKKLQSRLNNLRTFRKQ
HEQLRAVILRVLRPSKVEAKSSNEENAASSGSIEISDDNAVKEVDLAYENFKEIDPLDVSKEGTEAW
ETALKRYGERIDRVETRITSTLRDQLGTAKNANEMFRIFSRFNALFVRPRIRGAIREYQKHLIGLVKE
DIEALHDKFKVQYSHSKASKMSRVRDLPPVSGSIIWAKEIERQLHAYLRRVEDVLGKDWENHIEG
QGLKADGDSFRQKLNTQEIFDDWSQQVQKKPLLVVGRIFSIETLKTKGSNKATRKLKVNFTKEVIT
LAKEVRNLKNLSFRVPLAIVRQANDANQYYPLAISLIESVRTYEVTNDKVFEKESIIPLVAGIRKDIQ
SLLAEGMHLEWQSYKLMPYVMRLAEAVTGYQEKVDELLTSIQKIDIEVQSLATCGFKHEAFQEILI
RIQKLVDELNLHSYSNLNSWVKTLDEQVEAKLAHRLQAGIKEWTRVLRTGNENVDDKDLAIHSP
GGLPDIKPLRVEFFIRNQVIEMHPPFEKCIEHLYNELAVYCSTITSLTKIQSQRYQVGLDRDNAEETY
HNLLTKLPDPNGPNPITVYGEMESMLEDCRKYCEGWTGFQALWDAEMSNLAPRMKTLEDWMT
ILNQIKMSRSHFDTTETMKEYGPLIVDFNAIQGKVNLKYDSLQKAIVQNFGGKLGDEVNDFFTNV
TKARTDLEQQSLDVATTAEAVTFITYVQGLKRKMKTWEQNVEVFREGQKVLERQRYQFPSNWLY
SDNVDGEWSAFNDILKRKDGAIQTQVAILQQKIVAEDQAVEERTFNLLADWDKGKPVSGNTKPD
SAIQTLQIFEGRLTRLKEDRDNLQKAKEALELIEPGTVPPSDERVQVAIEELSDFKSVWGELEKIWA
QVDDLKEQPWVSIQPRKLRQSLDSIANGMKILPAHMRQYAAFDYVQKIIKGYLKANMLVVELKS
EALKERHWKQLMRKLSVKWNLSDLTLGQIWDCNLQKNEVVIRDVINIAQGEMALEEFLKQVRE
SWQAYELELINYQNRCKLIRGWDELFDKVREHINSVSAMKLSPYYKVFEEDSKQWEDKLNRILNL
FDVWIDVQRRWVYLDGIFSGSGDIQHLLPIETQRFGSISTEFLTLMRKVAKAPLVLDVLNIQGVQRS
LERLADLLGKIQKALGEYLERERASFPRFYFVGDEDLLEIIGNSKNVGRLQKHFKKMFAGVHTIIL
NEDSTLVTGICSKEGEEVIFNKAVSLIEFPKINEWLTLVEEQMRLTLATLLTLSAKEIKSFTGDSIDPK
LYMEWVDKYQSQLVVLSAQIVWSENCEAALQTCYNGDMSSLEKVLSIVEATLTVLADSVLQEQP

417

QVRRIKLEHLITELVHQRDVTRTLVRSKVQGTKSFAWLSQMRFYFDPKQRDVLQQLSIHMANAKF
NYGFEYLGIQEKLVQTPLTDRCYLTLTQAIERRMGGSPFGPAGTGKTESVKALGNQLGRFVLFNC
DEKFDFQAMGRIFVGLCQVGAWGCFDEFNRLEERMLSAVSQQIQTIQVALKEGPKEIGKPIQIELI
GKDVKVSEDMAIFITMNPTYAGRSNLPDNLKKLFRSIAMTKPDMNLIAEVMLYSQGFRTAEVLAG
KVVPFFKLCFEQLSAQSHYDFGLRALKSVLVSSGNVKRDKILSIKQKMQAQGVVADVGKITETLN
EQEILIQSVMETMVPKLIAEDIPLLHSLLADVFPGIKYVNAEMTALRNELKKVCNEMHLVYGENL
ESGAHWIEKVLQVYQISCISHGLMVVGPSGSGKSTAWRTLLKALGKLEGNEGVCHVIDPKAISKD
QLYGVMDPNTREWTDGLFTHILRKIVDNVRGELSKRQWIVFDGDVDPEWVENLNSVLDNNKLL
TLPNGERLSIPPNVRIIFEVQDLKYATLATVSRCGMVWFSDDVVSPEMIIENYIKKLRNVLLEESEED
IRSKQSKSVTDSKDELVSPTLQVQRDFSDILTPHLASNGLVLKTLEYSYSKDHIMDFTRMRALNSLF
SLLNQGVRNILQYNQQHHDFPMSQDTIEAYTPKYLVHSLLWCMSGDGKLISRLDISNYIRNITTIPL
PSPVTSLIIDFEVNMQGDWVPWSNKVPQIEIETHKVASPDVVVPTLDTVRHESLLYTWLADHKPL
VLCGPPGSGKTMTLFAALRALPDMEVVGLNFSSATTPELLLKTFDHYCEYRRTPGGLVLSPVQIGK
WLILFCDEINLPDIDAYGTQRVISFLRQLVEHNGFYRPSDLQWVSLERIQFVGACNPPTDPGRKPLS
HRFLRHLPVIYVDYPGPSSLTQIYGTFNRAMLRLVPSLRSFSQPLTDAMVEFYTKSQERFTQEMQP
HYIYSPREMTRWVRGVLEAIRPLDNLSPDGLVRLWAHEALRLFHDRLITDEERRWTNTNIDLVAQ
KHFPNVDLISLKRPILYSNWLSKDYLPVDREELRDFTRARLKVFYEEELDVPLVLFDEVLDHVLRID
RIFRQPQGHLLLIGVSGSGKTTLSRFVAWMNGLSVVQVKVHRKYTGDDFDEDLRIVLRRSGCRNE
KIAFIMDESNFLDSSFLERMNTLLANGEVPGLFEGDEYTTLMTQCKEGSQRAGLMLDSGEELYKW
FTQQVMNNLHVVLTMNPSAEGLKSRAATSPALFNRCVVNWFGDWSTGALYQVGQSFTNKIDLE
RSTYKAPDYLPVVFENLPMPPTHRDVIVNTMVFHQTMHKANEQVTARGGRTVAITPRSYLDFIS
QYMKLFNEKRSDLEEQQLHLNVGLQKIRDTVTQVEELQKSLSMKSQELESKNELANKKLKQMLQ
GQQEAEKKRITSKQIQDDLKKQTEEINKKKSQVLGELDQVEPALLDAKAAVKSIRKENLDELRRL
GNPPTAIKLALESICLLLGTPSVEWKEIRVLVSKTTFIPSIVNFKTDDISIETRKQMMKYLNHSDYNF
EKMNKASVACGPLVKWAIAQVSYAEMLQKVDPLRRELQKNEDEMMSNQSKLDSVGEMISELEK
SIAKYKEEYALLISEAQSIKADLAAVEAKVSRSTALLRSLSSERQRWENTSDGFQNQMDTIAGDVLL
SAAFLSYGGYFDQQMRSRLWGTWSEQMEQSKIKFRSDLARTEYLSTADERLHWQSNSLPADDLC
TENAVMLSRYIRYPLIIDPSGQATEFIMKEYSGKKITKTSFLDDAFRKNLESSLRFGNPLLVQDVESY
DPILNTVLNKEVRKTGGRVLITLGDQDIDLSPAFTIFLSTRDPTVEFPPDVCSRVTFVNFTVTRSSLQ
SQCLNQVLRAERPEVDTKRSDLLKLQGEFHLRLRHLEKELLQALNDSKGSILNDDKVITTLETLKT
EAADIMKKVEETDTVMSEVEAVSEQYRTLAAACSSIFFTLEEANLIMFLYQYSLKFFLEIFQSILFNN
PLLKDKRDPLVRLGILIESLFQVVYNRVARGMVHNDRVSFATLLARIRLKGKSENSYDLEFDHLLK
GKEIVVQVSDVKLTGLSSDQKMALLRLSKLNPFKELSRYIMDNSMGFQEWINSSNATLNVPRCW
NIKDSLTSSGEVLYECLVVQAFRPDNLHAMLRKYVLAVMGEKFLHTAEQELDMVNIVENEIKAET
PLLLCSAPGYDVSGRVDDLVAITNKQITSIAIGSAEGFSEAEKAINASVKSGRWVLLKNVHLATQW
LISLEKKLHTLQPHPNFRLFMTMEINPKVPVNLLRAARIFVYEPPPGLKANLLRTFSTIPASRMSEA
PGERSRLYFLLAWFNAIVQERLRYAPLGWSKIYEFSESDLRVGYDMLDIWIANVSQGRANVSPDKL
PWDAFRKLIGDSIYGGRIDNDFDQRLLQSFIDRLFTAKSFDSDFSLVTSVDGKQSENIVIPDGMRRE
QFVQWCEKLPDYQSPSWLGLPNNAEKVILTTLGERTCVKLLKMSVNTEGSELAYSADSHLKESEV
TGDIRPLWMKSLQQSVRNWLNILPKRIDPIKRTKENIKDPMFRFFEREVNLGVKLLNDILHDLNEI
LEVCEGNRKQTNDLRMLVDTLVKGVIPRSWNRYATPKGLTVIQWIVDLGERMKQLQNIARGTNA
GGSKELKSFKVWLGGLFIPEAYLTATRQYVAQSNQWSLEELYLNVTIADELNPQLKLDDCSFVVIG
LKLQGATCRNNQLSPVDTITTDLMDICLCWTKIDPRKPPTLGANDVTLPVYLNQTRCELLFTVDM
STTGAVPPRSFYERGVGFVVSALTG*
>TRINITY_DN1631_c0_g1_i1.p1 type:complete len:124 gc:universal TRINITY_DN1631_c0_g1_i1:62-
433(+)

MAEAPKPKPAPKSRYGPSFDDIERRDPAQWHAAHNAWVLERLVEQETVKIYRERMDECYWKEQ
ENFPQNCRKHILKYWKAWNDWKKKDWGQTEEGSVYRFRVPVEEYYREVEELYKNKDKGNE*
>TRINITY_DN5131_c1_g2_i1.p1   type:complete   len:164   gc:universal
TRINITY_DN5131_c1_g2_i1:518-1009(+)

MGVDYGMLTRVTVALIGFALSVYALQVEVMASRNKNYKAYCDINEHISCSKVFTSPYGRGFGIIGN
ILGEKSPLNLPNPVYGIVFYVLVIFLTLNRKNYFAASLSVILSFASCLMSFYLATILYKLKDTCVVCIST
YVVNFLLMYLNFRHLNRFNVEVKPKEE*

>TRINITY_DN95606_c0_g1_i1.p1   type:complete   len:538   gc:universal
TRINITY_DN95606_c0_g1_i1:82-1695(+)

MVLYTLFEHAAGYAAFKVNSNEEIGALLPEVQEAVLDLERFGRIVKLVAFSPFKSAANALENINSIS
EGVVHEDLKVFLESNITCGKKKSKVALGISDAKLGAAIVESCNLQCEYGATVAEILRGIRFHFHKLI
QGLTAETSGKAQLGLGHSYSRAKVKFNVHRVDNMIIQTIALVDQLDKDINTFAMRIREWYSYHFP
ELIKVVSDNYMYAKVAQYIKSRKNLTEDKLEGLEEIVMDEGKAQAIYDAARASMGMDISPIDLINI
ESFAARVIGLVEYRRKLHDYLQSKMSQVAPNLQALIGDLVGARLIAHAGSLTNLAKYPASTVQILG
AEKALFRAIKTRGNTPKYGLIFHSSFIGRAGAKNKGRISRYLANKCSIASRIDCFTDNPSSLFGKKL
HEQVEDRLKFYETGEAPMKNADAMQEVLDEIADIETTATSEKKKKKKKKKKQQENGDDNQDSN
NNDADENIKIGKKRKLEDVAQEVVENGEEPKSKKKKKKKKLDDTVNGEEDNEIDTTIEELIPKKK
KKKKKHSENEE*

>TRINITY_DN30329_c0_g1_i1.p1   type:5prime_partial   len:213   gc:universal
TRINITY_DN30329_c0_g1_i1:1-639(+)

EPIVNRVLVKRMKVMEAINDVSPAMMLDFFKTTLATNFLKFPFFEAINAFCAALPIAPSVRGLFTG
FVFTTATLPVTNYRYRKSMQLEVNWANIYEAYFPTVIRDIVYGICRNYCTIWTLALNPQWTAVSPQ
VLFIVVILGCLGSAPFNEWRGYLLQSKGQELTFKEFFKPSNFVRSTSLGAIKQGLALAVGYWCAPP
ATRLVHGLFAGLRG*

>TRINITY_DN7808_c4_g1_i3.p2   type:3prime_partial   len:280   gc:universal
TRINITY_DN7808_c4_g1_i3:837-1(-)

MWVPGAALARRAFEGELGVTMPFRYWDPLQLAKDGDAEAFRRRRAAEIKNGRVAMIACIGYIV
PEYFRFPGELSPSASLKFADVPNGLAALSKVPSEGWAQIGMFCAFLELFPFRQPQDRMPGDLPGA
GKLGLPVFLGGVESKPCDADGSARSLNAEINNGRLAMVAIVGMVTQNGFLGTTGPGMWVPGA
ALARRAFEGELGVTMPFRYWDPLQLAKDGDAEAFRRRRAAEIKNGRVAMIACIGYIVPEYFRFPG
ELSPSAGLKFTDVPNGVAALSKVP

>TRINITY_DN163801_c0_g1_i1.p1   type:complete   len:298   gc:universal
TRINITY_DN163801_c0_g1_i1:55-948(+)

MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*

>TRINITY_DN1739_c0_g1_i1.p1 type:complete len:400 gc:universal TRINITY_DN1739_c0_g1_i1:86-
1285(+)

MAITDNIKDILSVKIKPRHDTYSDQYSRIFMVKIMMMSALLVGLNWYSDKIKCIIPDSISADGGFVG
AACWINGFYVYEKIRYHVNEVGYFGMPREIDHDGMFPDGQTCNSKDTLSSDPSMECQPMEKTFF
LQYQYMTFVMAAFALLYYAPYAIFRWINVDLVSLKGSIQDNSAEKIIGNYFNHRVNSPNKMRMRV
MGNIVVKILYIVVNIAAFLLLDSILNGGFTTYGTLWTQWAKLDNDLAYDYMGIRHSPKPANALLP
TFGFCEVYMSAKDIKTTVNNKFKFICEISQHILYQYVFIVVWFAMVFGIVLSIVGLLMQLIEHALTIT
CFLKQGDQARRMYSILTLRECEYLEYIRRKNIPLYNDVIKKLKEQFQDGFHKPRDHYNNDGLPKY
QDTQA*

>TRINITY_DN309_c0_g1_i1.p1 type:complete len:454 gc:universal TRINITY_DN309_c0_g1_i1:65-
1426(+)

MSNCEHKTQKITIQKKTVKVTSQREEDEYVKARKEGKKYILPWKTPDGLQPPDGFTNLKYIFTPDS
SNVPSSAEKIDEEPLMQKMKPDPSRIENPPETGIRATWLGHCSVLFQLDNVNVLVNPNFNDRGIK
YYFPGDNKRYRTCVYKVDDLPRIDVIFITNTHYDYLDLSSVRALNNKYGEMLLWYVPIGVGEWM
TKAGCHNVVEMNWWREDEVDFIDHTKIDDDEETTTTTFNISCTPSQSFHSRTFDEDNAALWCSW
VIKSPRYKLFISGATGYCDIFKVIGRKYGPFHMAALPIGGYHPKDKFGYGNVTPEEAVQIHQDVLA
MCSLAVGWGTFTLSNEYYLEPPRRLNEELSKQKLSEMQFFLLKHGESRLIEIKEADKDDDEPPQEN
GVPPVVPPVDDTIEGEVCGEEKKDDDDSDVLQQLVDNFTMDEEKKSEEEEEKSEEKEEEKEE*

>TRINITY_DN3452_c0_g1_i1.p1   type:complete   len:466   gc:universal
TRINITY_DN3452_c0_g1_i1:139-1536(+)

MDVACFRFRMILSIISFTLLTFDLPAVNSEALHLTEENYQDTLDKNKLVLVNFYADWCMFSQQLAP
IFHQTADIIHEEYSNVKLGRVDCEEQQKIALDNMVSKYPTIKIFRNGKALRKEYRGQRSVDAFAQF
IKEHLKPVVQDITTSPNDMKINENRNTIVGYLESKDSPGYQSFAKIAEDLGETTDFFALLGDASHK
ERAVGESVVFKPKKSYGESESTYSGSVSNLDRLKAWATEKGNPLVREITFENGEELTEEGLPFLLLFY
KPGDTTSIQRFKNGVMRELLPERPRINFLIADGTTFSHPLHHLGKSLDDLPLICIDSFRHMYLFKKF
DEVDVPGKLIAFINDLHSGKLHQDFHNPSPDDQAAQGHHHGGQAQIDNNAQQPPQEQQPDQ
KQPDQKGEDTIQNTDQPPSGSGNKGSGKKPASGSGSGQSPPETVFHKLAPSENRYTLLHWRDYS
GNYRDEL*
>TRINITY_DN47849_c0_g1_i1.p1   type:complete   len:689   gc:universal
TRINITY_DN47849_c0_g1_i1:176-2242(+)

MCGIFAYLNYGVPRSRRYILETLVNGLKRLEYRGYDSAGVAFDSEETLKNHECGISIVKTKGKVQSL
NDEIFDNDARAFEAELSYHLGISHTRWATHGEPSPLNAHPHRSSDDNEFVVVHNGIITNYKDIKL
LLAKKGYHTESETDTEVIVKLLKYMYDRDQESDNEKRLNFPELVELVIHQLEGAFALVFKSTHFPN
ECVATRRGSPLLIGVKSNKPIVVDQIPVMCTENGSPGDRTPNGTSIFDSGASAIKANFCVADDAAM
EYYFASDASAIIEHTKRVIFLEDGDIAWSKEGNLNIARMNNSTPAIRDVQTLQLEIQQIMKGSYSTF
MQKEIMEQPESVFNTMRGRVNFEKRKVLLGGLVSHMDYIKRCRRLIFIACGTSYHSAVATRQLLEE
LTELPVMVELASDFLDRQTPIFRDDVCFFISQSGETADTLMALRYCKSRGALLVGITNTVGSSISRET
MCGVHINAGPEIGVASTKAYTSQFLSLVMFACMMAEDRISKQQRVDDIIGALEVFPEKVEEVLKLD
KKIEELAAHFYKQKSLLVMGRGYQFATCLEGALKVKEITYMHSEGILAGELKHGPLALVDEDMPV
LIIALRDKTYDKCMNALQQVLARKGQPIIICSKGDEETKKLGNFCIEIPEVPDCLAGILTVIPLQLLS
FHLAVKRGFDVDFPRNLAKSVTVE*
>TRINITY_DN15151_c0_g1_i3.p1 type:internal len:560 gc:universal TRINITY_DN15151_c0_g1_i3:1-
1677(+)

LDGAERPRILAAMLSTLRRAPRLAARAPLAAPAAARAFAAAKDIRHGSEARALMLEGCNRLAD
AVAVTMGPKGRNVVIEQPFGAPKVTKDGVTVAKSIDLKAAPMINVGAQLVKQVASKTNDVAGD
GTTTATVLARAIFREGCKAVAAGMNPMDIKRGMDAAAKVVLEDLAAQATTIESPTSIRNVATIAA
NGDAQIGEMITDAFEKVGKDGTITVQDGKTLEHELEVVEGMKLDRGFISPYFITNVKAQKVELEN
PLVLLYEKKISSVQAILPVLEQVAKVQKPLLLIAEDIDGEALAMLIVNKLRGGLKVAAVKAPGFGD
NRKEILKDLAVLTGAELLSDELGDKLEDLQITQLGTVGSATITKDDTVLLDGSGNKSAIDERCEAIR
DAIELSTSEYEKDKLKERLAKLSGGVAVIKVGGASEVEVNEVKDRLNDALCATKAALEEGIVPGG
GTALLYSAQKLEALTLDSLDQQVGVDAIKAALSQPCVQIAQNAGEEGAVVVRALLQEGNAARGF
NAATGQYVDMVEAGIIDPTKVVRTALADAVSASLMTTTEA
>TRINITY_DN801_c0_g1_i4.p1   type:5prime_partial   len:182   gc:universal
TRINITY_DN801_c0_g1_i4:1-546(+)

SSLAQGAPRPPPNDPLPRPARPRRARLGLPSPMADQLTEEQIAEFKEAFSLFDKDGDGTITTKELGT
VMRSLGQNPTEAELQDMINEVDADGNGTIDFPEFLSLMARKMKDTDTEEELIEAFKVFDRDGNG
FISAAELRHVMTNLGEKLTDEEVDEMIREADVDGDGQINYEEFVKMMMAK*
>TRINITY_DN30386_c0_g1_i1.p2 type:internal len:165 gc:universal TRINITY_DN30386_c0_g1_i1:3-
494(+)

ACRQRAAARPAARRLARFVSEGAGAMADQLIEEQIAEFKETFDFFDKDNDQRLSIKEFGCMMNS
LGQNHTEDDLHKMVAEVETDFEMRINFPEWLSLMAKKMKDTDTEEELIEAFKVFDRDGNGFISA
AELRHVMTNLGEKLTDEEVDEMIREADVDGDGQINY
>TRINITY_DN3271_c0_g1_i1.p1   type:complete   len:399   gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)

MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR

AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*
>TRINITY_DN123073_c0_g1_i1.p1   type:internal   len:179   gc:universal
TRINITY_DN123073_c0_g1_i1:2-535(+)
EGETYPRPLPGQEPLPPRVFLYRGFAPSTVQVARGPCLKVDLSVRMIQGQTALVKLTTLRDLLIAKH
KNEGLPPPTKEEMLDHLKFQMAGRTCMTKHNHIHYRIKEVCIDMSPTSTFPFEEGEISYLEYFQRR
HGITLKRNQPMLHCPFRGKSELYLPAEVALLTGVDEDWRSDREFA
>TRINITY_DN33065_c0_g2_i1.p1   type:3prime_partial   len:804   gc:universal
TRINITY_DN33065_c0_g2_i1:2409-1(-)
MWQFVWLAVAITSQINGNVHHKHTKPRHQNLIDDIVPNDDFDLDYSHNIFIPFDAYDNYEKFLE
YAERSDLAKRGGVTSLPAIQSLPGDGSHTYAAPGVNCQVQLLNKKVEGTDKRVIERTSCAEGWTL
KNALGFFFAGVGHDLATKSAGLVHMNQLRFKMLIFEAEGYTFVADTDNEVYSNLQSKLSLKNAE
CRLTISNSYTFENSEIVLTGNHEVIEKITNAKKTLEVTFEKGKDTSSFDVKMKVPSMPLETFATIFLES
ETEFITADMGDTSYEINIDPIKAVIIESTSNSVTGVFDGSDGKFQLTGKFLSNDQNAFMGQATDIYLT
VNRKSLGSRTTYNLMLGFAKEVKVMDIIPKYVGKTEIQDEFDDNFLKTTIEKWHLLFTSKRIIVAD
GAEYKKTFANIFDADEYQEFKQGVGIKATVDLQKTLTACSSGSTVPDSLKSVKIKGLLGRRGLSMV
FPPGTSVPLIPLIKCKLRQIQDDLGFELPISLKGYEQKSKFKLEEIAYSSDSGAFKMSLLYENTITIYKD
VLEITNPQLTIEREGKDEPWQFTIAADVSIFQVDASVMISYSKTGYTVEVSSGNVPLTNLLRAFSFSD
KPAITFEIHDFKMQIEVKDKEEEEENEEEGEDEGNKNQLAIKRQDNKEEKKRDLKFSIAGKPVFN
GFDKVSIEALVWTSQTPAGVAVAVIMENIRLDEVLEKILDVPEVPMAWFSDMTLTMVISNVDAEG
CDNPAQSEDDCEEADEEEEEEEGEGEEEEGEEGEKTQEGEEGEKGEEGGGGGPGGGPGGGGRG
PGGGRPRRG
>TRINITY_DN1319_c0_g1_i2.p1 type:complete len:134 gc:universal TRINITY_DN1319_c0_g1_i2:86-
487(+)
MVVPSAKRKIVKKRTKKFIRHQSERYKTVKQNWRKPKGIDNRVRRRFKGQYLMPSIGYGSNQKT
RHLMPDGFKKFVVHNVKELELLMMLKGTHAAEIAHCVSRRKRIEIVERANQLAVKVTNATARV
RSEENE*
>TRINITY_DN3180_c0_g1_i1.p1   type:complete   len:1889   gc:universal
TRINITY_DN3180_c0_g1_i1:5857-191(-)
MGYLRVTWICVITLSTIVLSEFIFDDDEFGEKRTFGDPDSLVKRSSSGSTKKHVSTFTRTQRFSGGGST
CNYRVIKRSGRQYVVFRSSRHTRVANGCTKIHVQSFLNNHFGGKNLLTTFPNLNGDNFEVVQMM
YSLETRVAFMEAISKTSMAFFGGGNLEFGKSGDVPLTLKLQWTEDHDSSAWDPSDIQVELETTKV
VLSAASFHFKAKKSYHNPDHFMIEKFDTQGVGNFRVSAYTSAIAGLDNTAFGADFSQDKYGALT
WNDFRGYGFFDPAENFQLVLHPSTYVRNSRLFNNEETSQFIILSNPVSDDTTYVTLMAQFGQSTNI
KDTLNGIMTSVNADIGIIKRINSRAFCLTVSSGEYDFLFTPPYTKDRNLMNPCFPLEYQDARDNQN
DLSKQKKKMTADINIHVTINFKENVGSCNDDSSIDTSSLPPKMTINGNENWKGFSWSFPEQAKGP
MMAIMKCMWQNSAAFQGLPYSLPFGDSEVVSISDFLDSPTEKTIGLKITPPEQWRTIPGIDLTFNYL
EFTASYNIPDQTWELSGTADMRIDKFEVFLKLEYSRTTVEVEDDDDDDSSNEDDGEGPDKKAKKK
SDKKKKQSKNSKSSKSESKLMAKLRKRKSMDALLKSLPDTFQDDDFNNNHHVFYDNLIIPRSLPV
KNNQSANVSLNKDAGTNIVPAAVKNSSLATAATTSKRTTEVEKQWTFTILMPTLLVKDIYTIFSPQ
STLPAEYPKVFNNGIKNLQISWAWGNEFEVRFRGQLVIMGWDKILLETVFWKQMPSRSLKFGIGIY
FQKIDVDAILKHIFQDESISVPWLSNLDCKLVIGNSEGFKDVSKKKKIKKIKKAKSNKKVSKKQR
KTSKSKSKTSAALTRSTRGMEEYIYADLAEKRQADDDDDGDDDAEPDVKFTYGSLADNALIAG
AGFEMTWYRPTEEEKCLGNTLCKFIYEKVQSNTQFVLAGQVDTGGITISAEVKDAGIVLATDLKL
ENAKLEIDGRAGGGIKLSCQMIYTNSEIATNPLTFEGAIEIGFAGELTFRFTMGGTIDSAFGYNRIAL
GNILLGATIDFKAASFTIEFGVTVLMGLLNEDPITIRGYFGLSPTNWIDSWVYVKASKLTIGSLGKAF
DFSVPDTFKDEGFPEGFQFSLSRKVVNIESLGIEIPSGLYLVGKFKFKFFELSADCTIDPANKAFDVKL
EMNKQNWIGGMITISSYTDENKGPMFHIKVDENTPFYANIDGKLTVLGLSQEILVRIDENSGALIH
LRGTPFPFIFDAALDINAALDPNTKSFNGGTFKITVSSSEFIPTLARKIRDWLEGLKSEGTQAKQDG
MTAITKGEEDSETITGKKSLWDSALDTWKSNLQRRESELAAKQRAITGALQACIDECELVCVPFFD
WEEDCFTIFGWSAPCPWPNSCAKKVPNYFCYAGCALDQLGSAFLTWVESTLTKIGLALQSTAVFL
TDMVEGIAAALTKLGEYIVAAKDWLINQFQAALNWVADLLTKQIVLRKLVLEATVQPPFKYCFG

YDIDITLFTWHITDGGHVCLDTLIRDLIYSLFGYNQDSKKALGMKDQIEEAKSKTLSIKEAAEELEE
SAETTQAEVDMQTAKTFEEELKRKRTMPTKEMFKFIDEKSKNTKYSKAHQKIMDTPHGMPAYQI
HNNHMLENLEKRSPWVVVRSFKDGNRNLEPKRIADHEIVKRSLSFGDGSKPCSRLRRSLATYDTI
VNVLIRSARNLENMEKNHFAHKEFHGHGIRKLDKRIAELELKNMTDEQREDAYFWYDKANEGY
EDFHNKVRRNIDYHDNYALPLLHNQLNYILKKSGKEGGFLKRVEDMHSEALHDFKRSIKNEEDR
ADGQELLSKIKKSMLAIVTDENTPLSRYTRSINGMKNDITRMNKMVLAC
>TRINITY_DN1339_c6_g1_i1.p1 type:internal len:570 gc:universal TRINITY_DN1339_c6_g1_i1:1-
1707(+)
GMFFQDGLTGSAWGDWALYVDSPLRFFGGGEASTYKTFDPATELGVQEPVGFWDPLGFASDGDE
ATFKRRRSVEIKHGRVCMAASIGYIVPEYYKFPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIF
FAGIVEGAFGVTDDYRNGTPGDYGWKVITSDDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLT
GSAWGDWALYTASPLRAFESELGVQAPVGFWDPAGYTNDGSMENFKRRRATEIKHGRVSMLAC
MGYMTPEITGKLPGYLSPSMKVQFADIPNGLGALSKVPGVGWAQIFAYCAYCELSQDQSAASPGG
AGDFGFKAITSSDPATLTRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWALYVDSPLRFFGG
GEASTYKTFDPATELGVQEPVGFWDPLGFASDGDEATFKRRRSVEIKHGRVCMAASIGYIVPEYYK
FPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIFFAGIVEGAFGVTDDYRNGTPGDYGWKVITS
DDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPL
>TRINITY_DN124769_c0_g1_i1.p1 type:internal len:113 gc:universal
TRINITY_DN124769_c0_g1_i1:1-336(+)
NRRRSVELKHGRVCMAATIGYIVPEYYKFPGLLSPSEGLKFADVPNGLAALGKVPALGWVQIIFFA
GIVEGAFGVTDDYRNGTPGDYGWKVITSDDPAEKEKKLSAELANGR
>TRINITY_DN24414_c1_g1_i2.p2 type:internal len:146 gc:universal
TRINITY_DN24414_c1_g1_i2:435-1(-)
VTSFKRRRTVELKHGRISMLATMGYITPEITGKFPGYISNSLGLKFDDIPNGLAAISKVPALGWAQV
VAYCGFCELSAGSEDWKSGTPGDYGFKVLTSDDPAEKEKKLAAEIANGRLAMVAIIGMFFQDGLT
GSAWGDWALYTAS
>TRINITY_DN1995_c0_g1_i1.p1 type:internal len:514 gc:universal
TRINITY_DN1995_c0_g1_i1:1539-1(-)
LTFIESLRLRTSKKRMGKEFKHQKNEKLEEDNEDISKTKGRLTNDTISYYKRVDSVLTENNFESDEL
YEAFIRNVFAQLKEDSVQVLRHTLTSKVIEKIIPLLSKSQFIELLEFVKEDVELLCCDRFASHVMETIV
ITYNGISDSTSDENFIKQFVSFCKVIRELIDHLIRDVFGCHVVSKLLQVLSGVKVSDRITKSKASINSK
KKAQQKYQIKEKELSAKEVTIINVADSLKKQYSKHVRVLLNVDNFGELLCHRNASPVLQVLLITTS
HINKKKYSVLSNQILQRARLIENRSLMEEENEDTIHKLPVVLTDAVGSHLIEVLLQTADDGLYRLLS
SQCFKNIIVSLCIQPVANFLAQTFLRLLEEKEQALFYVDKLFMYMEDILAVGNMGCISRLAELISRL
DLIDKQKKFIKVISNALHIPDQKLYKTDQKSNVLVTLIITMTTFDMFYKKESESENKTDIKVETDTN
KEIQNSDIENLCIKKNSINYHGACILKNCFKFKKCKTIVQS
>TRINITY_DN123_c0_g1_i1.p1 type:5prime_partial len:1231 gc:universal
TRINITY_DN123_c0_g1_i1:2-3694(+)
RGGFRPFGTGLMGSPMLGPYAFGPARSGALGGFGIAPLVRPPTRGGAAGANRGSRSNSNRGGKK
TTPVKNNKSTPEAKKDNNINAKNDKKEDKKDEKKDDKKDEKKDDKKDDKKGGKTPTGKEIKV
EPKDDMKNIKKNFFKDPKVEPKNEKKPDTKAVTVKPEIKKESGPQNVTLDKFNSELHLSIDADGL
SAGNMKGEGFQYMWGGVRGTHGVKKGKVCYEVYLLENIKVHCPGENNPHVLRVGWSVDNSD
YQLGEDKLSWGYGGTAKSSYDSKFLDYGKKYTVGDTITCYIDFESNPKAIFFMLNGEYLGVAFRFG
NELGDKAVFPHITSKNMRFRVNFGKEKPKHHVTNGFRMMQDIPVDQLVLPSPSPKTPKEAEIIM
MVGLPACGKSFWCEKYAKENPDKKYYILGTNNIIERMKVSGLTRKRNYHGRWEMLIKRASLVLN
KLFTVAKNNPRNYVLDQTNVYFTARRRKMESFAGYKKIAAVIINKPDVLASRTEKQQKIEGKMVP
EGAVMEMKFNFTLPEKGPSFNEVWYLEETLPKAQELAANYRREGSNFKTKSKRKPESSPSQPESSP
SSEKKPKLDPKIISRGFDKPFSKPNTNSPQQSTFKAPSPAQNNANKTPNQDRFSKNEKSTSKVETNS
DNSRSKAGNFNKGHDGNKSNERPFFSNTPDRGNASNRGNDSNRGNSSDRGNAPNKGNSSDRG
NAPNKGNFADKGNAPNKGNSSDRGNAPNKGNASDSANKNSKNEKPKEESKKTPKRAIRGTLD
QLNSIINSEARKTENNSGNIRDSAQSGKNEKMGSLMDIDRTPQRESDSYQNLQSRNRDALSNQG
GKNKESQSAGLMDIRNVPQGNQDYRGKAGILDSSRNTSQDYRGKPGILDSSRNTPQDYRGKPGIL

DSSRNTARRNEYESPVGRGNNSYSDSPARGVSTPRGRASFNDSPARGARGGRGQSDISRSGSLAKS
QGSGGNRGGRGRGRSKHLGDVNKYDPVGNMGGYYSALKALPSVKDLIGNRSSFSSYSTRIDEPSR
FDQLYSSYEPYSFGRTQNANDSRSLNYSFGQTDSYSSLERDGGYRDSQNSKDFLGSYQQRKDSSYS
DNRGSQGGQRGYQDSSYNADGLDAKDQYQNDDYQESYSSQKDKSSYDQNTQSSRSYNQETSYE
ESSDYGRSRNQEQDEYARSGTYERGDTSYGTDDANRSSRRYEDDLQESEPMDGNYSTQDYGRSSQ
SSQRARIW*

>TRINITY_DN495_c0_g1_i5.p1   type:3prime_partial   len:407   gc:universal
TRINITY_DN495_c0_g1_i5:152-1369(+)
MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKRISCSNDKVIKVRSALY
GRTAGNVCSISCSKDEEIKVKNALYGRTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPS
NSVFGDPCVGTVKYLNIKYFCVKRITPTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAG
DVCGRSRVTN

>TRINITY_DN495_c0_g1_i6.p1   type:3prime_partial   len:382   gc:universal
TRINITY_DN495_c0_g1_i6:152-1294(+)
MDFHWNTVIAGLIIVQVYSLAEYGTLNGKDSYRNAYPWLANDRNNNELGREDARSIYRSSDEID
AEYPQSDDEVDTNDIPKSYTSRDELDAEFAQRTYKFADDLDIENAQKSYASSDELDRDDEQRTNK
NTDDLDAEDAEREETINDSLDAENAQRRYTSIDELDGEDTQRVISKTITLPRLGAGRIYKSRFIHGP
YIRPKFVRPHKGIRLPHPNRIIIPGSWKRPAHGIFALKGKKAIFCEHKGIKSISCSKDEEIKVKNALYG
RTAGDVCGRSRVTNCRALNSFAIVQKKCNGHNSCDLNPSNSVFGDPCVGTVKYLNIKYFCVKRIT
PTTTPNGKTAIFCEHKGIKSISCSKDEEIKVKNALYGRTAGDVCGRSRVTN

>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)
SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHRR

>TRINITY_DN34_c0_g1_i1.p1 type:complete len:149 gc:universal TRINITY_DN34_c0_g1_i1:477-31(-)
MDAAQAAEIKKKRTFRKFTFRGVDLDQLLDLSSEQLMELVHARARRRFSRGLKMKPLALMKKLR
KAKKEAPPMEKPAVVKTHLRNMIVLPDMIGSIVGVHNGKVFNQVEIKPEMIGHYLGEFSMTYKP
VRHGRPGIGATHSSRFIPLK*

>TRINITY_DN56792_c0_g1_i3.p1   type:5prime_partial   len:1003   gc:universal
TRINITY_DN56792_c0_g1_i3:3453-445(-)
DNELKVIECNLRVSRSFPFISKTLDHDFVAMATKVIAGLKVERVLNIMNNCNKIGCKVPQFSFSRL
AGADFQLGVEMASTGEVACFGENRYEAYLKALISTGFTIPKKSILLTVGSYKAKNEMLGSVRLLEQ
MGFELYASMGTGDFYQEHGVKIQVIDWPFEENGIEGQEQSIQEYLSRNKFDLVINIPMRQTSSKRN
PHFITHGYRTRRLAIDHAVSLITNIKCAKLFCEALYRTIGQIKVKTHIDCVSSGNIIRLPGLIDVHVH
MREPGAEYKEDFQSGTAAALAGGITMVLCMPNTRPSITDTLSFKQAQKAAQKGARCDYALYAG
ASNKNAKHIKQIASSCAGLKMYLNDTFSTLKMDNLSDWMNHFENWPKHMPIVCHAESQTTAA
IILVAELFNRPVHIAHVARKEEIMVIRAAKLRGIQVTCEVSPQHLFMTVDDIGGECEGKYRVKPPIV
TAEDQKALWDNIDIIDCFATDHAPHHVDEKNSENPPPGYPGLETMLPLLFTAVHDGRLTVDDIIL
RLHTNPRRIFGLPEQHDTYVEVDMDEEWVIPDAMTYTKSKWTPFAGRKVKGKILRVVLRGELAVI
ENEVLAKPGMGEDVRTWEPTHCMPPVSTTGLVSSKDAVDPTRSAYLGVTAPSVPVEDIHKTIESPS
SPARKLFGTQKDNEGMHNILETIGPVSVAPSISQPSPLFAQTHLFHGQHILTVESLSKEQLYALFNL
AGYMRQEVRKGKSFDVLKGRVLALLFYEASTRTSCSFTTAMQRLGGSTIEIKPSDSSMKKGESLED
TVQTMSCYSDVLAIRHPKKGAVQNAAEHCKRPVINAGDGTGEHPTQALLDIFTIREEIGTVNGITI
TMVGDLKHGRTVHSLARLLTMYRVNLQYVSPKSLKMPESVKEYVKQRGIPQVEISTLEDALTNTD
VLYVTRIQKERFDNEEEYNKVHGSYIVTPKLLTKAKEKMVVMHPLPRVNEISTEVDSDPRAAYFRQ
VECGMYIRMALLYMLVAR*

>TRINITY_DN167719_c0_g1_i1.p1   type:internal   len:144   gc:universal
TRINITY_DN167719_c0_g1_i1:431-3(-)

SRRAMSAPYKAMDDGGSRMNVPAEVGALVLRLTVCVTVVHHGLQKLQNPEGFAQNMVAKWF
PFLPAPLFWTYAAAGMEIVAPILLGLGVFARLAALGLLVTMVFANAFHFLFTGSEGYPLGVPASGA
YAFEPSLLCGAIFAYF

>TRINITY_DN164271_c0_g1_i1.p1   type:complete   len:163   gc:universal
TRINITY_DN164271_c0_g1_i1:1172-684(-)

MATGIKPDPQCTDLYNKLKMTGGKAKPYEYLILHIDDKLNKVVPDVYPDLNSTLEMDEYKDVTG
QPASYKRLKDYLLAKASAYAFYHFEWSEKDGERSEYVMIAWCNDNKANITQKMKFSGTKDEVK
KVLKVGKVIQCNDADDIDYKTIIKDLSKNKAIFTK*

>TRINITY_DN19237_c0_g1_i1.p1   type:complete   len:209   gc:universal
TRINITY_DN19237_c0_g1_i1:128-754(+)

MMSEDEQMRMELQRMQRRADEMTDESLESTRRMLRMAEETQDTGIKTLVALDEQGEKLNRIEE
NLDEINDGMKEAERNLTGLEKFCGLCVCGCKKRKDFEGTEEYKKAYNHKSDGNKNGRSGNKA
GGSNDVAKSGYIQRITNDDREDEMDENLGEVAGIVNNLKSMALDMGNEIETQNKQIDRITDKTN
ANEIRIDHANKRAENILRS*

>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)

MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*

>TRINITY_DN140702_c0_g1_i1.p1   type:complete   len:2036   gc:universal
TRINITY_DN140702_c0_g1_i1:94-6201(+)

MATSFKVSEIKCTELLNLEKKGAIDPLVEVEYLGLSKETENKDNDLNPSFGEVFDFDLSGKALGPE
DFLKITVKDYEKFGRNRVVGKADVYLQELLSNPSSTLSATLNDKNDRPTTGKITFKVDYIGPAGGG
AGGATGGGGDDRQAAERELEGDEDEGDPNAMPDGTPIPEGPAGDAMRAEKRKMKKNKKKRR
EHNLPDKPTDFQIRIKIIEGRQLPGGNINPTVRVHLGEETKQTRVKHSSNKPFYDETFFFNFNERPN
ELFDKLVTFEVHNSKNVLSEAMIGAFQFDVGTIYFEDSSHAIIRKWLLLTAPEDNDKKDGEETKGA
SLQPGGPPAGYLKITAIVLGPGDELPEKAKGSGKSEGGEEDIESNLLRPAGVTLRPATFLVKIYHAE
DIPQMDSAAFDGVKKLFSSGSAQKDHVDPYATFSFAGKTQKTEIKYGNNHPDFNQELRVAFKFPS
MCERLKLQMFDWDRIGNDDCIGTSFISLTAISGNGDEGFLPCFGPCYVNFYGSTREFSDLPDEHDN
LNKGRGEGCGYRGRALVEIDTRFGDHTAKPVQDIMAQELVRVQAYMRRRKYKLFASFLSANMIS
EADGLVEFEVSIGNYGNKLDPDTEPQSSSTPPTNPVYDGCAYYFLPWQESKPCCVVESHWEDVIFR
LEPINCLLKIIDKMEKNIKSVELGLKAKAQPAEVAALLIALLDQFISDVSMDLPKFAATDNGVNEL
DLKIQEIRSDELLNLKEEASTLREQATDVQEAMDTIDGYLKRMRDLCVEPQNSMPDVVIWMIAGS
KRVAYHRIPAYDIFYSENPLARGRKCASLQNFILKYPGKKGHDMEDHPEIPASVSVILWLGLEKHQ
AAWTDTEQMEGEYSVYAETYENQGKPPMFDWTAKIIKRPGFSDSEGKIRLNKEYYEPPEGWKWD
DPPDGDWFIDPEMSSNFDADAGHKKFMQDCFENESRVPAGNWGKSTPHYTNVQGDEIDHRDE
TSLPEGWSWTDDWKVDVNRACDEEGWEYCIEATGGGWGAVFRSYHFCRRRRWVRNRQLEADP
QKVMKQKKEEAKQGEGWEYAPVFGMKYHVKEHKFDFVRRRWHRKMVCVKPGAVPMFKIPD
DDDKGKFHQIMPRIFLAYDEPHKWQFRAYLFQARDILGLDSEGTSDAYAKVCFQDQSQITDVIEET
LCPEFNQTLLFEDMQLYGSPSVFAENPPFVSIELFDKDKVGKDEFLGRVLAQPIVRLNGLKPPATRL
MWYDIHHGERTCGELLAAFELFLDEGADLPLPPPWLEKEKKFQVPSGIRPILVKTGVEILNWGVR
NMKKYQLASCTSPSVTYEIGREIITTDVIKNTKKNPNFLKNIFYKEVYLPKDPLYMPPIVIKVRDHR
TFGRKPVVGRHVIKSIDFVQPPKADPVVELPPADLVGEPEEKKDVTLDIEEKKKKKEIPVDDNLDW
WSKYFASADEIEKCGNYLKKGHKTIQIYDSELEEIKDFNGFSDFIVSYPLERGKEDDDEDDNVVGE
LKGLVKVYPLPQDPKDQTKIRYFTPKLKEKSKIVKCIVRVYVIRARDLQPKDPNGKADPFIVVQLG
KKKISTKDNYIPNEINPFFGSFFEMKADVPLDKDLKIKVMDYDFMSGDDLIGETMIDLENRFLSNC
RATCGLSPAYYTSGAYQWRDAKSPKEILDQVCRTKPQWLSNEQVVVNGQLVKIEDFEESPPTDPHI
GPVEQRLALHVLNNEDIIGHRLVPEHVESRSLKNPLQPSMDQGQLEIFVDIFPIANGVPGPPLDIAT
RKPKEYVLRVIIWNTAEVPPSETSITGEEMSDLYLKGWMEGQDDEKQKTDVHYRSMDGEGMFN
WRFVFPFKYMPEERVMVVEKKEHFWSLDTTKQTLPPRMNLQVWDNDLFSANDFIGNLELDLSK
LPRPKKAAKKATLAMLDTEGDDVMDLFQAKIAKGWWPMLSENEDGTRTMQGKVEMTLEIVTD

LEHEAKPAGQGQEEPNMNPKLDPPNRPETSFLWITSPWKTLKHIIWKNYKWYIGFFLFIILILFIGL
VLYSVPGSIVHKIFGFQ*
>TRINITY_DN96_c0_g1_i2.p1   type:5prime_partial   len:189   gc:universal
TRINITY_DN96_c0_g1_i2:1253-687(-)
LASLGICYGADLMVTKQVYFDVSIGGQNAGKITIGLFGEVVPKTVQNFYELVTHSKGFGFKGSKF
HRVIKAFMMQGGDFTNGDTGGKSIYGERFPDENFKLSHYGPGWLSMANAGQDTNGSQFFITF
TKTPWLDGRHVVFGKVVNGMDVVKKVEQVQTDSRDKPKKDVTIEDCGVVKVEKPFAVKKQ*
>TRINITY_DN26249_c0_g1_i1.p1   type:5prime_partial   len:477   gc:universal
TRINITY_DN26249_c0_g1_i1:1733-303(-)
QMKMAASNMAGHVVRNNLIFLLSFVIIIVAEEGRHARFEYKFSFKGPHLANKQGTVPFWNHYGS
AIPSDDQVRITPSMRDQRGGLWTKTKSSSEFWEVEIFFRITGRGRVGGDGLAMWFTEEAGIQGPVF
GSSDHWKGMGLFFDSFDNDGEQNNPYVMVMLNDGTKQYDHFKDGNSQQLGGCMRDFRNRP
HPIRAKIRYYNNILTVFYHSGMSERSDDYELCMRAENVVLPKEGFFGITAATGGLADDHDVIKFLT
HSLTPPLTDEQKQKILSEEQRKKYEEQYGEYTQKLETKKEEFQKEHPDKKAPEEKFESVYDRDVRL
IYENQNTIHHVVRALHEKVGELTNQLNNLHVTINNNNQLAQQQQPKGDGVTRQEVNTIINLQN
QVHNAIQELKQQSGGGGGGDNTKTVQMEKTLQTVLEQVGHLVSKNNDRRPSCPTVSCVTPSILILF
LVAQVLLVAGYNFYKEHQNKAAKKFY*
>TRINITY_DN140696_c0_g1_i1.p1   type:complete   len:260   gc:universal
TRINITY_DN140696_c0_g1_i1:43-822(+)
MPRGPKKHLKRLNAPKHWMLDKLSGNFAPRPSSGPHKLRESLPLVIFLRNRLKYALNYTEVMKI
MKQRLIKVDGKVRTDICYPAGFMDVITIEKTGEFFRLLYDVKGRFVCHRISSDESLYKLGKVKRVAF
GKNSVPYLVTHDARTINYPDPSVNVNDTVVIDIKTGKINDFIKFDTGNTVMVIGGRNTGRVGIITH
RERHASSYDIVHIKDAAGNQFATRLSNIFLVGKGNKAMVTLPRGKGVRLTIAEERDRRLASK*
>TRINITY_DN8707_c0_g1_i2.p1   type:complete   len:564   gc:universal
TRINITY_DN8707_c0_g1_i2:2751-1060(-)
MSGFVRQSKYRHVFGSPARKDGCYEGFRVTNCAFDGNFIAANKHFIAVCVEVGGGGAFIIVPVGS
TGRLDVNIPKVSAHKEYILDLQWNPYNDFMLASCSEDGTIKIWEIPEKGLFMNIGDEKALLSLEYH
EKRCTQVLWHPSASNVLMSVSQEPKVCVWNLDEGSVEVEILEHPELIYNATWSQKGDKIGTTCK
DKKIRIFDAREGTLLVQGMGHEGAKPSRVIFTFQDKYLFTTGFSKMSERQYACWNAETIEQLGLEE
LDTANGCLVPTYDADSQLVFLNAKGDSNIRYYELVDGDPYYFYLSTYQSSAPQRGFGFIPKRCINV
NANEISKGYKLHGTKTGYIEPVSFTVPRKSETFQQDLYPDAIGDEAALEPDDWFSGKNAEPKRIA
MSTFFKGKTKPTGAAGGGLKKGGLKGLKAKKEAKTAAKSAAKSEPAKPAPVKTESKDKVDAAP
PAAAAVEQKSSSTAVAAPAAAAPVVVSGVDEKVVKELQNEIKSLKDGDKKLQKEIISLKDKLKDY
DTLRSDIKLLCDAVKKNDERITALESLVAEETDEEETGEGGDE*
>TRINITY_DN41831_c0_g1_i1.p3   type:internal   len:115   gc:universal
TRINITY_DN41831_c0_g1_i1:342-1(-)
WGSWSSVRTRGEDKDARTQRSSKTPPQYRSSCLKNGKLRVCWMQRLTASTVLMAGIGKLTMESP
ASLTMSMTRSGGASPIDLRANSPVRPMSNARARSLTWAWRRACLPNKQAR
>TRINITY_DN2490_c0_g1_i1.p1   type:complete   len:1044   gc:universal
TRINITY_DN2490_c0_g1_i1:354-3485(+)
MDVNKKVNQAYIDDDDDITINFNPKSGDPNPQAQRFKISKLPSQSDSNNSMEDIEEADDVDGLE
KDNVQNTVSKHVQLTIPAEHYHNDHNDTRRASHTHTQTIGYMTHDAVPMSVFYRNQASMENA
ANGDMRPTLDQLHKGQGLDEARKRHWDALNEEDEQQDAERGTSNTKTKLGWIKGVLFPTLLN
IWGVILFLRMPWIVGQAGIGLSSVIVLLATVVTTVTALSMSAVCTNGEVKGGGAYFLISRSLGPQFG
GSIGIIFSVANAVAVALYLVGFGETVQALMARSDTYMVDATNDIRIIGLIALILIFVIAMIGLEWVIHT
QTFLLLLLVAAILCVAVGCVYPAPQESREKALAWGLPGYKSKSFADNFVPDYRDGEEFFGVFAIFFP
AATGIMAGSNLSGDLKDPQKAIPLGTLLAIGMTSTSYVALSWILGSFVMRDASGIIPVINVTVNGTT
MNSHTCEIGSCEYGSVNDLQIIEKISLWGPLVLIGIFAATLSSALASLVSAPKVFQAVCKDKIFPHIEL
FGKEYGKNGEPRNGYLLTLVISACFIAIGELNVIAPIISNFFLMAYALINYSVFAASIAKSPGWRPSFK
YYNKWCALVGFFLCIVIMFMINWWAALITIIVVAALYKYVDVRKPDINWGSSGQAHTYLKALRFT
RRLEDTDEHVKNFRLQVLCLTGQPSLRPNLVHFCSHITKHLGLLVCGEVNVTDKILSPSGNEGKW
LKKQKIKAFHQIIHSATLRNGAQSMLQSVGLGKLKPNTLIMGYLNRWQSIEVAKVDEYVHIIHDA

FHLRYGVGILRLQDGFDITDGVVDDQIENGVVENHEPDWYTEDWDENQKDTRGSDGDGSDQA
KEERQETFKPPDIVSAFPKKRKGYIDVWWLYDDGGLTILAPHLLALSSHWRGCKLRIFTPASDKKI
KANQIRMANLLKKFRIDFSSVVEFRGINKHPKEDSINQFKQLRRGEHLPQDGLLDKKTLRQIRLGE
LLHEHSSEAKLIVLTLPIPKEGMVTSLMYLSWLEVLSADLPPVLMLRGNQTSVLTFYS*

>TRINITY_DN39385_c0_g1_i1.p1   type:5prime_partial   len:154   gc:universal
TRINITY_DN39385_c0_g1_i1:2-463(+)

SNNITIKLSDNVTKINRSDGKEVAKIFLISDTHVYLLNSKTLQLIHQIEISKINKVTLTPYKDGIIVLH
VNQGSDKSLQKGDFILNSSNVIENVTRLAMLYESISQKNLDIDFSSNLCINTKGKNIDLVVQENDD
NNQLVFRKKGNQIMVSVQ*

>TRINITY_DN367_c0_g2_i1.p1 type:complete len:199 gc:universal TRINITY_DN367_c0_g2_i1:67-663(+)

MNILYLSGLLLLCGLAFCDEEDIEVEDFGQSCTKVPTRKCEHVKRCSRVDKHHPEVCKVVEECKH
VLVEKCVPKPKPRFETKCEVVDTVRKCETVYKCIPKYFYVKECKSRQVCKHIPFFKKVCKDFCTKK
LVKHHYGHPVFKKVCHPRCYTAPFPKSECKDEPFCFQKWQSKKNCGNFKHCWDQDIRKCRKVL
VSHH*

>TRINITY_DN1121_c0_g1_i1.p1   type:complete   len:252   gc:universal
TRINITY_DN1121_c0_g1_i1:1155-400(-)

MAEREQLIQQAKLAEQAERYEDMATHMKGVTKMADQPLNTEDRNLLSVAYKNIVGAKRSSWR
VISSIEQKATDSKKQYAEAYRIVIEKELSDICNEVLHLLDDFLVKSASATYYEDPNLTTAESAVFYLK
MKGDYYRYLAEVASESEKQSVVDKASNAYKEASNIGIKSLAATNPIRLGLALNFSVFHYEICSEPSK
ACTLAKDAFDLAIAELDSLPEESYKDSTLIMQLLRDNLTLWTADQADGNEPDAE*

>TRINITY_DN3773_c0_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN3773_c0_g1_i1:168-1679(+)

MAPVVGDLMDLSDIDASKQHNQAVVRDYISQPRLIYKTVSGVNGPLVILDQVKFPKFAEIVTLTLP
DGTRRSGQVLEVSGSKAVVQVFEGTSGIDAKHTTCEFTGDILRTPISSDMLGRVFNGSGKPIDNGP
PILAEDFLDIMGQPINPWSRIYPEEMIQTGISAIDTMNSIARGQKIPIFSAAGLPHNEIAAQICRQAG
LVKHSKGTMDYSDDNFAIVFAAMGVNRETARFFEQDFKENGSMDNVCLFLNLANDPTIERIITPR
LALTAAEYFAYQCEKHVLVILTDMSSYAEALREVSAAREEVPGRRGFPGYMYTDLATIYERAGRVE
GRNGSITQIPILTMPNDDITHPIPDLTGYITEGQIYVDRQLQNRQIHPPINVLPSLSRLMKSAIGEGM
TRKDHSDVSNQLYANYAIGKDVQAMKAVVGEEALTPDDLLYLEFLQKFEKEFISQGAYENRTIFES
LDIGWKLLRIFPKEMLKRIPAKTLAEFYPRDGRKEETD*

>TRINITY_DN32522_c0_g1_i1.p1   type:complete   len:235   gc:universal
TRINITY_DN32522_c0_g1_i1:147-851(+)

MAAWLDSYRETEQLGHDIMELINERNTLKRSASNTSKVQSSIRIKMQQYSSGLQRLKDLLLRDSSS
YNVTQQELQRRQNQLDVLVSKEQQLNQAFKPTQSNYDRSNLFGEKYGDDLNGRYGGASASNGL
DDDLTPQNFRQQQEQILKEQDKGLDSLHEVIQRQKMMGKAIGNELEYQNDLIDDITKGVSRVDN
KVNATERKVKKVHRKTGSCAMIVVIILLLIAILVVAVFPTN*

>TRINITY_DN18187_c0_g1_i4.p3   type:5prime_partial   len:112   gc:universal
TRINITY_DN18187_c0_g1_i4:361-26(-)

SRKAMPVQGSIKKPHRYRPGTVALREIRKYQKSTELLIRKLPFQRLIRELAQDFKTDLKFQSQAVLA
LQEAAEAYLVGLFEDTNLCAIHAKRVTIMPKDMQLARRLRGERL*

>TRINITY_DN34191_c0_g1_i1.p1 type:internal len:238 gc:universal TRINITY_DN34191_c0_g1_i1:1-711(+)

VRQRSAPAPGGGPPFATMAGRFDPSKLLQAFASRGAPLAAGGAVLFGGAYAVQNAVYTVDAGH
VAIKYHRMSGIGSSTYREGVHFMLPWFERPIVFDVRARPHTMTSLTGSRDLQMVNISLRALCKPDP
SRLPDIYRNLGPDYDEKVLPSIINEVLKSVVAQYNAAQLIMQRELVSRMIRQRLVQRANDFSILLDD
VAITHLSFSSEYEKAVESKQVAQQQAERARYLVLKAQEEKK

>TRINITY_DN12_c0_g2_i1.p1 type:complete len:203 gc:universal TRINITY_DN12_c0_g2_i1:239-847(+)

MANRPKGFGMTAELANKRAAKFDAELAAEAMGWVKDVLEASGNDEAVNLAREIGSIDGPTDV
KGPLKNGVILCHLINSIQPGSVKRINQSSMAFKQMENIGNFLTGCEGIGCSKQDLFQTVDLYEGN

NIPQVINGLFALGRKARKTGYDGPRLGPDEASENKREFTEDQLRAGEGVIGLQAGSNKGASQAG
QNFGKTRAIID*

>TRINITY_DN2301_c0_g1_i1.p1   type:5prime_partial   len:452   gc:universal
TRINITY_DN2301_c0_g1_i1:2886-1531(-)
TCVCRNHIAKMEGKSTCQQLLFVITIILSCISALFGKTLVLLDNANIKETHSIFFENLKDKGFELVFK
AADDPSLTLVKHGEYLYKNLIVFSPTVEEFGGSVDVPAITTFVDNGGNVLVAGSSNVGNPIRELGSE
CGIEYDEEKTSVIDHHNFDQSDDGTHTTILTDAKNLIKSNVIIPSKVDSPIMFNGVGMTADTDNPL
VLEILSAESTAYSYYPDMKITEYPLAVGKNTLLIGGQQARNNARIVFCGSLDFFSDQYFMSGAQNA
AQSGSTYFIQSGNMKVAVDVALWTFRHNGVLRVSQVNHHLLGEVDPPPAYTIEQEVVYSIKIEEFS
NGQWVPFQAKDVQLEFFRIDPFVRTYLKSSTDGVYNVNFKLPDVYGVFKFKVDYDRVGYTHLFSS
TQVSVRPKQHTQYERFIVSAYPYYASAFSMMAGICIFSVVFLHHKETSKVKDE*

>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-
550(+)
LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW

>TRINITY_DN278_c0_g1_i1.p1 type:complete len:470 gc:universal TRINITY_DN278_c0_g1_i1:3091-
1682(-)
MAPSFNKTNGHMEENGGMIHANGKSSEKPINLGEQTYSYMTFKKMGLIMITLPLVFLLLVGLPSY
LYPVLVLLFFIPVFAGYIGLNNVIYCLYERHNQVSKIDNYIEFLDEDLKKKFTGRFIPIRDLYELYAEG
KLNFKGDVLQCLERRNEYVSYKLQLWHLKFFLSKLLPELLHARSQDKEQVCDHYDRGNDFYNA
YLGPLMVYTSGIRYSESDTLEDMQMNKLKAVCEKVQLKEGDRHLDIGCGWGTLVNYAAENYNS
QSEGVTLAKEQVCWAEEKAKSKEIMDRVNYLCMDYRDIPKKKYDKITCLEMSEHVGIKRYHHFL
KDVRNMLEDDGIFFLQIAGLRRAYQWEDFLWGFFMDTYIFPGADASLPLQFPIAELEAAGFEVES
VKTVGIHYSDTIKYWYHNWVKSDSHDKMIQKYGRRMVRVWDIFLAWSTIIARQGNSTCYQIVAH
KNFNHYPRRRFIQPKN*

>TRINITY_DN413_c0_g1_i4.p1   type:3prime_partial   len:463   gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR

>TRINITY_DN26892_c0_g1_i1.p1   type:complete   len:233   gc:universal
TRINITY_DN26892_c0_g1_i1:108-806(+)
MHMEERNMSSEKFEEYEDEFQTYFQEFKSIVHNKLPKLTAEPRKKEVRNAEKIYEDADFQLTQMT
DEAQKAPGVHKSRLMTKTRGYRADLNKVKRELVKISTAVIMSNSGAREDLLESSRPERQMNIQQ
QSRMKEGLDYLERGSQSVARSQRIAAETEEVGVQIIGDLDDQKETLHRVKDRLKDTEADLGKSRRI
LNSMAVRLATNKLLLAVIIFVELLILAGVTYLKFFKK*

>TRINITY_DN6_c0_g1_i1.p1 type:complete len:196 gc:universal TRINITY_DN6_c0_g1_i1:843-256(-)
MIFTVFLIGLQFVGIYNHAIPHLHPGFHPFHHYQPQGLLNQMDKEFTFSCPNGKAISFIGSVHDNR
KEDRQWTVYCANDVMEPRGTSTWTYYVNDFDGEMDFACADGNIVTGIASFHKNKYEDRRYKF
RCTYMPGTIRKGCSWSKYSTYDAMFSEHIEPGRYLTGMRSSHDNNKEDRIFQIETCRFDHYYEQQF
H*

>TRINITY_DN76040_c0_g1_i1.p1   type:5prime_partial   len:383   gc:universal
TRINITY_DN76040_c0_g1_i1:1-1149(+)
RTSSKAGHRFAEITKMASEQETDAEMIKECEDYVKKHNIQVLLKDAIVQLCINKPDNPYQFLRDH
FEKLENEHGGKTGKDDHVSATEPPPQATTRRRRGAVSAAVISEEDAASYVKKVIPKDYKTTAALS
KAIEKNILFSHLDESERSDIFDAMFMVKHSEGEVIIQQGDEGDNFYITDSGEVDVYVNDNLVVSISP

427

GGSFGELALIYGTPRAATVKAKTDVKLWAIDRVTYRRILMGSTMRKRKMYETFLEKVSILESLDKW
ERLTVCDALEPCNFNDGEEIVVQGEPGNDFYIISEGQAAVLQRRSPNEDPIEVSRLNVSDYFGEIAL
VLNRPRAATVVARGTLKCVKLDRQRFERLLGPCGDILRRNIQQYNSFVSLVV*
>TRINITY_DN15016_c0_g1_i2.p1   type:complete   len:566   gc:universal
TRINITY_DN15016_c0_g1_i2:94-1791(+)
MGQVLPCLPSPSAGSRSKLPLNMDNIIMLTDSYKVSHYVQYPEGTDEVYSYYESRGFDSSCVAGHP
TVCFFGLQYFIKRYLEGPVVTMEKIQAAKAFFDLHFVGTGAKFNLDGWMHILKAHGGCLPIEIKA
VAEGTEVPTSTVLFTLKSTDPKCYWLTNYLETLLVQVWYPMTVATNCMYQRRMLLEYLKETGSPE
GIDFKLVDFGFRGVSSVESAAVGDLAHLVSFCSTDTVAGMVAAQSFYGAKMPGASIPASEHSTITS
WGREHEVDAMRNMLSKYPTGMVACVSDSFNIYDACDKKWGQILKEQICSRDGILVVRPDSGEPK
EIVPELLEKLAAAFKAGTCGPSPGTKKNEKGYVVLDPHVRLIQGDGVNTQTVLEILHEIKNRGFS
ADNVTFGSGGALLQRMDRDTQKIAFKCCQISVKGKKSDVYKDPIHDKGKKSKMGEMFLIRDPSM
PKKSPEVRGAMDPNRFAGECYDLVTVCHYEGGTKRAVWASDAMGKAGRADPESIGRSRAPTAD
GLAKDKAADLLVPVFRNGVCLKEYTLKEVRALAAKSWPGDVGCNTLQ*
>TRINITY_DN1397_c0_g1_i2.p1   type:5prime_partial   len:107   gc:universal
TRINITY_DN1397_c0_g1_i2:2-322(+)
NTLKCTTGLQTKWPAIPFATADVPSAVDECFPGTKECVTVKYDYIFQFETKIATPKNEFRLPVVQK
MCNRHNIDKCNKWCTILSIHQRMENCDADCCKGDNCNANA*
>TRINITY_DN128406_c0_g1_i1.p1   type:5prime_partial   len:150   gc:universal
TRINITY_DN128406_c0_g1_i1:474-25(-)
FGSTRKMSQTQSVQVFGRKKTATAVAHCKRGNGLLKINGCPLHLVEPSTLRYKVQEPILLLGKERF
EGVDIRVRVKGGGVVSRIYAIRQAIAKSLVAYYQKYVDEVSKKEIRDILVQYDRSLLVADPRRSEPKK
FGGPGARARYQKSYR*
>TRINITY_DN1315_c0_g1_i1.p1   type:complete   len:371   gc:universal
TRINITY_DN1315_c0_g1_i1:246-1358(+)
MKILLAVLCTICAVYGKSLPQGPEEDNGEDMSATDIIFNVNQYAGKTDESISTFGAGSDSNPDLFE
GDIVMTNRLKSQINQMNHSNGNDKFDAIRNGAWPKGVVPYTFASNFARTYRSAVMSAIKEYNA
KTCIRWKPYTAALARAAGGYVQFFHSGGCYSMIGRQGGLQKISLGTGCGTKGVAIHEMMHALG
FFHEQSRRDRDSYIRINWNNINPSTRYNFEKYRSGQASTLGEPYDKSSIMHYGNYAFSINRQKTIVSI
SNYNEVLGQRNGLSVIDARQLNKYYKCSNTGTGVVKPPVVTNNLTNKYKFCVDLSKWCGDSFV
KANCKKTCGCKDIKTQKECSYWSNQGFCRHTWVTFMKVNCPKTCNMC*
>TRINITY_DN33483_c0_g1_i1.p1   type:complete   len:344   gc:universal
TRINITY_DN33483_c0_g1_i1:56-1087(+)
MMTMSEEKGTTTVTLTNPKDIIEKVVVHPLVLLSVVDHFNRMSKIGNQKRVAGVLLGSIRNKVLD
VANSFAVPFDEDDKDASVWFLDHDYLENMAAMFKKVNAKERIVGWYHTGPKLHANDIRINEVI
RRFNSNSVLVVIDAKPKELGLPTEAYIAIEEVHDDGTPTSKTFAHIPSEIGAEEAEEVGVEHLLRDIR
NITVGTLSQQITNQLSSLKGLHVHLQEIQTYLEQVISGKLPMNHTIMYHLQGIFNLLPNLNIEEFIK
SITVKTNDQMVVIYLASVIRSVIAMHNLINNKLQNKELEKEKEEGKTKKDKDAKDDKSSSKDEKE
KKDEKKDSKKDEKKT*
>TRINITY_DN1091_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN1091_c0_g1_i1:200-835(+)
MKLILICLFAVLVYSIHCDQPSDPVWPNLFQQSFREKFYYPVIGTHYTNGTYYYDYKNLRYRLDRD
NGRYDRYCGLNGIRAFQNTPCTHLVLDGTRWLVYPEKKECCECCHAANGCGVLKPTWLTGAEF
VSKSNGIYKWNQKGLQDNFYSERVTDRIMTEIDQVPNDTQYYDPDSFKTKIENIEDVFKLPSYCKR
GTKCSFFSACRAVGFF*
>TRINITY_DN26679_c0_g1_i1.p3   type:5prime_partial   len:108   gc:universal
TRINITY_DN26679_c0_g1_i1:1-324(+)
TKSLNRRGWRLAAPAFRARKPTTRLKLPAPGCACAALKPAHLDQATAVGAHEDQDRHQDGPH
QLVVRVHLHATLPLRKLSGQRLLLREGHVAPLARPHQLDLHLRRQ*
>TRINITY_DN36471_c0_g1_i1.p1 type:internal len:286 gc:universal TRINITY_DN36471_c0_g1_i1:2-
856(+)

GNKWLVDCRVSKNTINIIKINRKSYCYLPEILDRIMTSITEQPCYTLINYPMENDTVSESKLKEDLEK
GDIPVKTEALKKVMYQLLNGEKMPSMLMTIIRFILPLQDHTIKKLLLIFWEIVPKTGQDGKLLHEM
ILVCDAYRKDLEHPNEFIRGSTLRFLCKLKEAELLEPLMPAIRLCLEHRHSYVRRNAVFAIYTIFRNF
DFLIPDAPELVYEFLEKEQDASCKRNAFMMLIHVDQERALDYLSSCIDQVHSFNEILQLVIVELIYK
VCIANPQERARFIKCI
>TRINITY_DN1479_c0_g1_i1.p1   type:5prime_partial   len:107   gc:universal
TRINITY_DN1479_c0_g1_i1:397-77(-)
GPYKNTLKCTTGLQTDFPNIPFASPNVPYAVDECFPGTKECVTLEYDFIYKFHSTIAQKNVFKLPFV
QKMCNRPYMPCNAWCTFFYARQATESCKAKCCKGDNCNA*
>TRINITY_DN73587_c0_g1_i1.p1   type:complete   len:533   gc:universal
TRINITY_DN73587_c0_g1_i1:94-1692(+)
MLRQAVRRLSRGTNKRSLLRKSSERLLPACVNACQRFVSTDVTNNQAAAAAKAADKSPAAAVA
VGQIVAVIGAVVDVQFDAGLPPILNALEVQGHGSRLVLEVAQHLGENVVRTIAMDGTEGLVRGQ
RIVDTGNPISIPVGPETLGRIMNVIGEPIDERGPIETKSKAPIHTEAPEFVEMNVNQEILETGIKVVDL
LAPYAKGGKIGLFGGAGVGKTVLIMELINNIAKSHGGYSVFAGVGERTREGNDLYHEFIETGVINL
KDDSSKVALVYGQMNEPPGARARVALTGLTIAEYFRDVEGQDVLLFIDNIFRFTQAGSEVSALLGR
IPSAVGYQPTLATDMGSMQERITTTRKGSITSVQAIYVPADDLTDPAPATTFAHLDANTVLSRGIAE
LGIYPAVDPLDSNSRILDPNVVGEEHYQIARNVQKILQDHKSLQDIIAILGMDELSEEDKLTVARAR
KIQRFLSQPFQVAEIFTGHMGKLVELKDSINGFKQILSGELDHLPEVAFYMVGDISEVESKATRLAE
EAS*
>TRINITY_DN493_c0_g1_i1.p1 type:complete len:473 gc:universal TRINITY_DN493_c0_g1_i1:2681-
1263(-)
MKCMKFISLMLITFTSILVAQDTGFIYYDDSSSSDIDSLTEPYGYQSVMDNREKSYEKPDMRYNFDK
PSASDIDSLNTPQYGYEPVMDDRERSYKRPDMRYNSDEPSARDIDSLNIEPYDYESLMDYRDTPSE
RPGMRFDFDESITGDIDSIDTPLDDYQSLMDHKRKPYARKRRSIRHRRFIGQRRWYGRRKFIRKNQ
RQRNGFRKINSQRKRVCSKGSNCRHKLEPMGCFKDIKSERAMTEEILNERDTASKVFNNRLINWR
QYHEWLPGFICRCAQAASERGYSVIGIQFWGECWSGPNSESTYNKHGQSDSCVNKNLQENRAN
LTQCAQAAGKDSTNYVYRIAPACNTKYEPVGCFQDDQKEPRPIPHYISTDRDSSLDIFSGKLLNW
KQWNTHMPDMICRCAALAKSKGHKMFAIQFWGECWSGPLSNDYKRNGASGECRGKDFKECSC
NSYYCVGKTHTNYVYRLS*
>TRINITY_DN751_c0_g1_i1.p1 type:complete len:227 gc:universal TRINITY_DN751_c0_g1_i1:731-
51(-)
MAMKIVLCTLAALMCCAYAQDGITAITDIINPENINTALDAAEKLKNLIHTTSESKIQSREKTQGFE
FLNMKANAQYTRGMKKHHLMRMMNRYLVPFSRSSADMKEVVDTLKEFIEDDVEEHQEQFFGL
MTQGGGGTTEAIFVYYKLRDDGKYNFKRMTFRGTFRLAADLVITHSSKSGFFSSESKDVINWLPRR
GVTAQNVQELLDIIVPKLATVMSEFAPKDSI*
>TRINITY_DN165222_c0_g1_i1.p2   type:5prime_partial   len:133   gc:universal
TRINITY_DN165222_c0_g1_i1:1-399(+)
FRHDLGGARRLFLHVGRGGRPPDRFLLDRAGAPAGGGPRGGRLDGDVLLRRGERIPHIFVLLHA
VHDLRDHIRLLLRWRILHRAVRRNHADLLHPVDEEQGLRRARGRPGDARRGHHRRPSVDHRGV
LGLPS*
>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-
44(-)
MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*
>TRINITY_DN624_c0_g1_i1.p1 type:complete len:884 gc:universal TRINITY_DN624_c0_g1_i1:218-
2869(+)
MANQEEEEHFGYYYGEEEDRGLLDPAWEKQQKKTFTAWCNSHLRKVNVQIEELNVDFCDGLKL
MLLLEVISGERLPKPERGRLRFHLISNVNKALDFIASKGVKLVGIGAEEIVDGNLKMTLGMIWTIIL

RFAIQDITVDEFSAKEGLLLWCQRKTAPYKNVNVQNFHMSFKDGLAFCALIHRHRPDLIDYDKL
AKDDPMYNLNYAFDVAEKELDIPKMLDAEDMVNAVKPDERAVMTYVSCYYHAFSQSQQAETA
AKRILKALNVNQGNEKAIEDYENLASDLLDWLNNKIPTLDDRTTDSSLDTMQNKLNEFRDYKGT
EKPPKVDDKSKLENLFNTLQTKLRLSNRPLYMPAEGKMINDIDKRWKDLEQSEKDFQEWILNELR
KLERLDHLAMKFKHKCDIHEAWSTGQDDYLRSDDITDASLASLLASRKRHEAFESDLAAQQDRV
EQIVAIAQELNTLGYSKIDEINTRCKGICDGWDTLGELTTQRSEKLAKAIEIAERLDNLWLEFAKKA
SPFNNWMDGAKEDLMDFNVHTIEEVNDLKDAQLKFKANMPAAQEEFNTIMGLQNAISSMSS
QPNPYTNTKAEDLQEKWQEVLELIPKRDSLLESETQKQQNNERLRVQFAQMANQVGAWIKQRM
GRMTDIGMNAQGTLERQLEELENLNAEINGFKQNVLDLDASARNVQEAMIFENPHTPYTMEVI
RIQFEQLLTGVTRNINEVENQILMRDSIGITEEQVKELRTSFNHFDKNSNGRLDYKEFKQCLVSLG
QLGDVEDKGEHTFNRIIAMVDPNETGYVSFQAFLDYMTREMADTDTADQVMESFRILAGDKPYI
TADELRRELPSEQAEYCIARMSAYNGPDGVPGALDYRSFSTALYGESDL*
>TRINITY_DN146208_c0_g1_i1.p1   type:5prime_partial   len:284   gc:universal
TRINITY_DN146208_c0_g1_i1:876-25(-)
TDSHIRTTSAFIPCAKPSKMPPKTKKIKVKKVAAAPFQTSKPAPKKSVNVLIERRPRNFGIGADVQP
KRDLTRFVRWPKYVRLQRQKRILYQRLKVPPSINQFTQTLDQQTATQLFKLLHKYRPETKAEKKQ
RLTQLAETKAAGKQESSRKKPVTIKYGINHITNLVESKRAQLVVIAHDVDPIEIVVWLPALCRKMG
VPYCIVKGKARLGKLVHKKTATAVCLTAVRQEDRHSLEKVSDAVRTNYNERFDEIRRHWGGGIM
GGKSQAKVAKAERAKAKELRV*
>TRINITY_DN120478_c0_g1_i1.p1   type:complete   len:544   gc:universal
TRINITY_DN120478_c0_g1_i1:2674-1043(-)
MMRAPVMVLNSNTKRESGKKVQISNIEAAKTVADIIRTCLGPKAMLKMLMDPMGGIVMTNDG
NAILREIQVQHPAAKSMLEISRTQDEEVGDGTTSVVILAGEVLSVASQFIEDKIHPTLIIAAYRKALD
DMLDVLKEQISIPVDVDNDEEMINILKSCLGTKFVNQWSKLACNMALKASRTVSTEASGRREIDI
KRYAKVEKVPGGSLEESCVLDGIMLNKDILHPRMKRYIENPRILLLDCNLEFKKGESQTNIELSGET
DFNRILQLEEEFIKKMCDAIIKHNPTLVFTEKGVSDLAQHYLVKAGIAVIRRIKKTDNNRIARAVGA
TIVNRPEEIREEDLGLKCGLFEVKKIGDEYFSFLTKCEDPKACTILLRGASKDILNEVERNLQDAMH
VARNVMVDPRLVPGGGAAEMALSCALEEKAKSITGVVQWPYKAIAKAVEVIPKTLIQNCGVNAI
RTLTALRAKHAEGGNSSWGINGETGEIANMKDLGIWDCYSVKAQTLKTAVETAMLLLRIDDIVSG
SKKSKGDEGATSGGMPTM*
>TRINITY_DN165536_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)
MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*
>TRINITY_DN13856_c0_g1_i2.p2   type:5prime_partial   len:292   gc:universal
TRINITY_DN13856_c0_g1_i2:3-878(+)
GAGRQAWSPSVSRQHGAAGGGAWAGAPESAATLTSSLAVGLSAGVVVAGLSSRRARTARRAVE
NKSQNGPFGELATVEPRTLELTEKVKAVIKQKGSLDRESYREIFLAPKPDAVFAGGLVGSEYHGWG
TYQWDPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPTLTLENAHNK
LIYGLGSGPMWWLLLFCGIIESLRFKQLGLDFGKLTLENAGDLDFGKGFLPKTKEGIVQMKIKELK
NGRLAMLAVSGALTQSMAYGVYTFPWTLPSPN*
>TRINITY_DN140996_c0_g1_i1.p1   type:internal   len:109   gc:universal
TRINITY_DN140996_c0_g1_i1:326-3(-)
VPHQPEQCVTVKHQSCSKPDRVCLPHDHHCTFSQLCRPFNVRKCCTVVSVERRCQFVNRCVPKY
SYTRVCRHVQQCPPKCRNVCRQVDLGEHQVKSICEQKCDDSAHR
>TRINITY_DN200_c0_g1_i2.p1 type:complete len:551 gc:universal TRINITY_DN200_c0_g1_i2:123-
1775(+)
MITARLARSLAKNAPKNLLKQYQGAGAVAAIIASRHVQTSKAASATAEVSAILEERILKTSSQVQL
EEAGKVLSVGDGIARVYGLKNVQAEEMVEFSSGLKGMALNLEPDNVGVVVFGNDKLIKEGDVV
KRTGAIVDVPVGEGLLGRVVDALGNPIDGLGPIPADNRARVGVKAPGIIPRTSVKEPMLTGIKAVD

SLVPIGRGQRELIIGDRQTGKTAIAIDTIINQKRFNDAQDEKKKLYCIYVAIGQKRSTVAQLVKRLGD
ADALKYTIIVSATASDAAPLQYLAPYSGCAMGEYFRDNGKHALIIYDDLSKQAVAYRQMSLLLRR
PPGREAYPGDVFYLHSRLLERAAKMSDDFGGGSLTALPVIETQAGDVSAYIPTNVISITDGQIFLESE
LFYKGIRPAINVGLSVSRVGSAAQTKAMKQVAGSMKLELAQYREVAAFAQFGSDLDAATQALLN
RGVRLTELLKQGQYVPMDIGEQVAAIYAGVRGHLDKIDPSKVVKFEEEFVKHVKTAHQDLLDLIR
KEGQISEATDAKLKEIVVAFMQSFE*

>TRINITY_DN21847_c1_g1_i1.p1   type:internal   len:133   gc:universal
TRINITY_DN21847_c1_g1_i1:397-2(-)
DTKKRKLSAELANGRLAMMAIIGMFFQDGLTGAAWGDWELYVDSPLRAFENELGVQDPVGFW
DPAGFTADGSVENFKRRRQTELKHGRVSMLATMGYITPEITGKLPGYLSPSAGLKFADIPNGLAAI
SKVP

>TRINITY_DN7808_c2_g1_i2.p1   type:3prime_partial   len:277   gc:universal
TRINITY_DN7808_c2_g1_i2:830-3(-)
MWFGPAALARRAGVVEFVDGKARFVVDEAAKAAAAEAAMAGVFRVDNELGVQAPLGFWDP
AGFCDGCTELEFKRFRSCELKHGRLSMLATIGYIQPFYGKLGGFLSPSAGLKFADMPLGFAAASKV
PSGGWIQILLLAALCEFGLGIEEWKERAGGDYGKGFLGMFGPVTDPEKKRRSLNAEIANGRLAM
VAITGMFVQEGVFGTTDMWFGPAALARRAGVVEFVDGKARFVVDEAAKAAAAEAAMAGVFR
VDNELGVQAPLGFWDPAGFCDGCTE

>TRINITY_DN2487_c0_g1_i4.p1 type:internal len:370 gc:universal TRINITY_DN2487_c0_g1_i4:2-
1108(+)
LTGSAWGDWSLYTESPLRAFESELGVQAPVGFWDPLGFCKDADQIKFKRRRQVELKHGRVCMLA
CLGYITPEYFRLPGYLSTSLGLQFNEVPNGLAAIGKVPVAGGLQMFFFAGAMERGLLQQDPSRDP
GDFANIGNLGVPYSEDIPDPEARKRSLNAELANGRLAMVAIMGMMFQDGTFGTTGPEMWLPGS
AFENELGVQAPFGFWDPLGLSKDGDADDFYRRRCTEIKHGRISMIACIGYITPEYFKFPGFCSPTLG
VEFTYIPNGLAALKEIPAPGIAQWFLFCGFCEVYAARQDPKDPPGKLSGNDEGFEQTTYGNLGLY
KGSSIADPDKKKRGLNSEIANGRLAMMAIIGMFFQDGLTGSAWGD

>TRINITY_DN142212_c0_g1_i1.p1   type:internal   len:178   gc:universal
TRINITY_DN142212_c0_g1_i1:3-533(+)
GLAKDGDSTAFARRRATELKHGRVSMLACVGYIVPEYVKFPGYLAPKSGIMFEEVPNGLTALAKV
PGAGVAQIIAFAGAMELNFLTADPGRAPGDFKNAGRLGIPFGGGIEDAEKRKRSLNAEIANGRLA
MMAIIGMFFQDGLTGSAWGDWLLYDDSPLRSFAPDPGYNTLPDWSKP

>TRINITY_DN7671_c0_g1_i1.p1   type:complete   len:123   gc:universal
TRINITY_DN7671_c0_g1_i1:425-57(-)
MTSKRRNGGRNKNGRGHVRYVRCTNCARCVPKDKAIKKFVIRNIVEAAAVRDLSEASVYDGYA
LPKLYAKLSYCVSCAIHSKVVRNRSREDRKIRTPPPRFGMRREDNKRPGQPGAPGAQRT*

>TRINITY_DN1468_c0_g1_i1.p1   type:complete   len:245   gc:universal
TRINITY_DN1468_c0_g1_i1:766-32(-)
MADSNKLPGVPETLLKRRKTLEKVKAARAAAQLKTKKHLKEKRKVIFKRAEQYVKEYRSKERDE
IRLRRMAKKAGNFYVPAEAKLAFVIRIRGINQVSPKVKKALQLLRLRQIHNGVFVKLNKSTLNML
RLVEPYIAWGYPNLKSVRELIYKRGFAKVNHQRIPITDNQIIENVLGEQDIICVEDLIHEIFTVGSNF
KKANNFLWPFKLSAPTGGMRLKTNHYVEGGDHGNREDFINNLIRQMN*

>TRINITY_DN5587_c0_g1_i1.p1   type:complete   len:809   gc:universal
TRINITY_DN5587_c0_g1_i1:196-2622(+)
MAQNKDDLSTEILKKKSKPNRLMVEEAVTDDNSVVTMSADKMEELQLFRGDTVLLKGKRKKET
VCIVLSNDEATSNDKIGMNRVVRQNLRVRLGDIVSVQPCPDVKYGKRVHVLPIDDTVEGLTGSLF
DVYLKPYFLEAYRPVCKGDLFQIRGGMRSVDFKVVETDPSPYCIVAPDTVIHCEGEPIKREDEEDA
LNSIGYDDVGGCRKQLAQIKEMVELPLRHPQLFKALGIKPPRGILLYGPPGTGKTLIARAVANETG
SFFFLINGPEIMSKLAGESESNLRKAFEEAEKNSPAIIFIDEIDAIAPKREKTHGEVERRIVSQLLTLM
DGLKQRSHVVIMAATNRPNSIDPALRRFGRFDREIDIGIPDATGRLEIIRIHTKNMKLDDEVDLEQI
AAETHGYVGSDMASLCSEAALQQIREKMDIIDMEEETIDAEVLDSLAVSMDNFRFAMGATNPSA
LRETVVEVPTVTWGDIGGLENVKRELQELVQYPVEHPEKFLKFGMTPSKGVLFYGPPGCGKTLLA
KAIANECQANFISIKGPELLTMWFGESEANVRDVFDKARMAAPCVLFFDELDSIAKSRGGSAGDG

GGASDRVINQILTEMDGMGAKKNVFIIGATNRPDIIDSAILRPGRLDQLIYIPLPDEPSRISILKANLR
KTPISKEVDLGYLAKVTHGFSGADLTEICQRACKLAIRESIEKDIQREKQREAQGQNDADMEMDD
EDLVPEIRRDHFEESMRFARRSVSDNDIRKYEMFAQTLQQSRGLGTNFRFPGSSNQQSSSGTSQPAS
EQPSIYGNDDDDDDLYN*

>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)

QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*

>TRINITY_DN166344_c0_g1_i1.p1   type:complete   len:360   gc:universal
TRINITY_DN166344_c0_g1_i1:93-1172(+)

MQKPKKYDWKDSNMALFGSDTEKKVKKESAESEPAWQGAGADVGVQVWRINKFKVEHWDKE
QYGEFYNGDSYIVLNTYKEPDTDELKYDVHFWIGKYSTQDEYGTAAYKTVELDTFLDDKPIQHRE
VQGHESSKFKTYFPTLTLLKGGADTGFKRVLPEAYEPRLFHVKKQNRTQITCTQISLKRGNLKSED
VFIIDLGDKIYQYNGSSCSADEKYKATQEVARLKSVRGKARAETIEERTVSDEHPALMVLKDGSSK
EKSTVEGEKKMLRVSDADGSIGMDEVASGDDISKDKLTSDDVYIINTGSHVYCWIGSGASIDERKN
GLSYASNYLNKTETPWLPISVVGQGKEDSQFQKAF*

>TRINITY_DN484_c0_g1_i1.p1 type:complete len:554 gc:universal TRINITY_DN484_c0_g1_i1:164-
1825(+)

MASMILNGERTTGNDVREQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLE
VEHPAAKILCELADLQDQEVGDGTTSVVIIAAELLKNAGNLIKYKLHPTSIITGYRLACREACKYIQ
ENLAVKTADLEREHVINCAKTSMSSKLVGVDSDFFSTMIVDAAMSIKRTGNKGETKIPIKSINILKA
HGGNMKESISVPGYALNCTIACEGMPKKIENAKIALLDFSLQKAKMHLGVQVLIEDPEKLEAVRQ
REMDITKERIEKVLASGANVILLSGGIDDLCMKYFVEAGAMAVRRIKKVDLKRIARATGGTVCLSL
ANLEGEESFEASYLGHADEVAQERICDDELILIRHPKTKAAASIILRGANDFMVDEMERSIHDALC
VVKRVLESKSIVPGGGAVEAALSIYLENFATSLASREQLAIAEFANSLLVIPKTLTVNAAKDSADLVA
KLRAYHNASQTQSDKAHLKWVGLDLINGVIRDNKKAGVLEPTMSKIKCLKFATEAAITILRIDDL
VKIEPEKKDDPNSYQNAIAGGRMG*

>TRINITY_DN119650_c0_g1_i1.p1   type:complete   len:211   gc:universal
TRINITY_DN119650_c0_g1_i1:883-251(-)

MKHNNILSNGHFHKHWQNYVKTWFNQPGRKKRRRVARQKKALAIAPRPVAGSLRPVVRCPTF
KYNTKVRSGRGFTLEELKTAGIPVKSAKTIGISVDHRRKNRSTESLQANVQRLKEYNSKLIIFPRKQ
SAPKKGDSDASELSVAAQLQGPVLPIMQSKPSTKARKITDDERKISVFRSMRIARANARLVGVRAK
RVREAEADAQMKAKK*

>TRINITY_DN7808_c1_g3_i1.p1 type:internal len:212 gc:universal TRINITY_DN7808_c1_g3_i1:635-
3(-)

ESELGVQAPVGFWDPAGLARDCDVDTFTRRRTTELKHGRVAMYATLGYLVPEYFRFPGYLSPSEG
LKFADVPNGLAALSKVPLNGWFQIVLFCGCYEFPTYNSNRAPGDLGWKAITSSDPEVLKRKLNCE
LANGRLAMVAIMGMLFQNGTVGTTGPEMWFPAGAFEGELGVQAPFGYWDPAGFTKDGDAEM
FKRRREIEVKHGRVSMIACL

>TRINITY_DN131028_c0_g1_i1.p2   type:5prime_partial   len:104   gc:universal
TRINITY_DN131028_c0_g1_i1:2-313(+)

FDKYHPGYFGKVGMRNFHFIKHGKVIPTINVERLWSLVSEQTRTYYKEHTDKAPIIDVLKAGYMK
VTGKGQLPEQAVIVKARYFTKEAETKIKEAGGVCVLCA*

>TRINITY_DN1272_c0_g1_i1.p1   type:complete   len:262   gc:universal
TRINITY_DN1272_c0_g1_i1:957-172(-)

MRCQLFLLVACMAIATCSAYDWRNKVQNMLKYAKVNIFDRAAYILGDKRQHQLGKPWFCHKL
DCPAFQVVGNYTNKKDGFEERCYPETAWVMTSKEVDANENDIETRDMFMKLFKYIQGENEKQE
KIEMTVPVFTYSQLKKDDPSKRYISMHFFVPPSQEKNIPKPTRDDVTIMDVKADCYYVRSFGGYV
MSFGSKIMNEEKKIHAALEKNNLDFEARKTMAAGYDSPFRLFNRHNEVWVAKRKTMDSGCCTP
RKSTNVMY*

>TRINITY_DN884_c0_g1_i1.p1 type:complete len:542 gc:universal TRINITY_DN884_c0_g1_i1:1783-
158(-)

MLRVLHQTCLSISRSTTPISGTETKLFFSSSSFRMVLDLELFRPDKGGCPEKIRENQSKRFKDVKKVD
NVIDCDNKWRKLRFQADNWNKLKNLCSKTIGMKMKKKEPVGDNDAIPEELSKTESLQGLNPQ
QLESFTVNQIKKIRTLIDEHMQNCEAERLECEKVRHQNLFEIGNWLHESVVVSNDEDENEIVRTV
GDCTTKKQYSHIDLLYMIDGVEYERGATVAGNRGYFLKGPGVLLQQGLINLATQTLIKNGFTPLYT
PFFMKKDVMQEVAQLSQFDDELYKVIGKGSEKEDDTSFEEKYLIATSEQPIAAFHRGEWMDTNEL
PKKYCGISTCFRQEVGSHGRDTRGIFRVHQFEKVEQFVFCSPHENESWKMLDLMCNNAEEFYKSL
NIPYRIVGIVSGALNHAASKKLDLEAWFPGSGAFRELCSCSNCLDYQARRLLIRYGQTKKMNDKA
EFCHMLNATMCASTRVICCILENNQTEEGIIVPELLRPFMGNIELIKFVKSAPIQEQKESKGKGKKK
GKEQNIATKLENMDVNGK*

>TRINITY_DN453_c0_g1_i1.p1 type:complete len:249 gc:universal TRINITY_DN453_c0_g1_i1:944-
198(-)

MDIDQLKYEIIELGKQIETVHVAIAVVVLTTILLWIAIRSRRSGDTVLLLGLCDSGKTLLFSLLTAGKS
AATQTSIKENKSRLTMGKKSWAIVDLPGHERLRAKYLYNHKDSARGIVLMIDSVEFPREIRDVAEL
MYDLLANRTIKKNKVSILVACNKQDLTTAKACNVIKSQLEKEINNLRKTRSAALLGIDDNTSSKN
AFIGKKGKDFEFAHVKPIKIEFCECCLKDENGESKTDYNGIEEWMKKL*

>TRINITY_DN59667_c0_g1_i1.p1   type:3prime_partial   len:225   gc:universal
TRINITY_DN59667_c0_g1_i1:673-2(-)

MGKAKKGQKIDESKFEGKGTDFKCKLIGFVNVPSARGDDICQEAITKLKHLALKLNKEKKEHKQ
KITVNITVKGIRLIDEPTERIEHAHPINRISYICHDNDDKRTFGYIVGTKEGYKLFAIRTMKEAEYITK
TLKDLFQVVFERHQAQKAASDTSEIKGQEQVEEKDDEEKFEVGEEQNEEPTESPLLDWEHGINEQ
IQAMQNDAMSTSGFPDPFGDAQFDSA

>TRINITY_DN12390_c0_g1_i1.p1   type:complete   len:268   gc:universal
TRINITY_DN12390_c0_g1_i1:826-23(-)

MLASQVSIALIVFYLGCGNAYRPLSFYETNGPVQEILEDFEFRDDFEDGFLDRDAGVSMAEACVH
AHNVMRQRHQDTPNLVWDEGLAKAAQAYAEKLAAKDDGLHHDIKNNKKEGWGENLYFKDA
ARVGTCADAVISWYNEIDDYDFNLGMSRNHKAIGHFTQLVWKTTTKVGVGVATHKGQTDNDIK

TYIVAKYKPPGNWFHGYHDYVKPLIIPIKHRPTSVEELDRSVCTIDAFPSRFCRGFRREGRCGEFIVK
DACYRTCHSCN*

>TRINITY_DN4815_c0_g1_i2.p1 type:complete len:638 gc:universal TRINITY_DN4815_c0_g1_i2:79-1992(+)

MVSSLLLVLICTVVYTAGISAFFQCDFEKVDICGFKSSSSNYTDTGEAPNWRRHTGTTPSAKDQNN
AHVTGPLEAQSGDYYMYFEASNLPSGASSTGTLTSRLFDATQFGVTDIVFHVSSKGESLSLLVLDFI
DYTTNDIFDEKVVFPRNKAAWQKYTFNLDEKIFKRKFYMQFIGYVREVNGKKDNGDWAIDNLRI
DGIAIVEKCENVKCNVNTNCKDTSNGPNCECLPGYSTKAGTSGKNTECIETCQAFTCNLNAECS
NTENGPDCKCESGYKAINGTSGKTTRCEETCQAFTCNLNAECSNTENGPDCKCESGYKAINGTS
GKTTRCEDDTCSNFQCSNNTNCENTVSGPNCTCKEGYRPVNGTRGRDTICEDINECAIKNICGGL
KVCRNVPGSHHCDCPPNYTFFAAENKCYRNGAFSQWRNVGSCSKTCGAGDQKQTRSCSNPSRE
APHGRDCPNEPTERAVACNSGPCLAGCPRNKTCTCENVRQYKTGEEPKKDFSSFNGLSITDGETS
RRYVHTYNREFIEKTIKDVNCNNNQLKSVYKNITDIIGILEGINKKYSSTKMEMQDIIDCNANIDIE
KNLWDVYDVLAEHSICNYQVQKDLEMKADRIQAEITRCNNRGWYSTILDAII*

>TRINITY_DN22594_c0_g1_i1.p2 type:internal len:268 gc:universal TRINITY_DN22594_c0_g1_i1:801-1(-)

DFQDPTLNLETAHNKLIYGLGSGPMWWLLLFCGIIESLRFRQLGLDFGKLTLENAGDLDFGKGFL
PKTEEGIVQMKIKELKNGRLAMLAVSGALTQSMAYGVYTFPWTLPAPNAVQSRTALRAVEFKGQS
GPFGALDVAEPKTLELTDRVKAVIKSKGSLDRESYREIFLQPKAETVFAGGLVGSEYHGWGTYQW
DPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPSLDLENAHNKLIYGL
GSGPMWW

>TRINITY_DN6701_c0_g2_i1.p1 type:internal len:169 gc:universal TRINITY_DN6701_c0_g2_i1:2-505(+)

ADSPLRAFEGELGVQAPVGFWDPLKLSADGDAEAFKRRRSTELKHGRVSMYACLGYIVPEYFRFP
GYLSPSEGLRFEDVPNGLAAFSKVPVNGWLQIVLFAGFYEFPTYNSDRAPGDLGWKAITASEPEAL
KRKLNAELANGRLAMVAIMGMLFQNGTVGSTGPEMWF

>TRINITY_DN647_c0_g1_i1.p1 type:complete len:344 gc:universal TRINITY_DN647_c0_g1_i1:1110-79(-)

MNPIFALRPSSKLIREGIKKFSTSNQKNVKVAVLGASGGIGQPLALLLKHSPMISHLSLYDLAPFTPG
VGKDLSHIETTSEVTTHLGPDNLDECLKGCSLVLIPAGLPRKPGMTRDDLFNTNASIAMNLADAC
ARNCPNAVVGIITNPVNSTVPIAAEVYKKHGCYNSNKLFGVTTLDVVRANTFVAEKKGLDITKTN
VPVIGGHSGVTILPLLSQVLPKTTFTNEELETLTHRIQNAGTEVVEAKAGAGSATLSMAYAGARFG
FSILEAMNGKKGVVECAYMASEETDASHFATPILLGPEGAERNLGMGELSDFEKEKLKEVLPELQ
NNIAKGEEFTAKNL*

>TRINITY_DN187147_c0_g1_i1.p1 type:complete len:1223 gc:universal TRINITY_DN187147_c0_g1_i1:3708-40(-)

MLTKFETKSARVKGLTFHSKRPWVLASLHNGVIQLWDYRMCTLLERFDEHDGPVRGIDFHENQP
LFVSGGDDYKIKVWNYKQKKCIFTLLGHLDYIRTSFFHKEHPWIISCSDDQTIRIWNWQSRNCISV
LTGHNHYVMCAQFHAVEDYIVSASLDQTVRVWDISGLRKKYCAPGAKPKEDITAPKTPGQMDLF
GHSDAIVKHVLEGHDRGVNWVTFHPTMPLIVSAADDRQVKLWRMNDSKAWEVDTCRGHYNN
VSSVIFHPRLELILSNSEDKSIRVWDMSKRTGVQTFRREHDRFWILGAHPTLNLFAAGHDSGMIVF
KLQKERPAYAVHQNTLYYIKERYLRMYELGTSKDIPIMQLRKSSGRSTPLKLIFNPAERCILITYNND
TSAGESQVYELHTLPKDIRSTDPEQSEGRRAAGTAAVWVARNRFAVLDKQQNVVIKNLKNEVTK
KVQTPACDMLFYAGTGSLLLRDAEQVMLFDVQQKRVMATVKIAKAKNVIWSSDMSYAAILAKH
SIAICNRKMENLCTVHESVKVKSGGWDDSGVFVYTTSNHIKYTLTNGDAGIIRTLDLPIYITRVKGS
NVYCLDRECKTKVLNIDPTEFKFKLALVNHRYDEVLYMVRNAKLVGQSIISYLQKKGYPEVALHF
VKDEKTRFGLALECGNLEIALEAAKTLDDKACWEKLSEMALLQGNHQIVEMCYQRTKNFDRLS
FLYLTTGNSDKLRKMLKISEIRKDVSGHLHNALYCGDVEERIKVLKQVGQGSLAYLTAATHGLVEE
CEEIKATFDLNPEKLPPINPNAKLLRPAVPILKNEGNWPLLSVSKTLFEGAAAMKDAGTSNMAAA
VDMDDEGEGWGDSDLVLEEDAGFVDPEEKLDIDEEGGGWDVDDDDLELPPDLDVGPVSSGGED
YYVPPTRGNSQAQVWCTNSQIPVDHLVAGSFDSAARLLNEQLGVVSFEPYKQLFMLAYARGRVA
APGLPSTPPLFYYPHRNWKEAGAKAGLPAVAIKLNDLVQRLQTAYQLTTGGKFADAVERLHQILL

SVTLLSVESRQDVTEAQQLLGICREYILGLQMELNRKELPKQNAQQQKRICEMAAYFTHCNLQPV
HLVLTLRTALNLAFKIKNYKLASSFARRLLELGPKPEVSQQTRKILLACEKNPTNAVQFDYDELNP
FSICAVSYTPIYRGKPEEKCPLCQASYKPEYKGTICKICRVAEVGRPGSGLKISMGR*
>TRINITY_DN148467_c0_g1_i1.p1   type:complete   len:218   gc:universal
TRINITY_DN148467_c0_g1_i1:105-758(+)
MGNIITLMYVDDDPVIKGLMLASGPLMVAGGLLLPVNLENATVATFLNMTEYGCFSIWFGVQTW
MSFVAGITLIKILPRPKFSQVQKALFGTYYKAGYKIGSIMLGIHLLRYRNVSWQNDILYRGCAMFG
TMLLSASGMLLKPQLDAVVSEMRAVEAKYGQSDVIGVVTSEELLKNPEYQVLRKNFAKGHILAM
VSNFTMLGVSGYLMYTMAKRINF*
>TRINITY_DN101992_c0_g1_i1.p1   type:internal   len:139   gc:universal
TRINITY_DN101992_c0_g1_i1:414-1(-)
AERYDHHSGIVESMDSNKISDNLKELTRLPHPPGRSRNKELGDMLADFWQNEGMDKIEKFKYNI
YLSYPEKPSTILLFGGAKTEKYTIEAEPPVDESEKGGTPVVPFNAFSANDIVKAELVFVNHCRESDF
DEVKKAG
>TRINITY_DN98420_c0_g1_i1.p1   type:5prime_partial   len:286   gc:universal
TRINITY_DN98420_c0_g1_i1:1007-150(-)
LHKEARSTVINKMASRLLNSLGKVGVGLAVVGGVVNNALYNVDGGHRAVIFDRFRGVLPDVSG
EGTHFLIPWVQRAIIYDVRSKPRNVPVITGSKDLQNVNITLRILFRPVASELPKIYMSLGEDYDERVL
PSITTEVLKAIVARFDASELITQRDNVSLNVQEALVERCKAFGLILDDISLTHLTFGKEFTEAVELKQ
VAQQEAERARFLVERAEQQKQAAIITAEGDAVGAQLLSDAFKKAGNGLIELRKIEASEEIAQNLSG
SRNVVYLPDGQGMLMNLPAP*
>TRINITY_DN478_c2_g1_i1.p1 type:complete len:145 gc:universal TRINITY_DN478_c2_g1_i1:3-
437(+)
MIKPDGVVRGLVADIIKRFEQRGYKLVAMKMMWPDEDLLNVHYGDLKTKPFFPGLIKHITSGPVV
AMVWEGTDVVKQGRQMLGETDPKKSKPGSIRGDYSIDMGRNIIHGSDSVESANDEIELWFKKGE
LMDYQLPLHSQVFEK*
>TRINITY_DN187527_c0_g1_i1.p1   type:complete   len:102   gc:universal
TRINITY_DN187527_c0_g1_i1:392-87(-)
MSGERTPITSDKRLQQTQKQVDQVVDIMRQNMDKVLERDTKLSELDNRADALQLGASQFETSA
GKLKRKMWWQNCKMWIILIAVLLVFIIIIVVWVVLENQ*
>TRINITY_DN79_c0_g1_i1.p1   type:5prime_partial   len:478   gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)
VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLDKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN
EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*
>TRINITY_DN7808_c1_g2_i1.p1 type:internal len:237 gc:universal TRINITY_DN7808_c1_g2_i1:710-
3(-)
VSLAAFENELGVQAPVGFWDPAGLSKDSDAETFKRRRTTELKHGRVAMYATLGYLVPEYFRFPGY
LSPSEGLRFEDVPNGLAALSKVPLNGWLQIVLFCGFYEFPTYNSNRAPGDLGWKAITSSDPDALK
RKLNCELANGRLAMVAIMGMLFQNGTFGTTGPEMWFPTGAFEGELGVQAPFGYWDPAGFTKD
GDAEMFRRRREIEVKHGRVSMIACLGYIVPEYFKWPGYLSPSLP
>TRINITY_DN36276_c0_g1_i1.p1   type:complete   len:449   gc:universal
TRINITY_DN36276_c0_g1_i1:104-1450(+)
MKFSQCCQLSQKTSFISMMVLTSTFFLVEIIVGYLTNSMALVADSFHMLSDVVSLIVGFVALKYSKG
GQQKGRYTFGWARAEVLGALVNAVFLVALCFSILVEAMKRMVIPEDIENPRLVLLVGTIGLVVNVI
GLFLFHQHGHSHGGSSHGHSHGGSNHSHTISPNITPREPALPKKDTSGTVAKVEVPLLDEHDLEM
DQDSSDGEGKENSPGASASQLNIRGVYLHVLGDALGSVIVMISALIIMYQHGVWTLYVDPGMSII

MVIIILKTSIPLLKESSMILMQTVPTHIKIQEIQDKLVQRIPGVISVHEFHIWQLAGNRIIASAHVRCQ
TLADYMAIANKLKEFFHDEGIHSTTIQPEFVEDENSTIVKECDYVIDKNDCILECKKDCVERTCCG
ALTNNHDNSTDSGMDIPPISPPLPQPNESEVPLEVVTTDPVSRLKEDSAA*

>TRINITY_DN165969_c0_g1_i1.p1   type:internal   len:128   gc:universal
TRINITY_DN165969_c0_g1_i1:2-382(+)
RILGNGGSAVHRGRDGPPAARQVRREQDVLVHRHVLLRLGAGQRVGLGQPHRGGQSDQIHGRR
VCEQGPGRCTHARGAESTNLHRGGGLPHPVLRQVALAVPALHVAATPRDGRPAGAARGPRVRE
P

>TRINITY_DN1428_c0_g1_i1.p1   type:5prime_partial   len:165   gc:universal
TRINITY_DN1428_c0_g1_i1:1-495(+)
HLSLNEQASSGLFVNLKMSDALATITIHKEYGYVVLTAFSSFVMLMYKAIKVGKARKLYNVPYPIM
YASDDNDKAKIFNCVQRAHQNTLEVYAPTMISLLLGGIQHPVLSSVAGMVWILGRIAYAQGYATG
DPSKRMRGTFGYLGLFTMYGCTISFALHLLKVV*

>TRINITY_DN2805_c0_g1_i1.p1   type:complete   len:189   gc:universal
TRINITY_DN2805_c0_g1_i1:623-57(-)
MGFEKVVIIDGKGHLMGRLASVIAKSLLQGQRIVVVRCEGINISGNFYRNKLKVLDYLRKRMNTK
PSRGPYHFRAPSKCLFKVVRGMIPRKTKRGMEALNRLKVFDGIPPPYDRMKRMVVPSALRVLKLK
PGRKYCSIGRLSHETGWKYKALIESLEEKRKAKAELYYKARKQTEAVRQKAIQQVAAS*

>TRINITY_DN8008_c0_g1_i2.p1   type:5prime_partial   len:1298   gc:universal
TRINITY_DN8008_c0_g1_i2:4205-312(-)
IMSPKERTCPLTQYLFTPIYTGSCKISDAEQRANDRQVKSAVQMAGSAIGTVVGTIFGGGIGGAIGG
FIGGAIGSLIGGIIGLFSSCDKSYEVVTRSWVEERKCILLEPDVRSITRPYSECFDAKIKANTGFKVPY
TCNCKVNDCIVKSPSPDCLLQNQQCERKRKDFLERTKTVPPTFSKLYKSLKQCQDSVGASILKVQS
AKKTVQFYEKEHTRIKNMLLALEEENKFSKQALSDATSILQDDLCVSNAFMNNKNINELIDIKNV
QFDTLLPLVNNIRINAHVKVKGNDVLVPFVHELSNDNKVSLNAFGRKIIMNTICKKIRKRRSLDL
NEDEKNDLAFVPWINNVNGTATVADLSCVSLDKTLEFIRHTVKTLNKKSSYANDLLMQLQYSTN
KLNPSLYTAFTAYSGITTEKNDIIKANEALLMSANNELNKIQDQVSVSNVLDIWGNEAEIVTGFNN
VSVCLNYKDCIISAIDTLKNLPTMFRNSREAYMKEVMELEKELTKIYEEKNLIGLSAKAQSVERIVS
RIKYMSFHCSKRPIVTLKEVKDMDVEKGKNITLRCIVRSARAIKYYWQFNDDILDEENSHSLTIPVS
NETSGIYRCIAKNLVGNGTSNQIRITTYTKPSFIEEPKDQIYILPSHPQSNLVLTCNVTNNYDTTIAW
YYRSFTIGKRPNIINGQTSILLDLDGTKQENSGYYFCQAFNKHGRIKSREARVNILNSNIARLEVNIS
LDILQTDEISSNSFKKISGDMLSEIKDLGRTLTTTVIKSKTKTRVTFNLKVKPITDNVKSLSESFNISSR
MRQNLGSAAAVLLGKLSENSFKLPINDGEFAKVDNDTMTYGMKLNICQEGYKLHKNGFLCVQC
PFGTAGKDCKKCPLNTYADAPGLGICKKCETSKITEQIGSTSKSQCIGTTERKVDIIFAVDVSKRFLE
QINGLQKIRELLSKFIKTYSGTKYNTRFALLTYYKYVDVYLSLTEYYHSDDILGLLEILGEGSRMPDT
KLALVEIETMFDEESSSDRKKVAVFITNGGTSDSYYLMELFKYKRQAITLQNKGVHIISVGLGTVDH
RGLRALASYPKLENAIFPSSNSVAVQKMIYSIGNELKDNCYTPAVDFGIIYHPNHKESLVQITKEQF
LRNANWLSKLLLPIYRMFKQQSYYFMYKHSVPSNSFGSFSETGFQERIVSYLQQQTSGFDIYKKIST
AINVDMTEIYRSFSKVKVLIIITEEPLDEAVLKQYEISVHGEKIDIYNFVKDASSIEKFEGPFSDKPRA
HRLVYGIDEVNFLVNAINCNRTKICG*

>TRINITY_DN2068_c0_g1_i1.p1   type:complete   len:204   gc:universal
TRINITY_DN2068_c0_g1_i1:160-771(+)
MNPEYDYLFKLLLIGDSGVGKSCLLLRFADDTYTESYISTIGVDFKIRTIELDGKTIKLQIWDTAGQE
RFRTITSSYYRGAHGIIIVYDVTQDTFNNVKQWLQEIDRYACENVNKLLVGNKCDLTSKKVVDY
TTAKEFADSLGVPFLETSAKNATNVEQAFMTMAAEIKNRMGPPQTTADNSSKKVPLTSSSPVKQG
GGGCC*

>TRINITY_DN87064_c0_g1_i1.p1   type:internal   len:179   gc:universal
TRINITY_DN87064_c0_g1_i1:536-3(-)
PAPRARGRPSRRRRPPPPPRRRPAGKMGIDIEAGGRVWNKPRVTKSENPYIRLLIKLYKFMARRTDS
KFNKVILKRLNMTRKCKPPLSLQKLAKHMDGKDGKIAVVVGAVTDDKRLYEVPKLTVCALRFTE
AARASIVKAGGECLTFDKLALRSPLGKGTVLLRGPVKAREAERYFGKA

>TRINITY_DN1084_c0_g1_i1.p1   type:complete   len:301   gc:universal
TRINITY_DN1084_c0_g1_i1:1131-229(-)
MGRPGFGGGGGRGGFGGGRGGRGGGGGRGGGRGGGGGRGGGRGGTPRGRGGRGGGRGGMR
GGKKTIIEPHRHEGVFIARGKEDALVTKNLVAGNTVYGEKKITVEGDETKTEYRVWNPFRSKLAA
AILGGVESIHMKPGSKVLYLGAASGTTVSHVSDLVGPDGLVYAVEFSHRSGRDLLNVAKQRTNIIPI
IEDARHPHKYRMLVGMVDTIFADVAQPDQARIVAINAHHFLKNSGHFVISIKANCIDSTAAPAAV
FAGEVKKLQSEKLKPQEQLTLEPYERDHAVVVGTYRPPPKKKD*
>TRINITY_DN1339_c0_g2_i5.p1   type:internal   len:362   gc:universal
TRINITY_DN1339_c0_g2_i5:1085-3(-)
NSRLAMVAILGMFFQDGLTGSAWGDWANYVDSPLRAFENELGVQEPVGFWDPAGFTADGNVE
NFARRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVPNGLAAISKVPAAGWAQI
VAYCAFCELSQDQSAGSPAAAGDFGWKLLTSSDQGELTKKLSAEVANGRLAMMAIIGMFFQDGL
TGSAWGDWALYTASPLRAFENELGVQEPVGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLA
TMGYITPELTGKLPGFLSPSAGLKFADIPNGLGAISKVPAAGWAQIVAYCAFCELSQDQSAGSPAA
AGDFGWKLLTSSDQGELTKKLSAEVANGRLAMMAIIGMFFQ
>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*
>TRINITY_DN22219_c0_g1_i1.p1   type:5prime_partial   len:427   gc:universal
TRINITY_DN22219_c0_g1_i1:2-1282(+)
YISKDYCKGKKNPSVCTLHIHNEFSQIKHFQHQTPVTSENAPGIILAHGQAGDALTGAGNVWFSR
NGGYNWTRIAKGSHHYAIGDNGNLIVLVPKFNSTGKTLIYSLNQGRNWYHNEFDLFDENITIHG
LAAEPHSKERSFSLWGHRLVKGKKLWHTFTVNFRKLITKECQEEDMKTWYPHINNGKDGCFLGE
RTIYKVPHKDSLCYLGRSYKPEKKVEKCSCTKDDLECDYGYERNRAGNCHRNEDIPLIEICKNGEE
MQEAFSKGYRRVPGDNCIAQSSNDEVVRFIDEHKKCVPNKEDIFGDFNRERAEVIREEEEEKEKK
MDETQKATKTKKSKKKGPNWPVIILSIILMCIIIGGAYWYWRKNYRPNNVHHVMYNASSFDNVG
MDNNDGDVDADDLFDPRPKSLREYHDETDAEDEQLLLP*
>TRINITY_DN5001_c0_g1_i1.p1   type:complete   len:1575   gc:universal
TRINITY_DN5001_c0_g1_i1:40-4764(+)
MHAGLTSVFLTKRFISHFVLQKQIRSTFPVIQTFYRGFTSNMIEVNADGKNPASVVLLAVEHLKKH
EIQVTVKDNNKTFIKVSNTIVEGENDVSRFLARKYPEVGLYGKSGIESSQIDSWLDFSCLYIKGSQDL
LPSLKELNRAIGQADYLVGPKLTVADLSVWSALHGNSKWKNLLDSGKAGEPVSKWFKTCMQQG
TFKVPTESSPNKIKSKDKGSNPKNSKSNMEEGGKFIDLPGAKIGEVVVRFPPEASGYLHIGHAKAA
LLNQYYKDHYKGKLIMRFDDTNPAKENSHYEKIILEDIKLLEMTPDIYSRTSDYFEEMFVYAEQLIK
QGDAYIDDTPADLMKTLREQRLPSPKRESSIECNLKMFDEMKKGTPEGLKCCLRAKIDYKSDNGC
LRDPVFYRCRDEEHVQHGNKYKAYPTYDFACPIVDSVEGVTHAMRTTEYLDRDVQYAWVIEKLG
IRKVDIYSYSRLNLINTVLSKRKLTYLVDEGFVEGWDDPRFPTVRGVLRRGMTIEGLREFIAAQGSS
KSNVHMEWDKIWAFNKKVIDPIAPRYNALLKEEVVPVTVHGVEESTAQYPQHPQNPGSEKKTVY
YSNKVFVEGADANLMKEGDLVTFINWGNLRIAKVNKSDDKVTSLEANLELDNKDFKKTLKVTW
LAEHSEAPFIPTKCGFFENIIEKADMTREDDFKQHIRKDTKKVSDMMGDQCLANLKKGDIIQLQR
RGYFICDEPYQPPSRHSCKESPCILFHIPDGSTAGMMNQGKSKNTAGGKTSSSTKSSDNKNKGSSK

KQNKEKSPPADTGTIVEHTAVQQELFDSIVVQGDKIRNLKAQKATKDEITAEVATLKELKSKYKTS
TGKEFVNPTAATAAAPSKQPSKQPSKQQAASLSTSATVNHTPEQQALFDKIVEQGNKIRTLKAEK
ASKDQITSEVNVLKDLKSQYKSSTGSEFSNPSANNQSPTKKSKEKMAPVPVATPEAVTVESPEVEA
VKQKIVAQGDKIRELKSKKIEKAELQPEIDNLLKFKAEYKELTGSEYKPPGGGGNQKKGKEKKQN
EPKKAPEKKVTQQEAADGSAKKITRLGLEAKKEESLSDWYQQVITKAELIEYYDVSGCYILRPMAY
GIWERIKAFFDTRIKSIGVENCYFPMFVSQAALEKEKEHIADFAPEVAWVTKSGQSELAEPIAIRPTS
ETVMYPAYAKWIQSHRDLPLRLNQWCNIVRWEFKHPQPFLRTREFLWQEGHTAFATREEACEEV
HIILDWYEKVYTDLLAIPVVKGRKTEKEKFAGGDFTTTVEAFIAASGRAIQGATSHHLGQNFSKMF
DIVIEDPNNPDSKDKIHVHQNSWGLTTRTIGVMVMVHGDNKGLVIPPNVSNVQVVIVPVGVTAN
TSDDQRKLIKDTSLSYRDLLLDSGVRVKVDDRENYSPGWKFNHWELKGVPIRIELGPRDIEKNEYV
AVRRDTGEKISMKRESASTDLSNLLKTIQEDMYKSACKQLNDNLTVVKSWEEFLSMLDQNKLIQA
PFCGAIPCEEKIKKDSARDDGTADAGAPSMGAKSLCIPFNQPGKVDGLKCVCPCCSKDAVSYTLF
GRSY*

>TRINITY_DN244_c0_g1_i1.p1   type:complete   len:3019   gc:universal
TRINITY_DN244_c0_g1_i1:9748-692(-)
MDARGQRLLYCLLIFLSLATLLVSQQVEKCKRPVDLVFALDTSGSVKDSGFRLIQKFAKDILKTFDI
GVADSHVGVLTFSEQAEPQIKLTETFDKAELMQMIDSLVYQGYRTATDDALRVAKTDFFSTAGGA
RQGVPHVLVLLNDGKCTVCIEPVKEAAQKLKDMGVEIFTIGVTENIKKQELIDIASQPTAYHFFEL
DDFDQLVDVVGDIQTRSCEVKKGKCPIPSPTEQCSGNEINECTSDENCEGELKCCSDGCSRICKYP
LLNCFTPIDIAFALDSSSSIQPETFQEMKKFSNDIVDSFAVSQKKTRFAALVYSDRAEIGFNFVRFDD
ASSIKKAIQNLPKLDSKERIDYALELAKSDIFSLQGKVRTRRPMVLFVFYDGTVSSGMKDLSLVVEP
LKNYGVKIVSMGVGPETNYYQMRKISSNNSDVFRATNFKELLPEIYNIAKRACTEKPGRCDASLN
PLPKEACKNVKILNQCENDFDCFGDAKCCRKGCNNVCVIRGPVCPRKLDIALAVHQNMDESEF
AATKFYLQSVVDQFNVGPSQTHFSLLSFGQEPKVIFDFNSDQSSNEIVRRKIDNFQYQYGIGRISDV
LALSCDAVFCAAGGTRDDVPKMLVIVTSRTSPSSPSKLKEKLQTLRNRGVNILMIGVGDVDTSLLQ
AITSDDPLVEDRVLLSKRFDGIFQYTKDISDYACGMAPALPPPDNIKGDAKGECGAPKSCYKGPKG
SRGRPGTLGQQGESGDLGLVGPKGIQGRRGDKGPDGQMGSKGKRGPDGLIGLPGFPGYNGIPGV
PGIEGRRGRDGDCGLPGSSGEAGQAGLDGLSGPPGRAGPVGEKGEKGLPAPENPNIRIEPGDRGD
TGSVGLPGFKGIKGEEGFKGPSGDSGVDGIKGVDGEAGEMGDIGTYIYQKGPEGDRGARGPPGD
GDTQGATAGLGVQGEKGEKGMRGEAGDGSIFPGIKGRRGDQGPKGEEGSTGPAGPTGQRGPEG
EEGPKGIKGEIGDRGKDGTPGQPGQEGDLGEKGFDGLKGQDGDDAEGELGDSGGKGLKGENGL
AGSPGSIGTPGPPGSKGEPGDIQIGLSGDPGAIGPRGPRGDNGISGQPGMRGDSGPKGAKGNQGP
RGDRGRNANMLAGKDGMTGPPGPKGFTGPVGDPGFPGPPGPPSVVECVEGACPKGVPGAMGQ
IGKTGEPGPPGPPGPRGSKGVAGGPCPICPDGIQGDSGDIGQPGMPGKEGSRGRKGNIGDAGSKG
LQGRNGDDGDQGPVGKKGFIGDIGPVGENGVDALGDSVAPDGEKGSTGDTGQIGSRGPVGNDG
PKGFKGTIGERGRRGLQGEKGDMGLTGETGEDGSRGLEGAKGDLGDGLRGAKGDKGNIGQEGN
QGVVGDVGLQGPKGEQGAPPTEDELKNVKATKGSKGEIGSTGDAGEIGDIGPAGPRGPKGFDGA
AGPKGPSGVKGDRGNKGRAGDGEPGFQGFPGRPGKRGPPGDPGKPGKRGFSEPGDAGDRGDP
GKSGKKGADAPPPIGCFKFNEPTDIGFILDSSSSVDDDNFLRQLQFVKNIVRQYPVGPDQTQVGIIK
YGEKAVTGINFYDYVTEEGLFNAIDLLEHTKESESRLDLALKLARDELFTESVGARGFDAKKALVIL
GDGFISGGGTPSKTLMNNAMQYAEDLRGAGVSIFALAVGPEKNKALFHEFVSEKEYYLDIESYSQL
DNELGALQLSLQTGCISVGVPGRDGLPGYTGPKGQKGDDGPKGFSPQGPRGIKGIKGVRGTIGIG
VKGLPGDPGLQGPQGEKGRDGEDGSADPGPKGRPGDKGSRGDQIKGASGEDGDIGPIGPPGFDG
RKLCDNVLAVDLLFVLDTSSGVGVDNFNKMLKFIESIINVFDVDNQLTRVSVMTYDSDARLVIRFS
DYNDPDKLDAAIDNIPYANGDETRIDKALLLASSNAFDTSNGAREGVNKAVILMTDGQQSFAVD
QVALKDAVKPLVDANVLMYAIGIGSEISPVDLKTIAAERVLIADDFDGLSLKIEDQIVLLGRVGCQG
PPGKDGKPGANGEDGFPGLIGAKGQKGDRGEAGTEGLKGNKGSQGEAFPGLNRKGEKGDPGS
AGPLGLPGCEIKNQNEVIDLGFAIDASGSLYEEGFNREKEFIKTIVDRVGRVSEQGIRIGVIVYYSDTAS
IEIRFDDHFNNEDLKNDIDNLPFFAKNTRMDLGLEEAKKMFGEQFGGRGSSKKVLILLADGQQTY
VPGVTEPSEVAKELAAAGVDIFAIGIGQQEIDRTELESLISKPEHIFLASDISKLIDELTPEVTSALECEG
GPRGPRGRAGTDGPPGSKGLLGPIGDKGFPGEPGSAGFGPKGDDGENGTAGTIGDRGEKGFRGP
AGVPGKRGAVGPKGFPGPNGEKGDRGDEGFIGFEGARGLEGPKGQRGDSSDNGVAGVKGSTGD

NGFKGPKGDPGKLPPGNRIEDFKGETGGSGLEGDTGPKGKPGRALFEPGPQGLTGPKGEKGDQG
FFGMSGPIGNKGFQGLQGFRGDDGAAGPVGEDGFPGMKGLPSSSGDQGDKGKNGRKGESGEV
GQPGRVGEDGDQGEKGYAGFVGMPGKKGDQGEPGVQGPQQIRNEILDNIRPGPKGYPGSTGPA
GDEGEDGEVGEPGETVGAQGMNGDFGERGSQGPKGEQGDQGLQGMIGVIGDKGVKGRVGTG
GNPGTVGLRGLTGAPGEVIFGSEKGNKGDLGIIGLRGRAGQKGKAGAIGPRGRRGRNGAKGERG
PPGFPGLSGIEGDSGNEGDKGPRGDPGSVGNRGIKGVPGESGIAEGNYIVIHSQTHIIPDCPRDFKK
LWHGYSLMYVVGNGHSHSQDLGDAGSCSQKFSSKIFLFCEIIKVCKHASRNDFTYWLAGDVDHP
MMPVSNAAVEPFISRCAVCEAHSSHITVHSQDTYAPECPPNWSSLWSGYSFLMVAGAGKTGAGQ
SLSSSGSCLESFRPKPFVECQGARGTCHFFSDKHSFWLVTIDPNKQFEVMKPQTLIKDKNHDLTSR
VSRCRVCIRKTGTKNNTVEPNIATRIRRSIASWIL*
>TRINITY_DN785_c0_g1_i1.p1 type:complete len:289 gc:universal TRINITY_DN785_c0_g1_i1:1062-
196(-)
MIIESKMLSSIMLKMIFVVVFLCGITLSEGIEKCDLQLEPIGCFKDDVWKRTMPEQILNERDPLNKV
YNNRMINWKKFDTYLPGFICRCAEAAFKKGYRVIGMQFWGECWSGPEAHLHFDSLGAADTCSN
QKFEREYDNITQCVSAIGMDSTNYVYRIAPTVCDTHYEPVGCFKDEQKVPRPMPHYISTDRDYSL
KIFSGKTIDWRNWNTYSPEMICRCATLAKSKGHALFSIQFWGECWSGPETNGYMRDGVTTDCRG
KDFEMCPCNGYHCVGKAYTNYVYRLGHHH*
>TRINITY_DN1534_c2_g1_i1.p1   type:complete   len:547   gc:universal
TRINITY_DN1534_c2_g1_i1:1914-274(-)
MHRVNSSFVKVAERTSKLCGNLGIKNSKIPSSLIARSSSTDTTDGVGESEPGFLEMVSIFTENAHSIT
LDKLLSAKPAPGKRAEDTGVREKRIKGILDIIKPTNTALAVNFPLRRDNGDYELITGYRAQHSHHR
LPCKGGIRYAPDVNLDEVKALAMLMTFKCAVVDVPFGGAKGGICIKKSDYSENEVEKITRRFTVE
LARKGFIGPGIDVPAPDMGTGEKEMSWMADTYAMTLGYGDMNSSGCVTGKPISQGGIHGRMSA
TGRGVYHGIDNFANNEEYMNLIGLKPGLKGKTFIVQGFGNVGLHSCRYLHRYGARCIGVIEHDG
SIMNPNGIDPKDLEDYKLDNGTIVGFPGATDTTEDLMVAECDILVPAANELQITAKNAPHIKAKII
AEGANGPTTPQADKILQQRKRLVIPDLYINAGGVTVSYFEWLKNLNHVSYGRLTWKYEESSNYNL
LSSVQESLEKHFGGNIPINPSSTFLQSIQGASEKDIVHSGLAYTMERSANRIMKTAKDYDLGLDVRA
AAYVVALEKIFNTYSEAGLTFT*
>TRINITY_DN4781_c0_g1_i1.p1   type:5prime_partial   len:2696   gc:universal
TRINITY_DN4781_c0_g1_i1:10504-2417(-)
QCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWIQFRNDDFDFDIQSGKTSSSGT
GPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASGDCSLRFWYHMYGSTIGNLTL
FLRRDNKDTLLWAKSKPEGNQWRPALVTVNSWYKPFQLIFVGTVGKSYFGDIAIDDLMMTDEKC
PSPGDCDFEDFDKCTYQDLVEDDFDWIRGHGGTGSWRTGPSLDNTKKDNSGHYYFIEASAPRT
QGDRARLVSELFDPTSSTRGRCLQFYRHMYGTAVGTLNVYVKTGPGNSSDAESLVWTNAGNQG
NSWIQGQVPIYSSKPFRLVFEAVRGNGYAGDIAIDDINFNNNFAPCSFLPSNAAPPTLPPTTITPEDS
NCTFDKGLCRWKQMKSNDQFDWTLVSGSTGSVGTGPLGDHTSGKGSYIYIEASYPRKENDSAILQ
SPPIRPSLGSVCFKFAYHMHGAHVNALYIYKNVKGKRTMVWKRVGTQGNQWRNGQVNIRGVS
GIFNIEMKGIRGVDYQGDISLDDFVVTNGQCPTPSHCDFENNQCGWFNIGRGDDFNWKRSNGG
TPSLGTGPGTDHTTGVALGSYMFIETSYPRKYRDVANLYSPYYPGSKTGYCFNFWYHMYGSHIGSL
NLYQDTVKSTPIWNKTDNQGNMWKHGRVTVNSRAKFRLIFVGTVGKSFLGDIALDDVWVDDFP
CPAPGACDFESKSFCTWSQVPNKFNTSNYDDFDWELGNGPTPSFQTGPAVDHTKGTSVGTYAYV
EVSGLIKRGQKAQLMSEKFPPTNGKCMSFWYHMYGSGVGDLNIYLKYLGVKKSHLVKSISGQQG
NKWIQGEVGLHSQKDFNVIIEAVKGSSYAGDISLDDISILDGNCVGLCSSVQPVARVACGPQSVTS
ASCVVSYGCCYDNSVPNVPACFQHPSSCKAVPIIARQQCGYYSISKYFCARRGCCFDDSGAGGPP
CYHSLSKPTDFPTTRAPPTTQPPSKFDCNFEKNQCQYTNLRNDQFNWARHKGDTASFGTGPKFD
HTLRNQNGHYMFVETSFNKENDTANLGTPTIDFPTGGDDVCVRFWYHMYGQHVGAFKVYHKL
TTRVPTKPIWERIGSMVNKWVYAQLIVPRRPAFQIVFQGVRGKGYQGDIAVDDVGFVNGPCPPSL
QCDYQNGDLCGWAQDADDEFDWSVGNGKTMSTQTGPKADHTYETDFGKYLFIEGSSPRQPGD
KARIESFSHRPTKGMCFEFFYHMKGTGIGTLNIWIRRGKTMDSKPVWTLSGEQGDEWYRAKVTLV
EDTENWTVIMEGIRGADFNSDIAIDDVIFHQGDCAPQGDCDFENDDVSACGYENWPRNKVDWL
IYSGGTPSYNTGPMVDHTLGTKQGHYLYMETSSPAKKGDFGYFMSEKFRVNPNYKWCVDFYYH

MFGDGVGSFMVKMMYQTKYSRGRYLLQTLFKKEGNHDDIWQHGQVNITSSYDFQIVFQGVVGG
GITHRGDIAIDDITVKKGLCPAPKAPPKPNPCAIKCKDGTCVPSNKVCDFYPDCAQTSDNTDDTD
EKGCDGCDFEKGTCNWNDTSKGLFDWNRQNGGTSSYNTGPSVDHTKKNALGYYVYVEASKGQ
SSDLATLSSPVLNQASSTCKMTFWYHMYGTSIGTLNVYLVNGYRLTLHWTLSGNQGNLWKQGTV
YVNRQLKPYSVRFVAERSFSYRGDIAIDDIKFEGCELPRPAGFCNSRYQHRCAVTRACISYTRLCDY
TDDCGDGTDELNCRWTQYPYRCNFEYDLCYWRNLKDDDFDFTRQKGQTDSANTGPLFDHTTG
TSSGYYIFVETSWPRKTGDKARIGSGYLGPITRTYCILRFYYHMYGDHIGALSVKLRTCIGCPETQI
WRRNTTVGNYWVRHAMYLRSDKPFQVIFEAEKGSDYQGDLALDDISFDGCTPYQGTFPTVAPST
KPPPTTSPCPSGKFYCAKDAKCIKGSMKCDYIKDCSDGQDEQHCGPCDFEKDMCGYQDVSIGTL
EFKRTQPINDGSKNGPSVDHTTNSTKGYFAMAQKGSGNKGSPVSFLLSAQLSQTAPSCKVQLFYH
AKAGANYVRVSHRQPGSNGKTVISQVQSLSIRNMDKWQNDTVGVGQRPFGWQVLIGLLSEYAA
IDDIKFIDCFYPRPTGVCNRMYTQCDNGVCLDPEKMCDFSNDCGDNSDEKPSVCKNFKERCDFE
TDTCNWYQDQSDNFEWKRIKGGTPSGSTGTGTDHTTGTSQGYYMYIEASNPRKPNDTARLLSPV
FKPHGNKKCAMRFHYHMFGIHVDSLSVKMKFSQDDNSTMKTVWTKRGNQGNQWNTAKVYLL
SKVNFQVVMEARRGISFLGDIAIDDVSFSPDCLPDFKATLNPNPITKAPPPGCKAGQFSCGDGQCI
DSDFFCNFKQDCKNNADEIRCPSSCDFEGGKSCNWFNAKFGDIMDWTVHQGKTPSNGTGPPFD
HTKGTKDGWFVYMEATQRKSSNFPNAHFVSPMFYQGAYDCKFSFWYNMYHYQISIRNDARLNL
YYRKNGKETRIWSNARSTGNKWVQQIVQLPRCPQDFRLVFEGYHYWATKTDAAIDDLKFMCTEP
KAPSSCANDEFQCTKTKQCIKKHMLCDMDRNCCDGSDEAAKLCKGYKTLDFETGLQQWIQFRN
DDFDFDIQSGKTSSSGTGPQTDHTLEEEHGKYIFIESSLRNENETANLGSPTLAATTSSLYASGDCSL
RL*
>TRINITY_DN2028_c0_g1_i1.p1   type:complete   len:274   gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)
MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*
>TRINITY_DN436_c0_g1_i1.p1 type:complete len:116 gc:universal TRINITY_DN436_c0_g1_i1:74-
421(+)
MAVSRAAGSASTFQKFANAFRSWYIYAAGYRQLGLRADDLHMEENPDVSAAIKRLPEEDQYLRIF
RIKRALDLSLKHNILPKEEWTKPEEDQYYLTPIIEAVKAERKEREQWDRM*
>TRINITY_DN1378_c0_g1_i1.p1   type:complete   len:443   gc:universal
TRINITY_DN1378_c0_g1_i1:2151-823(-)
MLRFAVLVVVASIGVSALYDSSDDVVELTQSNFNNHVIGSDDIWLVEFYAPWCGHCRNLAPAWK
QAATALKGIVKVGAVDMDQHQSVGGPYNVRGFPTIKVFGANKMSPSDYNGARSAQAIVDEAM
KVVQRVVSDRLGGRSSGGGGRRSGGSSGGSGNKDDVIELTDSNFEKEVLNTKDMVLVEFFAPWC
GHCQRLAPEWAKAATELKGKVKLAALDATVHGQTASRFQVQGYPTIKFFPAGDKDFSSAQDYQ
GGRTASDIVAWALAKHAENVDPPEILEITSNSVLTENCNEKPLCVISFLPDILDSMAAGRNGYISTL
KELGDKYKSKMWGWLWTAPGLHSNLEQALGVGGFGYPAMAVVNIRKKVYVLLRGSFGIDGIDE
LLKSIAVGRGRTEKLTQGLPTLKDVEAWDKDGQLPEEEDIDLSDVELDDLDDEPKQEL*
>TRINITY_DN6783_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN6783_c0_g1_i1:1018-77(-)
MVREDKSTWKANYFTKLEGLLDEFPRCFLVSADNVGSKQMQQIRVALRGKAEVLMGKNTMMR
KAMRGQMQKHPSLEKLLPHIVGNVGFVFTNEDLTEIRDILLSNKKEAPARAGAISPLDVFVPAGN
TGQGPEKTSFFQALAIPTKITKGTIEILGDVHLIKKDEKVGASESALLNMLNIRPFHYGLVCRTVYD
NGSVFNPSILDIKEEDLITKFCEGVANVAAVSLAVGYPTAASVPHSMINGFKNIAAVCLEADIDIPQI
ATIKEYLADPSKFAAAVAPAAGDSGAAEVKEEKKEESEEESDDDMGFGLFD*
>TRINITY_DN98968_c0_g1_i1.p1   type:3prime_partial   len:424   gc:universal
TRINITY_DN98968_c0_g1_i1:1269-1(-)
MEYKNILTSCIFLISVITNTQQTSYVNYFNDQSDLLRSFNIPVKPERSFNTGLPASYMKYARTNDFY
HLYARLFNENQDGKQMAFLTKPISFPSNIETVCVYFEYWMHNLGNTQLYIVGDTTDSTQMQNIN

VNNLVNTENRKERLVQTANEPNSCWREVNSCFNVKGKTKFTLHIQLVPPSTGIVSTNGAIALDSVI
VTTDKRIESTACTRRVGRRIKRDVSFTNLVSNPAAIPGMNLIFHNYDASKTTQDFECGDDLGLCGN
KYLGWTLTNQCSSSCGNGFIIESRTYRGQAIIAQYRQNFQQACNRGSCSTGPPQPPGNNLGPEQL
ATCSVDQCGVNTGTQVVFRVCNAALCQYQGTDYSLNQQVTIRVQSCTVACDYTAWQDTSACSK
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQA
>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-
7928(+)
MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*
>TRINITY_DN164351_c0_g1_i1.p1   type:complete   len:212   gc:universal
TRINITY_DN164351_c0_g1_i1:694-59(-)
MEDWGEPGEQEAVGPTSIEVQDIKLFGKWNPDEVQVSDISLTDYIAVKEKHAVYLPHTAARYAVK
RFRKAQCPIVERLTNSLMMHGRNNGKKLMTVRIVRHAFEIIHLLTGGENPLQVLCDAIINSGPRE

DSTRIGRAGTVRRQAVDVAPLRRVNQAIWLLCTGAREASFRNIKSIAECLADELINASKGSSNSYAI
KKKDELERVAKSNR*

>TRINITY_DN578_c0_g1_i1.p1 type:complete len:429 gc:universal TRINITY_DN578_c0_g1_i1:379-1665(+)

MDMKALFLSLALVVVAWNTAYGSSNHKLVAYWGQNAVYNLKRDKQYWEKDLSYFCDNSKYDV
IVLAFMHVFFDRRQKDALPGLNFAFHCETSMSADLPFLLRCPQIEAGIKRCQANGKKVILSLGGA
TGGYGFANDGEAKTFAHTVHNLVLAGNKMQNIRPFGSAVLDGIDLDIEGGSNVGYATFVRELRA
LQGSNHYLIAAAPQCPFPDHFLGPSPGTAFGEVADLFDEIYIQFYNNYCHTGDAKQFYPNFQQWI
NFSKKSNGPKIFIGMPSHERAAFGQGYWRTPAEVAAIYENVKNEPGFGGFMLWDASFDDVNRFN
GRPYSDSIAALFKNGGGPRPTYRPNTMRPNPVTRPTPKTRRPNTQRPVTQGPVGPVSCSAGADGL
IPHQDCSKFIECSHGRATVKSCPPGLKFSSAKKYCDWPRNVQC*

>TRINITY_DN10907_c0_g1_i1.p1 type:complete len:206 gc:universal
TRINITY_DN10907_c0_g1_i1:1010-393(-)

MAKKAYDYLFKLLLIGDSGVGKTCLLFRFSDDAFNTTFISTIGIDFKIKTVEVDGKKIKLQIWDTAG
QERFHTITTSYYRGAMGIMLVYDITQEKTFDNIAKWLRNIDEHASEGVERMILGNKCDMEEKRM
VSKEKGEGIAREHSIKFFETSAKENICVEEAFMQLTQDILRKHQAGATHEQSPSGVVIEKDSHNRS
KGGMNCCN*

>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-1359(+)

MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*

>TRINITY_DN1320_c0_g2_i1.p1 type:complete len:260 gc:universal TRINITY_DN1320_c0_g2_i1:97-876(+)

MRCLSMIFAILLVYLFDQVSSRACRDYVNYQCRKYLCHVPKYHRFVNMYCKATCGLCPVIHGLQ
MSTMSTPTTTATTTTTTTTTTKTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATIVLLSGGKTISGTPEDAS
GPAVRCTDGDVTTLCITTQAIDAYFQVDLGSQKKVSRMEIKNYFHYENQLELKFLVSNDVTFATST
ICDTWDVRSVNEGDVQDKKRDCNSNVSSQTFRYARVQTVNNANEPEHLRVGEFEVYGVA*

>TRINITY_DN1114_c0_g1_i1.p1 type:complete len:118 gc:universal
TRINITY_DN1114_c0_g1_i1:462-815(+)

MGKKKDDGTIPAGDSTKGAKVFKQRCSQCHTVEAGGKHKTGPNLYGLIGRKTGQQPGYSYTDA
NKAKGITWARDTLWVYLENPAKYIPGTKMVFAGIKKKGERADLIAYLEESTTKK*

>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-289(-)

MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*

>TRINITY_DN164128_c0_g1_i1.p1 type:complete len:166 gc:universal
TRINITY_DN164128_c0_g1_i1:117-614(+)

MGPKFDPTAITIVYLRVVGGEVGATSSLAPKIGPLGLSPKKVGDDIAKSTGDWKGLKVTVQLTIQN
RQAKISVVPSAASLIIKALKEPPRDRKKVKHVQHNGDISFETVLDIARQMRERSMARKLEGTVKEI
LGTAQSVGCTIDGENPHDMIDMVNSGEKEVPES*

>TRINITY_DN51048_c0_g1_i1.p1 type:3prime_partial len:761 gc:universal
TRINITY_DN51048_c0_g1_i1:2282-3(-)

MEKSVDSWILVDYASKCRSVSSPSNNSSREIKVGKDTGRVKVFVRIKPFTNEKNIKYESLPYEISEEK
LQVRILSDERGHTEKTYQFDHVFGPDRCNDHVCSIMTPPLVEAAMNGFNGTLMAYGQTGSGKTY
SLMSANGITQNMIDQCFRRIHDDGKHDYKVTMSYLQIYQEKLYDLLTNSNDKTDLTIRENPKTGV
YVENLTEYVVRSPHEVIQFLEVGKKKLVFGETRMNRTSSRSHSVFQMTIERTLQDGKDVQTITRKR
NSNHTQINKDPNSLDLNSFGKDVIIRGKIHICDLAGSERIKKTGATGDRLSEAQHINSSLLELGNVI
QALADEKTMHIPFRNSVLTRLLQESLGGNCKTSLIICTSPSNRDLHETKCTLNFGSRAMKVKNTAY
VNMEVDFKKLSDELMKQLQRKEDELFQVRQKYQDDIDRECDKVRNVLEKANKEKLLSFELEREV
MEEKMICMNAELCELKNELNNRRNRIKGLEDSILSMDDILKHERDTGYQMLKTENHIKSFMSSS
NMIENIVALTVILEHCILETESNYTEELLLENFLYIQQSVVELEKYKTKNMDTTEELLEKLKKRLEKL
SNQVAEKNNNSNQYDDSDIVWLRYNLFLGNVINNLLQSLKVFIMNKKKNDMKAVMERKTEKTL
DLDDDVSDRSDNRQETVKAKYQTYGETWNNAEDTIVKLPILLEKKQLDNGTQYDISDFSPNRRL
VDTTVEEIEKIITEIQSENITDRRDIKRSGEIFSGFSTTLG
>TRINITY_DN23911_c0_g1_i1.p1   type:3prime_partial   len:203   gc:universal
TRINITY_DN23911_c0_g1_i1:606-1(-)
MVTNDAESLIRKSESFDQHYDVLHELGRGRFAVVKKCVCKKTGKQFAAKIIKKSRTSSQGRSGRE
QLLLEIDILNNSNHPKLVRLYDVFETRSEMQLILELAAGGDLHRHCIEADVTRTEKEICYLIRQITEA
VRYLHDQSIVHLDLKPDNILLAKEGEVFPEIRLIDFGLSRRLDVPYSQFDIVGTAEYVAPEVLAFEPL
D
>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN6008_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN6008_c0_g1_i1:1620-343(-)
MSLEDTQLRKRKGVSEKHYTLDGFTNLQENEKKSSPLMSITKVILKMMIATFVLLGIYIAITPSPIDP
GVLELDTPLPRFEGVLAPNDKLKQARRIGEGKLLAPESLAMDKEGNIYSGLGDGRIVKITKDEEIIN
ITRTGEPHPECGKRKLGSKCGRPLGIHFDKDQKNLIICDAFFGLLKLNIATKKLSTLVGANVINEKP
LKFTNHISVSSKNVVYFSDSSSRWDLENVALLVLEGNGDGRLMSYDMESGKLQILLEGIYFANGVS
LSPDEDFVLVCEMSRNRIIRYYLKGENKGNYDIFADNLPGSPDNIRRSPNGGYWLALPSIRKAPFSP
PDLIAPYPSIRNVIAKLLSPQTLEYLLGSMRYGMIIKLDENGKVVESYHDKDGSKMYTISEVYEDSV
NKVLYLGSYKNPFMGKLQLSDSS*
>TRINITY_DN614_c0_g1_i1.p1 type:complete len:183 gc:universal TRINITY_DN614_c0_g1_i1:194-
742(+)
MGQMFGKLFSGLFGKKEMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNISFTVW
DVGGQDKIRPLWRHYFQNTQGLIFVVDSNDKERVTEAKGELAKMLGEDELREAALLVFANKQD
LPNAMNAADLTKQLALHDLKSRSWYIQATCATSGDGLYEGLDWLSTELKKKKN*
>TRINITY_DN7573_c0_g1_i4.p2 type:internal len:151 gc:universal TRINITY_DN7573_c0_g1_i4:3-
452(+)
SAPPQPLRAPSAAAMAPKDTVEATTTLGPQVRDGEIVFGVAHIYASFNDTFVHVTDLSGRETIVRV
TGGMKVKADRDESSPYAAMLAAQDVAARCKELGIAALHIKLRATGGTKTRTPGPGAQSALRAL
ARSGMKIGRIEDVTPIPTDCT

>TRINITY_DN76073_c0_g1_i1.p1   type:complete   len:107   gc:universal
TRINITY_DN76073_c0_g1_i1:794-1114(+)
MNTNVENDYDQCFIGSQLKDECHKKNYLRTTGTILLQDLLEKDRSLLQWRCEVKTSDSDLEKRIC
YHHEKIYLTRYVGLQKYCCDPCNMHGNRFVTSKWKDFSQYF*
>TRINITY_DN113_c3_g1_i1.p1   type:3prime_partial   len:1162   gc:universal
TRINITY_DN113_c3_g1_i1:3485-3(-)
MEIVSRSRIAIFVLLGLLISVAESQFDPECPEIDPDVECSPPESTVNECLINNDCDVDKPLCCSNGCG
LKCTARERRSITPDGFTPEDEKLCRVPVDLGFIIDVSGSIGQTNFDKIKKFIEKIVDAFHIADDGTHV
GAVFYSDNASLAFDFNHLQGDQLNEMNVVREIEKIQVTDGQTRIDLGLELASRELFNPAAGMRI
HKPKIALVLTDGKQTRGELAPDAKDLHQASRLLKQTGVQVYSLGIGLDYDIGELLDIASDDASVF
RSQDFDELVSIVDILIEQTCKGCTRAVDVHFALDASANVGEENFVFMKDFVKAIGYNFIISETGAH
MSGSVFGDVGTLVFDKSQATEINEFENEVENMPYLGDATGNMDKVLKMISNEVFNFDGFTRQSS
PKVIVLLTSSNCDTCQESLEDLARPLKAEGIHIVAIPIGDPLFDEMQVLASHPIDQYAIPRATHQELL
NAEFIQKVSEMVCAGKPGICAEPPVKGECAEIINECSVDMRCPEDQKCCIKNCVASCVLPLAACIT
PIEIAFAFETTKYGIADFNNVKNFAINLLDHFKVGPSKAHVSLSTFSEDVTSLTKFIDDFDMESIKQSI
KDLKHDGGEESNLGNFLEIINTEVFSVRGGIRQQTPRVLVIFANGDINDEQAVKAQEEALHLKAD
GKDVKIIIVNIGSSTKTLDVLNEVATEGSFYEFFGSAELDSTAIETEISEKICSTKVRRSKCQRRIRSSCA
VKDDLCDSDFDCPGHQECFSDGCRLRCQTCEFRCKDKVDLLFVMDTSARIGRDNFERGKKNIKK
MLEWFTIDSNNTNVGVITYSDTANVAMPLPSRGNNNPAQSLIDVQDRLDSIPYSGGSVSHLDNAL
QLAAEKVFPDNGPNLRRDSKKAVVVITDSLDDSASQLELASWPLRRQRVQTEDGDASNIRILAFN
VGQELDLDLWGNIVSPPVEENVFYAADFDDMYNGIRQLAEDSCKYAAAITPPPIIKQKGEPGPPG
PPGIPGTNGTDGRNGTDGRRGPKGERGDTGLKGFKGEVGLVGPPGGGAEEQKGPDPLASAVGIV
NVTDLPGGGRIVFDLREGPVGQQGLTGIIGPKGPIGDTGEVGIKGRNGTTGPGGFFGLPGPKGQP
GTDGAKGLRGDPGLRGSAGRKGPTGAPGLTGPQGPFGYK
>TRINITY_DN2904_c0_g1_i1.p1   type:complete   len:221   gc:universal
TRINITY_DN2904_c0_g1_i1:1339-677(-)
MSLAKIFGSGKKKEESPNAQDAIQKLRQTEEMLTKKSDFLEKKIQQELVIAKQNSSKNKRIAINAL
KKKKRYEKQLNQIDGTLSTIELQRETLEGASTNTEVLKTMGYAAKALKNAHQQLDVDDVHDM
MDEISEQTEISKEITDAISTSFGVADDIDEDELNAELEELEQEGLDEQMLNIESTSLPSVPETELPTPS
RAQPSAQKVQPDDDMAELEAWAS*
>TRINITY_DN11662_c0_g1_i1.p1   type:complete   len:398   gc:universal
TRINITY_DN11662_c0_g1_i1:75-1268(+)
MALSRPVYIIAAKRTAFGSFGGSFKGLTATQLGQKAAAAIVDAKLDPSLINSVIFGNVAQSSSDA
AYVARHIGLGNDIPFASTALTVNRLCGSGFQAVVNGAQEVVLGEADIVLAGGTENMSQCPFAIRN
ARWGINLGETREIEDTLWSALTDSFIQTPMGITAENLAEQYGITRLECDEYALASQQRWAAANDN
GLFKAEIAPIEVKQKRKMVPVDKDEHPRAGITIEALNKLPPVFKKNGTVSAGNASGICDGAAALV
LASEEACKQHNLAPLAKVVSYGISGVEPSIMGIGPCPAIKQALSRADMSLSDMAFIEVNEAFAAQY
LAVEKELGLDRSITNACGGAIALGHPLATSGARILTHLVHTLKRTKENHAIGSACIGGGQGIAVLL
ENVM*
>TRINITY_DN1065_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN1065_c0_g1_i1:53-
1171(+)
MSGRGKVKAQRISLSKRAGTIFPVGRIRRLMKGCTHKFRVGIGAPIYQAAVMEYLAAEILELAGN
AARDNKRRRITPRHILLAIANDEELNKLLRNVTIAQGGVMPHIQPELLRRKEGNKFSLPSNMKAK
ALKAQNAGVQKAKAKPAPVKKAAPAKKAAPAKAESKQAPKKAPQTNASPKKKSDQPWTVLSE
KTLFLGQKFLVVQGNVADIKCDAVVHPTNASFSTTGEVGKALIAAGGDDLKKAISELHKSHGDL
QVATALLGDAPNLKAKHVVHVHSPVWGTGNPEQDLENVVKSALTLADEKNVQTIAFPAIGSGA
GFKKNVAAQLMVRSMSNYFVDVSPSSIKNIYIFVTDAESIGFYTLELAKVDSS*

Band 11
>TRINITY_DN161_c0_g1_i2.p1   type:5prime_partial   len:399   gc:universal
TRINITY_DN161_c0_g1_i2:1683-487(-)

WNQEPLTCTYLYSVNSQLLKYKMADDDVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRH
QGVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPV
LLTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYEGY
ALPHAIIRLDLAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMQTAASSSSLE
KSYELPDGQVITIGNERFRCPETLFQPSFIGMESAGVHETTYNSIMKCDVDIRKDLYANTVLSGGTT
MFPGIADRMQKEISALAPPTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISKQEYDESGPSIVHR
KCF*
>TRINITY_DN2477_c0_g1_i10.p1   type:5prime_partial   len:344   gc:universal
TRINITY_DN2477_c0_g1_i10:1215-184(-)
SIVGRPKMPGIMVGMDQKDSYVGDEAQSKRGVLTLKYPIEHGIVTNWDDMEKIWHHTFYNELR
VAPEEHPVLLTEAPLNPKANRERMTQIMFETFNVPAMYVAIQAVLSLYASGRTTGVVMDSGDGVS
HTVPIYEGYALPHAILRLDLAGRDLTEYMMKILTERGYSFTTTAEREIVRDVKEKLSYIALDFDTEM
KAATESSDKEKTYELPDGNIITVGSERFRCPEVLFQPSFVGKEASGIHDTTFQSIMKCDVDIRKDLYA
NVVLSGGTTMFAGIGERMTKELTALAPSTMKIKVVAPPERKYSVWIGGSILSSLSTFQQMWISKGE
YDESGPTIVHRKCF*
>TRINITY_DN195934_c0_g1_i1.p2   type:internal   len:127   gc:universal
TRINITY_DN195934_c0_g1_i1:3-380(+)
GVMVGMGQKDSYVGDEAQSKRGILTLKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPVL
LTEAPLNPKANREKMTQIMFETFNSPAMYVAIQAVLSLYASGRTTGIVLDSGDGVSHTVPIYK
>TRINITY_DN2941_c0_g1_i4.p1 type:internal len:116 gc:universal TRINITY_DN2941_c0_g1_i4:2-
346(+)
LKYPIEHGIVTNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANRERMTQIMFETFNVP
AMYVAIQAVLSLYASGRTTGVVMDSGDGVSHTVPIYEGYALPHAILRLDLA
>TRINITY_DN1280_c0_g1_i1.p1   type:complete   len:426   gc:universal
TRINITY_DN1280_c0_g1_i1:195-1472(+)
MGFETCGPNEAMVISGCGQERPLLISGGRKFVWEFFQKVQRISLNVMTLNVESQRVYTVQGVPIS
VTGIAQVKVQGQNEEMLHAACQQFLGKHENEIRNIALETLEGHQRAIMGTMTVEEIYQDRKKFS
KSVFEVASSDLVNMGISVISYTLKDIRDDEGYLKALGQRRIAEVQCEARIGQAMAKMQSGIKEAQ
AEEVRIKAEYENKTEVARSQRDFQLNKSAYDIEVNTKKATSELAFALQSAITNQKIKEEDMQIKVIE
RAQAINVQLQEIQRREKELEAQIRKPAEAERYKIEKIAEANRMKVVLEAEAEAESIRMKAEAEAE
VIQKKATAEAEQMSKKADAWRDYQEAAMVDMLLDTLPKVAAEIAAPLSKVKKVTMISSGSSDV
GAAKITGELLDIVIRMPQAMEQLTGVDITKTFRREK*
>TRINITY_DN11435_c0_g1_i1.p1   type:complete   len:430   gc:universal
TRINITY_DN11435_c0_g1_i1:1616-327(-)
MGNIYTVGPNEALVVSGGCVGQRVKRTIVGGWAFAWACVSDVQSISLEVMTLNPRCEKVETAKG
VAVTVTGVAQVKVIKEDDLLKTACEQFLGKDPHEIEDILLQTLEGHLRAILGTLSVEAIYKDRDQF
AQLVREVASPDVGRMGIEILSFTIKDIVDEVSYLDSLGKTQTAEVKKNADVGVAEANRDAGIREA
CDTQRQDVRFKADTTIADAARAYEMEKAEFDKEVQTKNAEAKLAYELQANKEQQRIRNEEIQIE
VIERRKLIEVEEKEIQRREQELQATVKLPAEAESYKVQTIAEANKSAKVYLAQAEAEKIKMIGSAQ
AAAIEAIGKAEAERMRQKAAAYKQYGDAALMSLILEAMPKIAAEVAAPLRKTEEIVLINDDNGN
KMSSEVTKLLGQLPPSVKALTGVDLSKALGKIPGAQVTA*
>TRINITY_DN22077_c0_g1_i1.p3   type:5prime_partial   len:151   gc:universal
TRINITY_DN22077_c0_g1_i1:520-68(-)
SVCGTAVVQLGDPPPPPCAPLALPRLSLRAMSSAAASSSKASKGDKFSMGRESDKAPIGKGGATR
TKKVLRESIQGITKPAIRRLARRGGVKRISGLIYEETRGVLKSFLENVLRDSITYTEHARRKTVTALDI
VYALKRQGRTIYGFGV*
>TRINITY_DN329_c0_g1_i2.p1   type:5prime_partial   len:320   gc:universal
TRINITY_DN329_c0_g1_i2:1-960(+)
FNNSTHSPSLPTHVYLYCCRIKILILSFDPSTIEILKMAPPKFDDLGKEAKDLINKSFHFGVIKLEGKT
KAKNGVEFTTEGTHNTDTGTVNGSLETKFKYADYGLTFSEKCNTDNVISTKITIDNKLAKGLKVD
FDTTFAPVTGKKTAKVKSAYQHNNIHSTCDVDFDFAGPTIHGSAVFGYNGWHAGYQASYDTANS

KLIANNASLTYKEGDLVIHSGITDAVKYSGSVHHKVNSNLTAAALIQWASGTNNTSLTVAGKYAV
DNETFVKAKIDNNLRLGLSYAQKLRPGVELTMSSLVNAKSLEQGGHKLGLSLNFEA*
>TRINITY_DN3986_c0_g1_i1.p1   type:complete   len:446   gc:universal
TRINITY_DN3986_c0_g1_i1:252-1589(+)
MREIVHLQAGQCGNQIGAKFWEVISDEHGIDPTGTYHGDSDLQLERINVYYNEATGGKYVPRAV
LVDLEPGTMDSVRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKEAESCD
CLQGFQLTHSLGGGTGSGMGTLLISKIREEYPDRIMNTFSVVPSPKVSDTVVEPYNATLSVHQLVE
NTDETFCIDNEALYDICFRTLKLTTPTYGDLNHLVSATMSGVTTCLRFPGQLNADLRKLAVNMVP
FPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDAKNMMAACDPRHGRYLTVAAMFRGRMS
MKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPPRGLKMSATFIGNSTAIQELFKRISEQFTA
MFRRKAFLHWYTGEGMDEMEFTEAESNMNDLVSEYQQYQDATAEDEGEFDEEEEEEDA*
>TRINITY_DN982_c0_g1_i3.p1   type:complete   len:9852   gc:universal
TRINITY_DN982_c0_g1_i3:29697-142(-)
MSIKLCTFFVFFLIQCINSFPEIGLHLSLDRSYSFQGNGWKTVNGWEIKPRANGPYEIDAIKNISPEY
FPVPITGVYYITVSLPVEGASNGEFKSAIIVDGKNEEGRIGLMSSFQKTAFKNGASTLTFAGFVRLFA
DEKLTIEIYSDDINANYVVLESATFVFHFIGVTGSVPAYLAHTAQDQEYASDSIIKPWVTLGDSRVYE
SLSGFIKNEGVFTTICNGVHKMAVNIMIKANAGTYTLKALFQDEESATATVTINQPDSIATLNIFQN
FKWSEGMSITLQIHSSNGANFKVLKSSSWSMSFIGETTANFQEFSVFLMADQFLQPSQFPQRINIDL
NGVFQFLQSNPDQYNKGQLVSGADTKFKDNLDFIVDSTDLFYVSANIIIEGEAEDLEITIAVSQIDID
VLPEDGLSGRLTKISNSRRSISLSGIIFIREKQYLSFFVRSRDSSKSFTVSKDSFISVINMRYTVSSVSARQ
NENIDVTAGSWYDISGRFAEQKNGLYSFGKDFNINNGVFRTSHSGIHSVHANIQFSLDSDAFGDN
DDNKIVLRVVIDGQEDKISLMSIRKNPEKTATLKLFGSIYLRAGVTISFQVKSLMPNTVQYKILQRSS
ISISYIGPQWAVNSFHAVANQDLNYDGKPDDTRPDIPSPLNFWKTEAADEFISPFEVLESFDGTRYT
SVDDGLYVVSSLLILKNVDCDRSALFKLDFVTTGGSRASDKSNGFADSHFFIADSKGTEFTLSVTTA
MRLEVGFKVGLKLTVGSTSCRYTISKESSFSIAQWSKSSNTIEENRLKYIGVLARLSAPTEVSSPNTW
SNLGSNTMDINPGDKSRSSFRPGIFGGDDLAPITRTGKDFNGDVSDFTIKDPGIFFISGMITVTTTEN
ANEEFAATVQIDSEDIESGLYAAVINQGSTEMSLTFGGTIYLKSGARVRVVVKGGRTFNIAAGSSFSL
LKLQPDYKTPGIIVSIDEKITQAITRYEHKDLRADIHRTLTIGNLGFVESTGVYTIQVDGVYMVDYT
VILEATNPNAVFGAEILSDNTVVATGTSTFGNTKTIAITELVYFSKGAIVKAVLKSNTNGETLNNLQ
VDGGLTVYFLEPKEHVKDGHRSKQTSPQALPVRSFEKVTGFAAQSPDFAGGADSVDYTVPETGVY
LVAFTTRVNRVINGFKSRVLVNDNEFLNGNYQIVSAQNAPATLPLSIAMELTVNDVLSFQVMADG
SGMSLDGSTRSILKIDEVNTIRNVTEGLSAYKLRDQKVNGQQETIVEEWDTSVTEGTFLAKNVSFT
VDHSIVVAAGVFQISVSVVVKNDRPSQSKFELRVLQGDDVKSHGLHSKVEIGGGREQTLTIGGSL
LLQKFDSLRIVVRDIADPLASYTIKAGSTVSVIIIDDNNGPIACEDEGLNMRRLPERIRKPTRESHTF
QCNVVSSLKAEKYTWFKDNVQLKEENQKNLVLNDLKLSDSGVYQCRVRFLELTGATNNATLSVY
DPYPKITSPKFIANVLENQDPPLTIEMFSLSAFKLSPEDEKASITTQIIAGDDQSFFTLSGPSKQTVTLS
TTKKLDYETQNEYNLTIKATNLEETALTTKGPYETTINYIVRVIDVNDHPPVFSQSIYSRSVPEDYPI
DGSIAKVSANDQDAGANVIYTLVGQVSGDLFKIDNTGLIQLRQNLDREIRDDHTIFVQASDGLFT
TVAEVVVTVTDVNDNFPNFMDTGFDISVSEATLTQSVILKVIATDPDLGTNSQLRYTIKSGNNENK
FSLNLLDGNLTLISKLDYEGTKIYNLEIDVQDSASPPKKSQNPLTVVIRVQDANDNNPTFTQSLYNT
RIAENTAVGTSVLKVSATDRDGEGINNPLTFSITDTDANEFFQVVSSGATAGEIRVRKSLNYDIRKD
YRFSVVAKDNNLGEPRYRTALVVINIDDTNNLRPTFEAGSASISISEGTSIGTSVHQVVAIDKDTVG
KLDYRIISGADGKFAINKETGDINLISAVDFESNKKTYTLEIQVNDGVRDALNPATVVINIQDFND
NQPEFIQKYYIFTALESISDSQAINVGNPVIARDADSTTNSQVDYSIQYDINNPSVPNEGDALFRIDS
NGLIFKKNGVILDFENVRYHTFTVVAIDRGTPKTLLGKAFVTINIQDVNDEAPSWSPAIYSVTVKES
AGINRDLVFLSTTDKDTSGAVTYSIVSGDSANQFQIFDNVIKIVKPLDFEKTETHTLKVSAQDDNG
NRAQLDATVTITVEEVNDNRPLVTNNNANSIQVSVPEDIPVNSLIVKLNGRDDDKGAPGQASNQ
FTFVSLDKTTDFTIDEVTGEIKNTVNLDYERQKSYSLVATIRDKGTPYLESKFLVDIIVENKNDERPIF
DPAIYTIKLSEKAPIDTVVAMLQATDLDTPKSQLRFSSVTTLDSHFSLDPITGIITLKTSFDKEVNGKD
GIFVISCTVNDGTSNSAQNAIVRVEVVDVNDNQPVFPTSEYFIQVNEGSSIGTILQNIAATDKDNT
NTHNQFTYTLEGKEAVDFRLNGNQLQTNKIFDYENKKSYSFDVLATNNLSPDKLVGKATVVVSIL
DQNDNNPVLSPSGVINLNISEGTIAPANIITIFATDKDSTINAEVQFTLTGDPTNTFTINQNTGEIML

AKSVDSFAKNEYTLSVTATDKGSPPRSSTATTLNISIKPVFVPGIEFENCPQIISFNENAAPNTFTKTL
TVKDRGSFNQVQFTVVSGQAGIQNLITVSQNGVITNGQRRADFEARKRHDFLVQAENERGAKAY
CHVTANINDVNEGPIFDSANYVFDVLEVIKINTVVFSVRATDPDFSSTTNGQLTYSLAGQEASQFSI
VPNNGQIKLAQPLDYEIKKQYQFNVIATDGGSLQTTSSVIVNVEDWNDNRPIFDQPQKLAINVPE
NSKPDNVFTVSATDKDSTTNGEIEYVGIYPTGIISIDKDTGTAKIIGDLNYEKRQKYDFVIVAKDKG
VPYLSNTREVSLSVLNLADEVPYFDTAAYTISISEKTSINTAVFRVMAKDNDLENFGKISSYEIISGNQ
LNRFRIDSNGNIIVQQSVVLENNNPNQYILTITAFDTQRTQSLNNTQVTINIIDLSDKQPFFIQNSYI
VEVQENNEVSKSLLSLEAQSNEPTFNPTYSIVQDPKNTDSQFFQIINGNTIVATTVFDYEKKRFYSFE
VQVIDTNNGKTNKALVVRITDENDNKPFEVSGNLHFNITEHTLLGSTIGSLNGKDNDAGINKEF
EFSILEGNDDDKFMLLPTGQILLKNFVSVKEKDFYKIEVKITDKGTPSLFNIFTVRVTINSSQALVAS
NNPTIPEDKNTGEEITRVTAIDPNTGSSNGFIYSLVGTLSNSQFTIDAKTGAISLLASVDFETDRTHT
AVVKAEGPTSTGVTEVIRVTDINDNKPIFDPTNFNLNINENFVVGQEIVLVRATDKDSSLNDNNV
IIYRIDSVNPSSGNDLFSVNPSTGRILLLKALDRENGDTSYVLTIAASNRGVSNKPDNTMTVTINIA
DVNDNFPIFEKSLYQGSVSEDANTGTSILTVRASDKDILLKNRNIRYSMTQPMAVQKFQIDPISGVV
SLKQEVDFETKQRYDFSVIASDTGDVAYSRTANVEITILDVPDVEPKFDPQRYEITIAESTLVSTSILK
LQVIDSVKNLNFNIKQGNSNSDFRLVASSGELFVNKQLDRERISRYQMTIEVSDSVNKAAIDAIVIV
NIADVNDNQPLFLQSGCYQANRAEGIETEQVVVNVQATDRDEGSNKEIVYSFSDACSVLDIDAN
TGAITTKQKFDYESARSHICTIKAEDKGTPKLSGFSCIILTVTDSNDLKPTFEVITSNARVLENIPVGS
VITRVLATDKDTLSSNKQFVYTIKTGNEDGRFTIDANGFIKLQQPLDYEKKTDYRLEIEAVDSTNQ
DMVSDPNAIVTVTVIEQNDNRPKFAKSYHRVNIEESTAIGTTVLKLSATDADAGVNEGLIRYVSLH
NTTVFNIDRTTGEITLATKLDYEVKKSYHLIAVVKDQGNPVLSARTLIDIFVNDVNDNPPVFVISSY
NNIVSEKAPIGQSIVTVSARDDDTGVNGQLKYKIRETQSMFRIDEDTGIIILNGDLNVENTNKLLYA
LTIDVVDSGVPPLQASNPATVSVQVSDVNDKQPVFALDRYQFEINENIEGNQIFGDSVTVRANDD
DLTGTNNQLTYRLVNTTMFDLVVTNQNVFIKTALGVSFDYETKKSYSFEIEAMDSAANKLYGRSLV
TVTVKDFNDNPPIITVPNIIVNISDATLIGSHIATIMAEDKDSGENGILIYTVTAGDSTNRFTMESDT
GSIILKNPVDSYTKDIYVLNVLVQDNGIPRRSATGTVTINVIPVDLTLLKFNTTCPFAISIPENQINSN
FLGLKALDAGEYVSKQLRYTINSDENDVNQIFALDSIKGEFKQLKEANYEERSRYDMTICATNERG
SKVCCHITIFITDINEPPSFIGLNNNNIYEVSISETTPIGTIIYRVLSKDQDLPGVLNGQTSYSLGQQNV
FIIDQMGQIRVNKTLDAETQLNYVFQVIVTDKNPTNPLQSAATIRVNILDYNDERPIIQNIPDITIDE
NSDNQVVRNIVVTDRDISNIGSNIELSIEPSNILTINNRQLRTVGSALDYEKVQRHTLYLTAKDKSFP
YLSSTTSFTVTINNLNDNKPKFPVNNYNLTVSEKTTVGTLILTLFAEDDDLEEFGEIANYEIVSGNQ
EDRFSIDSNGRLTLKKQLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNL
YVKFIPETTPIDTLVLTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFD
VQVEDEKNGKTNRASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNA
EIRFRGIGGDGNGVFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYT
SVITTDVDINEDVETQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDR
HVLTIQSRGPTTNGVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGE
VTYSIEDGDQTIFSINPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFND
NCPVFENSTYSLTIKEPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKEL
DYEEFTSFRFVVKATDQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGS
TFKGLLYSLFHKNTQDDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINII
DVNDNAPFFNQPTCYQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSG
RITTSQILDHEQQKLQHCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPA
GTLVASLVARDVDNQGLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFS
SPDDALVLITVLEVNDNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQ
FTVNANTGVISVAENLDYEIEDHYELVVIQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNR
ELSEKALIGAPVVKLNAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFV
LSVSVKDSRDRDGANKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPEN
NNLLYSLVDGEDAASFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQD
TNDEAPVPEKDLIMVNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKST
LDFFQQNFYNFTVLVTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAI
DEGTYVSRQIVYSIVSGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITIN

IMDVNEKPYFVGLNNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQY
GRIQVLKDPDFEFTRSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNN
TDVGTVTATDKDGSGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGT
PYLNAYKVIKVEVLNENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPP
SGGSGAGSPDKTFEITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLE
QPIFSVNPAVVEVYENITLNSNIVKKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEI
KRKYVFLAEARDKHNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDA
DSGENAMVDFTITGGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTF
NIKKSKFIQNTVRFDRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQ
TGEISLSQTLDYEIKQEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGY
LVYKTTVMDADKTDFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGN
LVGDMVLRVNILDWNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTED
DFILRRNDKGHGSLIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSE
YNTTVSEHAQIGTRVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDV
GARDGGNLVSLNNVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSI
SGANDDTSYVSVDQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDN
NPKFVFGSDLVYNVTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQI
NLINKLDALQTNKYVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSI
YELNVTKTLPGSPMKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVR
VQNLNDNIPYFTQNAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIV
VVNGKLIRNKVYEFEVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGT
FSGITYVITSMKAKDMFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNE
NDNAPVFVNGPYERNITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNF
DLKNKYVLNVRVSDGKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPS
SFSINEQSGRDFFTIDANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPIL
TPATQTVQITEPVAPGTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTV
TVDDGTCTKSVQVDVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDP
AALEYVTINRLTGEISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCP
SIESPMYYEVSHSSPIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYN
LTVTVSDGQCSKTSNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFS
IVESDANDQFVIDSNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIF
PVIGYNQRVSGTPVIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYG
LSVRATDNKCSADVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQ
NTHFTIDQNGDFRLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEEELYAVQ
HTEPLREGLLIAKLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSV
NDGKCAKNTKVDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFF
QIDPKTAQLQLVKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQ
NTPHNSIVTKIEVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTI
SVDDQVNTPTIFSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTV
LKRLTRPFVEKTTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAY
LVMVNDVDDSKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNI
VIKDTLNAAGSPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTIL
ANDGDTNDKIAYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAV
GDVNDQVPVITPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKE
NLAKSNVSSHTLSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTV
FKLVAGDASVFSNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNL
FVRISDVNEFTPVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAAT
GNIILNKRLGSGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVY
KPIVTDSDQTGTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVAS
DRSQSITPSFNQDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKN
RTALTLGTIYTIPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSY
YIILGQQVGGDSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKS

FTYLVGEENGCSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQA
GKSIDEYREQDSYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEY
SNTVYRFQNPSYPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEY
ETRSAQIKFHEESPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFV
NEKEDSLTRL
>TRINITY_DN95248_c0_g1_i1.p1   type:complete   len:124   gc:universal
TRINITY_DN95248_c0_g1_i1:197-568(+)
MAPKTKKVSKKKSTLNFNIDCTLPVEDGIMKVDDLKKFLQEKIKVDDKLNNLDQITLEVAKTKVT
LVSERPFSKRYLKYLTKKYLKKNNLRDWLRVVASSHTDYELRYFQINNDEEEDEEDNE*
>TRINITY_DN250_c0_g1_i5.p1 type:complete len:452 gc:universal TRINITY_DN250_c0_g1_i5:131-
1486(+)
MRECISVHVGQAGCQIGNACWELYCLEHGIQPDGQMPSDKTIGGGDDSFNTFFSETGAGKHVPR
AVFVDLEPTVVDEIRTGTYRQLFHPEQLITGKEDAANNYARGHYTVGKELVDQVLDRIRKLADQC
TGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAIYPAPQVSTAVVEPYNSVLTTHTTLE
HSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITASLRFDGALNVDLTEFQTNLVPYP
RIHFPLATYSPVISAEKAYHEQLTVSEITNACFEPANQMVKCDPRHGKYMACCLLYRGDVVPKDV
NAAIATIKTKRTIQFVDWCPTGFKVGINYQPPTVVPGGDLAKVQRAVCMLSNTTAIAEAWARLD
HKFDLMYAKRAFVHWYVGEGMEEGEFSEAREDMAALEKDYEEVGVDSVDAEDEEEGDEY*
>TRINITY_DN118_c1_g1_i3.p1 type:internal len:200 gc:universal TRINITY_DN118_c1_g1_i3:599-3(-)
KVLFLCGFILLSGLAFAYEIEEIVEDAPKPEPEHVPEPEPEPVKEPEPEPEHKPEPEPEQCSTVKHQK
CSKADKVCSPEDSHCTFTQICTPFFVKKCCKVVSVEKKCVVVRNCIPKFSYEKVCEDVKRCPPRKR
CKNVCRQVDLGEHKVKSICEQECEVVEHPEPCKLVHTCFSKWVSKKDCTPRETCSDIEKRECREV
>TRINITY_DN15584_c0_g1_i1.p1   type:complete   len:275   gc:universal
TRINITY_DN15584_c0_g1_i1:874-50(-)
MADSGSAGADRGGRGGFGRGGRGGRGRGRGRGRGRGKPEDKEWTPVTKLGRLVKDLKIKTLE
QIYLYSLPIKEFEIIDFFIGPSLKDEVLKIMPVQKQTRAGQRTRFKAFVAIGDYGGHVGLGVKCSKEV
ATAIRGAIIQAKLSIIPVRRGYWGNKIGKPHTVPCKVTGKCGSVTVRLIPAPRGTGIVAAGVSKKLL
QMAGIDDCYTSACGTTATVGNFAMATYMAIARTYSYLTPDMWAENQFQKTPYQEFTDYLAKNH
NVGGKPVAPATATA*
>TRINITY_DN2126_c0_g1_i1.p1 type:complete len:114 gc:universal TRINITY_DN2126_c0_g1_i1:55-
396(+)
MAPVKKKTAESINSRLALVMKSGKYTLGYRSTLKTLRQGKAKLVIISSNTPQLRKSEIEYYAMLAKT
GVHHYTGNNIELGTACGKYFRVSVLSITDPGDSDIIRSMPSEQETK*
>TRINITY_DN1566_c0_g1_i1.p1   type:complete   len:4626   gc:universal
TRINITY_DN1566_c0_g1_i1:42-13919(+)
MDTEEVPGEPPPTVLAATEDVINYVKNITCFIFDESQPCLPLDKILKEEQTKDYFRKFISDVQTKTIL
LYRINQLTDDVDGDHDQGVSQPSYGIKLNVQYVPHKESSIAFIKRGMLLESDKKINAQLHVLILD
NSSPFDTLHSYISNAVSPFFKSYVKTSGKSEREGDKMVPSVEKKIAELEMGLLHLQQNIDIPEISLQI
HPVVQSIIQKAEIERRKISPDDYAEKAEDSSFLNALQNGVNRWIREIQKVTKLERDPSSGNALQEIS
FWLNLEKALHRIEEKQQSPEVKLTLDILKYAKRFHAIVSFTNDTGLKQGLQTVASYNPLMKDFPLE
QLLSATELERIKDALIAIFSHLRKIKLSQYPIQRCLRLIEAISKDLMSQMLKVLGTRKFMLMNYELFE
KVMTSAFNVLNCWDDEYERLQQILRDMAKKKKDDSLKTMWRVNPSHKKLQSRLNNLRTFRKQ
HEQLRAVILRVLRPSKVEAKSSNEENAASSGSIEISDDNAVKEVDLAYENFKEIDPLDVSKEGTEAW
ETALKRYGERIDRVETRITSTLRDQLGTAKNANEMFRIFSRFNALFVRPRIRGAIREYQKHLIGLVKE
DIEALHDKFKVQYSHSKASKMSRVRDLPPVSGSIIWAKEIERQLHAYLRRVEDVLGKDWENHIEG
QGLKADGDSFRQKLNTQEIFDDWSQQVQKKPLLVVGRIFSIETLKTKGSNKATRKLKVNFTKEVIT
LAKEVRNLKNLSFRVPLAIVRQANDANQYYPLAISLIESVRTYEVTNDKVFEKESIIPLVAGIRKDIQ
SLLAEGMHLEWSYKLMPYVMRLAEAVTGYQEKVDELLTSIQKIDIEVQSLATCGFKHEAFQEILI
RIQKLVDELNLHSYSNLNSWVKTLDEQVEAKLAHRLQAGIKEWTRVLRTGNENVDDKDLAIHSP
GGLPDIKPLRVEFFIRNQVIEMHPPFEKCIEHLYNELAVYCSTITSLTKIQSQRYQVGLDRDNAEETY
HNLLTKLPDPNGPNPITVYGEMESMLEDCRKYCEGWTGFQALWDAEMSNLAPRMKTLEDWMT
ILNQIKMSRSHFDTTETMKEYGPLIVDFNAIQGKVNLKYDSLQKAIVQNFGGKLGDEVNDFFTNV

TKARTDLEQQSLDVATTAEAVTFITYVQGLKRKMKTWEQNVEVFREGQKVLERQRYQFPSNWLY
SDNVDGEWSAFNDILKRKDGAIQTQVAILQQKIVAEDQAVEERTFNLLADWDKGKPVSGNTKPD
SAIQTLQIFEGRLTRLKEDRDNLQKAKEALELIEPGTVPPSDERVQVAIEELSDFKSVWGELEKIWA
QVDDLKEQPWVSIQPRKLRQSLDSIANGMKILPAHMRQYAAFDYVQKIIKGYLKANMLVVELKS
EALKERHWKQLMRKLSVKWNLSDLTLGQIWDCNLQKNEVVIRDVINIAQGEMALEEFLKQVRE
SWQAYELELINYQNRCKLIRGWDELFDKVREHINSVSAMKLSPYYKVFEEDSKQWEDKLNRILNL
FDVWIDVQRRWVYLDGIFSGSGDIQHLLPIETQRFGSISTEFLTLMRKVAKAPLVLDVLNIQGVQRS
LERLADLLGKIQKALGEYLERERASFPRFYFVGDEDLLEIIGNSKNVGRLQKHFKKMFAGVHTIIL
NEDSTLVTGICSKEGEEVIFNKAVSLIEFPKINEWLTLVEEQMRLTLATLLTLSAKEIKSFTGDSIDPK
LYMEWVDKYQSQLVVLSAQIVVWSENCEAALQTCYNGDMSSLEKVLSIVEATLTVLADSVLQEQP
QVRRIKLEHLITELVHQRDVTRTLVRSKVQGTKSFAWLSQMRFYFDPKQRDVLQQLSIHMANAKF
NYGFEYLGIQEKLVQTPLTDRCYLTLTQAIERRMGGSPFGPAGTGKTESVKALGNQLGRFVLFNC
DEKFDFQAMGRIFVGLCQVGAWGCFDEFNRLEERMLSAVSQQIQTIQVALKEGPKEIGKPIQIELI
GKDVKVSEDMAIFITMNPTYAGRSNLPDNLKKLFRSIAMTKPDMNLIAEVMLYSQGFRTAEVLAG
KVVPFFKLCFEQLSAQSHYDFGLRALKSVLVSSGNVKRDKILSIKQKMQAQGVVADVGKITETLN
EQEILIQSVMETMVPKLIAEDIPLLHSLLADVFPGIKYVNAEMTALRNELKKVCNEMHLVYGENL
ESGAHWIEKVLQVYQISCISHGLMVVGPSGSGKSTAWRTLLKALGKLEGNEGVCHVIDPKAISKD
QLYGVMDPNTREWTDGLFTHILRKIVDNVRGELSKRQWIVFDGDVDPEWVENLNSVLDNNKLL
TLPNGERLSIPPNVRIIFEVQDLKYATLATVSRCGMVWFSDDVVSPEMIIENYIKKLRNVLLEESEED
IRSKQSKSVTDSKDELVSPTLQVQRDFSDILTPHLASNGLVLKTLEYSYSKDHIMDFTRMRALNSLF
SLLNQGVRNILQYNQQHHDFPMSQDTIEAYTPKYLVHSLLWCMSGDGKLISRLDISNYIRNITTIPL
PSPVTSLIIDFEVNMQGDWVPWSNKVPQIEIETHKVASPDVVVPTLDTVRHESLLYTWLADHKPL
VLCGPPGSGKTMTLFAALRALPDMEVVGLNFSSATTPELLLKTFDHYCEYRRTPGGLVLSPVQIGK
WLILFCDEINLPDIDAYGTQRVISFLRQLVEHNGFYRPSDLQWVSLERIQFVGACNPPTDPGRKPLS
HRFLRHLPVIYVDYPGPSSLTQIYGTFNRAMLRLVPSLRSFSQPLTDAMVEFYTKSQERFTQEMQP
HYIYSPREMTRWVRGVLEAIRPLDNLSPDGLVRLWAHEALRLFHDRLITDEERRWTNTNIDLVAQ
KHFPNVDLISLKRPILYSNWLSKDYLPVDREELRDFTRARLKVFYEEELDVPLVLFDEVLDHVLRID
RIFRQPQGHLLLIGVSGSGKTTLSRFVAWMNGLSVVQVKVHRKYTGDDFDEDLRIVLRRSGCRNE
KIAFIMDESNFLDSSFLERMNTLLANGEVPGLFEGDEYTTLMTQCKEGSQRAGLMLDSGEELYKW
FTQQVMNNLHVVLTMNPSAEGLKSRAATSPALFNRCVVNWFGDWSTGALYQVGQSFTNKIDLE
RSTYKAPDYLPVVFENLPMPPTHRDVIVNTMVFHQTMHKANEQVTARGGRTVAITPRSYLDFIS
QYMKLFNEKRSDLEEQQLHLNVGLQKIRDTVTQVEELQKSLSMKSQELESKNELANKKLKQMLQ
GQQEAEKKRITSKQIQDDLKKQTEEINKKKSQVLGELDQVEPALLDAKAAVKSIRKENLDELRRL
GNPPTAIKLALESICLLLGTPSVEWKEIRVLVSKTTFIPSIVNFKTDDISIETRKQMMKYLNHSDYNF
EKMNKASVACGPLVKWAIAQVSYAEMLQKVDPLRRELQKNEDEMMSNQSKLDSVGEMISELEK
SIAKYKEEYALLISEAQSIKADLAAVEAKVSRSTALLRSLSSERQRWENTSDGFQNQMDTIAGDVLL
SAAFLSYGGYFDQQMRSRLWGTWSEQMEQSKIKFRSDLARTEYLSTADERLHWQSNSLPADDLC
TENAVMLSRYIRYPLIIDPSGQATEFIMKEYSGKKITKTSFLDDAFRKNLESSLRFGNPLLVQDVESY
DPILNTVLNKEVRKTGGRVLITLGDQDIDLSPAFTIFLSTRDPTVEFPPDVCSRVTFVNFTVTRSSLQ
SQCLNQVLRAERPEVDTKRSDLLKLQGEFHLRLRHLEKELLQALNDSKGSILNDDKVITTLETLKT
EAADIMKKVEETDTVMSEVEAVSEQYRTLAAACSSIFFTLEEANLIMFLYQYSLKFFLEIFQSILFNN
PLLKDKRDPLVRLGILIESLFQVVYNRVARGMVHNDRVSFATLLARIRLKGKSENSYDLEFDHLLK
GKEIVVQVSDVKLTGLSSDQKMALLRLSKLNPFKELSRYIMDNSMGFQEWINSSNATLNVPRCW
NIKDSLTSSGEVLYECLVVQAFRPDNLHAMLRKYVLAVMGEKFLHTAEQELDMVNIVENEIKAET
PLLLCSAPGYDVSGRVDDLVAITNKQITSIAIGSAEGFSEAEKAINASVKSGRWVLLKNVHLATQW
LISLEKKLHTLQPHPNFRLFMTMEINPKVPVNLLRAARIFVYEPPPGLKANLLRTFSTIPASRMSEA
PGERSRLYFLLAWFNAIVQERLRYAPLGWSKIYEFSESDLRVGYDMLDIWIANVSQGRANVSPDKL
PWDAFRKLIGDSIYGGRIDNFDQRLLQSFIDRLFTAKSFDSDFSLVTSVDGKQSENIVIPDGMRRE
QFVQWCEKLPDYQSPSWLGLPNNAEKVILTTLGERTCVKLLKMSVNTEGSELAYSADSHLKESEV
TGDIRPLWMKSLQQSVRNWLNILPKRIDPIKRTKENIKDPMFRFFEREVNLGVKLLNDILHDLNEI
LEVCEGNRKQTNDLRMLVDTLVKGVIPRSWNRYATPKGLTVIQWIVDLGERMKQLQNIARGTNA
GGSKELKSFKVWLGGLFIPEAYLTATRQYVAQSNQWSLEELYLNVTIADELNPQLKLDDCSFVVIG

LKLQGATCRNNQLSPVDTITTDLMDICLCWTKIDPRKPPTLGANDVTLPVYLNQTRCELLFTVDM
STTGAVPPRSFYERGVGFVVSALTG*

>TRINITY_DN189323_c0_g1_i1.p1   type:5prime_partial   len:156   gc:universal
TRINITY_DN189323_c0_g1_i1:2-469(+)

KREVWRVKYTLAKIRKAARELLTLEEKDAKRLFEGNALLRRLVRIGVLDENRMKLDYVLGLRIED
FLERRLQTQVFKLGLAKSIHHARVLIRQRHIRVRKQLVNVPSFIVRLDSQKHIDFALNSPYGGGRP
GRVKRKNLKKKQGGGSGGQEEDED*

>TRINITY_DN7659_c0_g1_i2.p1 type:complete len:359 gc:universal TRINITY_DN7659_c0_g1_i2:82-
1158(+)

MASAATDNRKVALITGVTGQDGSYLAEFLLDKGYEVHGIIRRSSSFNTGRIQHLYKDRTAHLEGN
LHLHYGDLTDSSCLLHVVSKAQPTEIYNLGAQSHVKVSFDLAEYTADVDAMGTLRLLEAVKICGL
MHKVKFYQASTSELYGKVHEIPQTETTPFHPRSPYGAAKLYAYWIVQNYRESYNLFGCNGILFNH
ESPRRGETFVTRKITRAVAKIHLGLQEELVLGNIDSVRDWGHARDYVEAMWLMLQQEQPETYVIA
TGETHTVREFVEKSFGLIDVKIRWEGTGENEIGYDAASNKVRVRISSKYYRPAEVEYLHGNPAKAE
KELGWKRKVSFDELVKEMIDSDIALMKKDPEA*

>TRINITY_DN3036_c0_g1_i3.p1   type:internal   len:548   gc:universal
TRINITY_DN3036_c0_g1_i3:1643-3(-)

AFAGAARASPARQGSVARRALDQSSRYADLSLTEEDLIRNGKHVLVAYIMKPKAGYDYLATAAHF
AAESSTGTNVNVCTTDDFTKSVDALVYYIDPEEEEMKIAYPNLLFDRNIIDGRAMMCSFLTLTIGN
NQGMGDVEYGKIYDFFLPPEYLRLFDGPSCNVIDMWRILGRGTSNGGLVVGTIIKPKLGLQPKPFG
EACYAFWQGGDFIKNDEPQGNQVFCQMNECIPEVVKAMRAAVKETGVMKLFSANITADDPVE
MISRGKYVLSQFGPLSENCAFLVDGYVAGGTAITVARRNFPKQFLHYHRAGHGAVTSPQTQRGYT
AFVHTKISRVIGASGIHVGTMSFGKMEGDASDKNIAYMLQGDVADGPYYQQDWQGMKETTPIIS
GGMNALRLPAFFENLGHSNVILTAGGGAFGHKDGPKQGATSCRQGEEAWKLWKAGTYGDITLS
DGVIEYAKTHEEIKGAFLTFQKDADQIYPGWKEQLGYTGESSVQAASFDWKRKAGAAAFAGAAR
SPLAKQSSVARRALDQSSRYADLSLTEEDLIR

>TRINITY_DN6920_c0_g1_i3.p1   type:5prime_partial   len:411   gc:universal
TRINITY_DN6920_c0_g1_i3:2124-892(-)

CKRHQGKMSHRKFSAPRHGSLGFLPRKRCKRHQGKIKSFPKDDAAQPCHLTGFIGFKAGMTHIV
REVDRVGSKTHKKEVVEAVTIVETPPVVVVGIVGYVETPRGLRQLTTVWAEHLNEECLRRFYKNW
YKSQRKAFTKASKKWSDDDGKKSIERDLEKMKKYCTVIRVLVHTQQKLIKLKQKRAHIMELQIN
GGTVADKVDWAKKSLESKLSVSTVFGQDEMIDVIGITKGKGFRGVTFRWGTKKLPRKTHKGLRK
VACIGAWHPARVGFSIPRAGQCGYHHRVERNKKIYRIGRGIHTKDNKVIKNNAATDYDITNKTIT
PMGGFPHYGEVNEDFIMLKGCVPGPKKRVLTLRKSLLAQTSRKALEKITLKFIDTSSKFGHGRFQH
DQEKKNFMGLLKKDKERQAVEA*

>TRINITY_DN262_c0_g1_i1.p1 type:complete len:1033 gc:universal TRINITY_DN262_c0_g1_i1:111-
3209(+)

MADPSSLETKEKDGSYRVATKSGGKDKGKKSKKAAKKVNMDDLKKELEMTEHSCELETLVSQLE
TSLTQGLTKSIAARNLERDGPNALTPPKQTPEWVKFCKQLFGGFAMLLWVGAILCFFAYIIRSIREE
EPGMDELYLGIVLTVVVIITGCFSYYQESKSSKIMESFKKMVPQEAVVMRDGEKLNLNATECVVGD
LVFVKFGDRIPADLRIIESKGFKVDNSSLTGESEPQSRNSECSSDNPLETRNLAFFSTNAVEGTATGIV
VKTGDNTVMGRIANLASGLGSGKTPIALEIEHFIHIVTGVAVFLGVSFLIISLAMNYHWLESIIFLIGI
IVANVPEGLLATVTVCLTLTAKKMASKNCLVKHLEAVETLGSTSVICSDKTGTLTQNRMTVAHM
WFDNMVVEADTTEDQSGQAHDKGSTTWKALAKIGALCNRAEFRPNQEEEPILKRECNGDASET
AILKFVELSVGSVEDIRSKNKKIVEIPFNSTNKYQVSIHEQEDPDDPRYLLVMKGAPERILDRCSTIL
HEGVEKPLDEEWKENFNKAYVDLGGLGERVLGFCHYYLPADDFPKGFAFETEDPQNFPLEKLCF
VGLMSMIDPPRAAVPDAVSKCRHAGIKVIMVTGDHPITAKAIAKGVGIISEGNETVEDIAQRLNIP
KEEVNERDANAAVVHGSHLKDLPQEKLDDILKYHQEIVFARTSPQQKLIIVEGCQRMGAIVAVTG
DGVNDSPALKKADIGVAMGIAGSDVSKQAADMILLDDNFASIVTGVEEGRLIFDNLKKSIAYTLTS
NIPEISPFLMFILLAIPLPLGTVTILCIDLGTDLVPAISLAYEKAETDIMKRKPRDPVRDKLVNERLISL
AYGQIGMIQATAGFFTYFVIMAENGFLPGYLIGLRNDWDDKKNNAVMDSYGSEWTYNQRKNLE

LTCHTAFFTTIVVVQWADVIISKTRRLSLFQQGMTNWMLNFGIFFETALAAFLQYTPGLNTGLRLR
PMNFPWWFVGVPFSLLIFVYDELRRFLLRRNPGGWVEQETYY*
>TRINITY_DN2963_c0_g1_i1.p1   type:complete   len:116   gc:universal
TRINITY_DN2963_c0_g1_i1:1072-725(-)
MSATGNLVTVLRKLYDEYNDKTPSRLKIVDGFLLYVMLTGIFQFLYCCLVGTFPFNSFLSGFISCVGT
FILGVCLRVQTNPRNRTEFKGISPERAFADFIFANVVLHLVVMNFIG*
>TRINITY_DN36_c0_g1_i19.p1 type:complete len:223 gc:universal TRINITY_DN36_c0_g1_i19:826-
158(-)
MIKLAIIVTVIAACVFESSAARCYVGYSAKGLPLAIGVRDVECGKGFDYCTTIKYRLGGIEVTQGNC
ARKYGQAMCQFMRNPHKAMTDCEETICQGDSCNKDVYDAEQAERKRVGPYKNTLKCTTGLIT
KFPAIPFYTADVPNAIDECFPGTTECVTVTYDYLFKFETQIATKDNVFKLPCVQKMCNRHNIDNC
NKWCDILSIHQSMENCVAKCCKGDNCNA*
>TRINITY_DN3036_c0_g1_i3.p2   type:3prime_partial   len:342   gc:universal
TRINITY_DN3036_c0_g1_i3:621-1643(+)
MDPAGADDPRDLRVYESRVSALRLGARHGAVPGTVVMQELLREVPPRHSDRRAAGDVAVHEEG
AILRQRTKLRQHILPAGNHLDRVVRGDVRRKQLHHASLLDGGPHRLHHFWDAFVHLTEDLIAL
RLIVLDEVSTLPERVARLPERLRLQAELRLDDGADHQAAIGRAAAQDAPHVDDVARRAVEQAQV
LRRQEEVVDLAILDVAHALVVADRQRQEAAHHGAAINDVAVEQQVRVRDLHLLFLRVDVVHQR
VDAFGEVIRRADIHVRARGRLGREVRRGGEIVVPGLRFHDVRNEDMLPVPDEVLLRQGQIGVAA
GLIQSAAGHRALPRRRRASRARKS
>TRINITY_DN1386_c0_g1_i1.p1   type:complete   len:596   gc:universal
TRINITY_DN1386_c0_g1_i1:2419-632(-)
MEYIEVKSFIVALVFVFSILGTAQSDLVINNVERTLDLSTQTAKYTTKIKFHNPGKKVEKSFLLALEK
DQEKHLSYLEILDKQDDNSLEYAAENVEGQSGRFFKVSFSKPLKENDDVTLHIETVFTHVLTPFPA
KIGQTEKQLVLYKGNTVFYSPYEIKEQSTTVKLASSAIESYSRLKPSRSSENTITYGPYKNSKPYRLHE
MKIHFENNSPFLVVNEMTRWIEISHWGNIAVEETYHMTHEGALLKGHFSRYDYQRSPTHSVIKSF
KTVLPAAARDVYYRDEIGNISTSNMLVNDDSVEIELRPRFPLFGGWQTRYMLGYNVPAYQYLYNK
GDNYILKMRLIDHVFDEFVIDDLNVKIILPEGSTNIEVVKPYELEEGKRDIHKTYLDTSGRTVIVLSK
KNVVENHIQDIQVHYTFKKLQLLQEPVICVAVFYILFLSVIILVRLDFSITKDAAKESRMKVASLLEE
LLSSCGRRGSLYYSYDSAIDKLKQNRNQNDFAVSLKKLNQDYNTLTQSINELCSLLIKEDPEIGDKV
NDLQKKENERKVIVDQLVTLATRVVTNKIGRQQYIESEKNSMAKREKLGEDIDNVLATL
>TRINITY_DN286_c0_g1_i2.p1   type:3prime_partial   len:106   gc:universal
TRINITY_DN286_c0_g1_i2:40-354(+)
MIKVAIITIAIVACVLESTAAVRCYVGYSAADLPLAIGVRNIECGEEFNHCTTVKYRIGGITVTQGN
CAKRYGQAMCQFMRNPHKAMTECEESLCQGDNCNTAVN
>TRINITY_DN982_c0_g1_i1.p1   type:5prime_partial   len:6412   gc:universal
TRINITY_DN982_c0_g1_i1:19377-142(-)
KLDFETKQSHTLTIKAVDRGNPSQDSLNKATVIVVVQDFNDNCPLFSESIYNASVSESTAIGTTVLR
VSVTDKDVGNVNNEITCSIDEPLAKGFFSVNKINNNQFSVVLIKNLDYETHRGYRFVIKAKDNGE
VPCQLTTNMVVEVQDEPDVITNFKPFNYVISIPESTLIGTKLLELKVDSESSSITYTLQAKNQPGDLD
KFMLNGQSGELVLKGTVDFEKKSEYEFTATLNDGVNNGGNTANIVVNILDINDNPPVFSQSTCYI
RRMPENQQVNTTVTSVLATDSDQGINSNISYSLIKDSSCNNFEINEITGAISLTSSLNYEVRKEHYCII
KATDNGSPVLSSYSCLKVIVENVNDNSPVFLPKELEITVLESKPVNSFVIRVFATDKDEGNSITYSIV
GGNTQNAFAITPLTGHIILNQKLDYEIVKNYILEIQATDDGTPRRSSNLNAKVMVKVLEVNDNKP
KFNQQRYLRTIPEDTNIGSTIISVTATDDDAGLLTSKIQYIALENTNDFLIQPDTGDIVVSQNLDYER
QRTYQLVAVCSDSGTPPFTGRTLVDITITDVNDNAPILNPTLYNVLVSEKAPLGTSLIQVHAKDKDS
GINGGLKYQIVSGNDLNKFVINNSTGVITLQETLDREKYSSLYNLTVSVSDQATPSLNGNNAFVQI
RVLDVNDKQPVFVKSEYIFEISENQPLNSPIGLVQANDDDSTSPNNIIQYTIVPSKDSINFTMINNQI
LSNSVFDYEEQKSYEFEVQARDQSTGVNNEQLVGRTLVKVLIRDTNDNDPMIENQNIALNISDVT
LVGTLLFDIQATDKDNGENARLTYTISSGDTSTFRINENDGRFYLSKKLDFYNKNEYSLIVIVNDNG
SPQRNSVANVQINVYPIDQTLISFEPQCPIAFTIQENSLSSPMNIKAIDTGSYVSKTMRYMLKSNKSD
VSSMFQIVETNGVIIQNKAANYEERSRYDMTVCARNERGSEGCCPVTIYILDQNEQPFFDTDNDN

LDNGKYLVRVSETTPIGSVMFSVNTGDEDFGSLPNGQKTYSIKAKPGEEMLFLVDSYGRIITNTTLD
REKTPQYDFSVVVTDKGTPPRQAEAEVIVTVIDYNDQRPVFEIMSVRPVNENANNEVLGRVVAVD
IDSTSINNGIKYSIQPAGFLNISNTGTLTSVGSALDYEKNQKVTLYVTATDTGSPYLSATTSLQLDIINI
NDNKPYFLQNNYNLTVSEKTTVGTLVLTLFAEDDDLGEFGEIANYEIVSGNQEDRFSIDSNGRLTL
KNPLNWRNVKSYNLNIIARDKGLPSEQSQIPATVVINVADYSEEQPNFLQNLYVKFIPETTPIDTLV
LTVEATSGEPVYGPFKYTIVPKLPDTNNFQIFSNGEIKTINQFDYENQRNFTFDVQVEDEKNGKTN
RASVFIHITDVNDNIPQFTDLTRSNTQYNITEFTLPGSMITCLSATDRDHGKNAEIRFRGIGGDGNG
VFNVNLDGKVLLSQQIFYDKKNKYNLIVEAFDLGSPEQKAQLTLTIFLHKSYTSVITTDVDINEDVE
TQTRVTRVSSIDPFTRSSNNFTYYLVGKSTTFFEINAQTGEIFTKATLDRETRDRHVLTIQSRGPTTN
GVGELVVNVKDINDNPPIFDPQVYQVTVSESANIGLSIVSVTATDKDIGVNGEVTYSIEDGDQTIFSI
NPSTGSISLAGKLDFESKQSHTLTIKAVDRGNPPQDSVNKATVIVVVQDFNDNCPVFENSTYSLTIK
EPGELGKEYLKLGITDNDNGRNQLFTCSIDEPLAEKYFEMINDCRLRLIKELDYEEFTSFRFVVKAT
DQGDVSCTTTTNMIVNVGDRADVIPFFSPLTYNISIPESTTVGTIVVSLKVGSTFKGLLYSLFHKNTQ
DDLIKFGINKDTGEIFLKESVDREIQDKYEFTADVFDGSNNAVQRASVTINIIDVNDNAPFFNQPTC
YQRDLTESTAIGTFVVDVSAADNDKGRNQQVTYSLLPSPSCTSFSVDETSGRITTSQILDHEQQKLQ
HCLIKAKDNGTNSLSGYSCLTVNVVNVNDNKPAFIVNRFDVSVLETVPAGTLVASLVARDVDNQ
GLITYSISNGNLNNQFTIDSSGKLRTRFPLDYENTKSYNLTIQASDNNGKFSSPDDALVLITVLEVN
DNRPQFLQSYYKVSIPEDTATGASILNVTAIDLDHGELTKSLFYAALENTTQFTVNANTGVISVAEN
LDYEIEDHYELVVIVQDRGTPHLSNRALVDIQITDVNDNAPMFVTTVYNRELSEKALIGAPVVKL
NAMDADKSDKMTFTIDSVVQGAQGFFSINGDTIQLDKELDYEVPEQRTFVLSVSVKDSRDRDGA
NKANVFINVRDINDREPIFDLNMYEVTVSENNVISNPIIEVTARDSDSTPENNNLLYSLVDGEDAA
SFSLLNNGQSAIITSKISFDYEKKKSYRFLVRASDKVRENFTAFSTVFVTVQDTNDEAPVPEKDLIM
VNISESTRVLSTIAIVFANDKDQGINGQLAFQIINHSEDKFEINNKGVIRLKSTLDFFQQNFYNFTVL
VTDKGNPVRTSKPVTVLVYVYRTEIPGIIFEKNHYIFNINEKEIVSLVGTVNAIDEGTYVSRQIVYSIV
SGQNDIKDKFRAVNNNIIQDKEVNYKDQSEYNFVMKAINERGSIAFTHITINIMDVNEKPYFVGL
NNKGRYEFSMSEIISVPSYIYAVRAKDDDFGLNGEVDYEIISNFRFGNFSIDQYGRIQVLKDPDFEFT
RSYEFQVRAKDRGTPSLESNLVSVVITVLDYNDNHPIFNIQEPLEISIKELVNNTDVGTVTATDKDG
SGLNRIVKYVAIYPSDHLTVNRDNGQIRVIEPFDYEIAHKHEFVVVAQDQGTPYLNAYKVIKVEVL
NENDEFPEFTVIEYNITISELTPIGSPVLFVHAQDKDRGPSGQVTNYKIKYVPPSGGSGAGSPDKTFE
ITSDGQVVLKEKLEYKFQKYYQYRVTCTDNGSPPKNSINEAIIHLNIADASLEQPIFSVNPAVVEVY
ENITLNSNIVKVEVDSIEPIKGPFEYSIIASEDSQPFMIDNSTGQITNKESFDYEIKRKYVFLAEARDK
HNNRTQRAMVVIFILDINDNIPTIETIAPQTFVQNISDTTYPGSVVAKLYSRDADSGENAMVDFTIT
GGDGENVFAINPNGYVTLIGPLDVRVKTQYTINVKVSDRGIPTLSNNRALTFNIKKSKFIQNTVRF
DRHHYKSNCIEENQINLNIIQLNATNSNPVAGSTIIYSLDGTLEERQPFIVNSQTGEISLSQTLDYEIK
QEYDFVAVAVNNDGSRDVAVVTVCIKDLNDNSPIFEPQSYVVNVSESESVGYLVYKTTVMDADKT
DFNTTKSYDIIQGNVNDKFIIDSMGHIYIKSKIDYEALQVKHFDLRIRVNEGNLVGDMVLRVNILD
WNDVHPSFSTLNIYNFTIPEDKPVGEIIEILTANDGDATSPNNEVTYKLLTTEDDFILRRNDKGHGS
LIVNKQLDYSKQNRYEYVALAEDKGYLNLLGTAIVIINIQDVNNHPPEFDDSEYNTTVSEHAQIGT
RVLQIHAHDKDTGLGEQIFFIYGDPTETFTISSQGFIILNKQLDYETQRDYIFDVGARDGGNLVSLN
NVTVHIKVSEVNDNEPIFDLSTYRNSYAEDTPLGTTLFTVRATDKDFIGNSIIYSISGANDDTSYVSV
DQTTGDITLQRRMDYESKNYITFTVQAIDSNNRNKLKGSTHVIIDVTDVNDNNPKFVFGSDLVYN
VTVVENINVGTLVVVVDSQDADSGLNGQTRYHIVSGNNENKFFINELNGQINLINKLDALQTNK
YVLTVMAKDLGNPSRSTNVTVTINVLRYFESTPMFLPSYAEVIYPENLALGSSIYELNVTKTLPGSP
MKLSFHSSSKFPEFTLQGNKIILSKEFDYEIKNRYELIIIATDEENDKAFAQVIVRVQNLNDNIPYFTQ
NAYFGVVSELAFVGHSVLTITAKDDDKDFTELFYSIATQVPDNAFKLQDNIVVVNGKLIRNKVYEF
EVEAFDNTFTSKRATVSITVTPENLPSFVNATYIVTLQENYPISTNFLNISAGTFSGITYVITSMKAKD
MFNVDANGQISLTKSLDYEKQRQHVFPVTASVTSPITQVRVASVIVNVLNENDNAPVFVNGPYER
NITEGHLVGTMVIRVDGHDDDSDKLTYSIVSGDDGKFSINSEGVISLISTLNFDLKNKYVLNVRVSD
GKFVTDTIVTINITPIVKFPPMFNQTLYLLSVKENTLVGTSILQVSTVNVIPPSSFSINEQSGRDFFTID
ANGVIRTNNALDYEAKRQHIFTLKVQDLRSMGHATVVVNIVNDDDTCPILTPATQTVQITEPVAP
GTIVAAVQAKDIDSKSLNFTITGGNGLFRIDQHGGIKTINEVDISTSTEYELTVTVDDGTCTKSVQV
DVNVNPLAPCPDCNIYPFTQTIYEFSINENTVPASPIITVTTGQSLQRNFSIEDPAALEYVTINRLTGE

ISVIKAFDYEATKHLSFNVMAKTQTTKNRNPFYVITSVSRVRITVRDLNDNCPSIESPMYYEVSHSS
PIVQDTVVTRILVEDPDTLKDHTYSISDNNFKIDSMGHIRTVQNIESFTAQFYNLTVTVSDGQCSKT
SNVGVNLAVNPTPMTYQFTSNGVYSKSVREDHNLQDVILSVALNQNYPRVFSIVESDANDQFVID
SNSGALRLKTSLNYELKKRYDFTVMADIHGGVYKSYASVHIIVLDVNDECPIFPVIGYNQRVSGTP
VIGTIVEIIEANDADNATLEYSIVSGNEDGHFSLDNSGVVRVVKPFASSFSKTYGLSVRATDNKCSA
DVPLTVQVSTCAYGEDYQFEESEYVYYLDENRNLGIVSNIKLKSTRAAFLTLSQNTHFTIDQNGDF
RLIQTLNYETKKEYHLTLTANFTQDNVVTRIPIKVFVRDINDNCPAFSEELYAVQHTEPLREGLLIA
KLSVIDDDTVQNFTYNIVSGDKRFSINENGEVVMNARLVTDTTLLSTTYKLEVSVNDGKCAKNTK
VDVFVYKTVVNSFLFPQPFYKFDISENQAIPFTIDRFVNVGGHEAVYGFLVSTDFFQIDPKTAQLQL
VKKLDFEVEKTHYVLISATYDDGTQTYTVVAIHVGDENDNAPQIFAHPPITRLVQNTPHNSIVTKI
EVEDPDTSKEFTFKITNGNPLQNNDPDKALFRIESNGMIKTTRCISEDEIGNYVLTISVDDQVNTPTI
FSNMQVQLKTTDDRSYVTNCGLGCPANDGPFSRYQFEQSLFIVNVTETAANPTVLKRLTRPFVEK
TTYTIGAGADGKFSIDQNGTLSLTGSLDYETKPVYYFIVSAVIPSQVVGRFITSKTAYLVMVNDVDD
SKPVIEGNGGTLAVSETSEIGQIVGTVRVKDSDSSSPLTYNVVNGSQYFNIDSAGNIVIKDTLNAAG
SPYTVTYTVSDGINPPVNGEFVVSISETNNNVPKFTQNIYEVSLSEDTATDTIAVTILANDGDTNDKI
AYSFLQSEGPFVINRDSGEIKLIGPLDYEAQKSYNMVVQATDSGGFANIAFVQIAVGDVNDQVPVI
TPQTTPTQIHESTLVNSVVYRVIASDGDGNERLTYALANSNDFFTINSATGEITIKENLAKSNVSSHT
LSIVVTDSSGKTSTQDVALNIRRSGTSQGCVKITTSQGQSSSPVINLPENTASGTTVFKLVAGDASVF
SNMRFTLNREANGVFAVTEQGELQLVAPLDYETKQFYSIIITAEDVTRGVSSQYNLFVRISDVNEFT
PVLETIAPVAVSELANIGDVIAQAKANDQDGDSQVTYSLGEFGNNDNKFTIDAATGNIILNKRLG
SGAPHVVEVCASDGSIKKCQNVTFIVADTNDNPPSFQDLTGVGSIDLTNTSSYVVYKPIVTDSDQT
GTLSFSLKDPAPSQFSINSTTGEVKANKDIAKGTYTFGVCASDGRYTSCQSVTVVASDRSQSITPSFN
QDQVGAIVDISASSGKQIIQVMASTLDKAKIEYELKNEADRNIFEINKDSGLITLKNRTALTLGTIYT
IPVKASRADDPLNFDEINIVISVGNQQLDSGSFIEQVLDTQHLVNFSLSTFDISKVSYYIILGQQVGG
DSKDDEKLPVSWYYATFGDESYRHRFYYIAKLDGSKFRNTGGSRKRRSIQDKDSKSFTYLVGEENG
CSKNTSMAAICNGPLKTGTEYRYKLRAYYDDGELRGIPVDQKPTEVKRTQAPQAGKSIDEYREQD
SYVITFWIIGLVIFGLLFWFSVLVIAILLCYKRRYEVTQAYGYSVQTRDKIDGPPTEYSNTVYRFQNPS
YPDNDTVKMKKVDASESRTKTEVQTTSMVVLDDYEQEQPQPDIPVQDYDAIEYETRSAQIKFHEE
SPEWESMDIQLRIDPTGNQDPVITRKSDSGSKDSDSDASKKYENTEYIEEKEDFVNEKEDSLTRL
>TRINITY_DN64_c0_g1_i1.p1 type:complete len:468 gc:universal TRINITY_DN64_c0_g1_i1:1555-
152(-)
MPPKEAEKIHINIVVIGHVDSGKSTSTGHLIYKCGGIDKRAIEKFEKEAQEMGKGSFKYAWVLDKL
KAERERGITIDIALWKFKTGKYYVTIIDAPGHRDFIKNMITGTSQADCAVLIVASSTGEFEAGISKNG
QTREHALLAYTLGVKQLIVGVNKIDNTEPPYSEKRFDEIVKEVKTYVKKVGYDPKTVAFVPISGWH
GDNMLEASKNMGWYKGWTTERKETKTTTGKTLLEALDNILPPKRPTDRPLRLPLQDVYKIGGIG
TVPVGRVETGIIKPGMVVTFAPSNITTEVKSVEMHHEALLEAVPGDNVGFNIKNVSVKDIKRGNV
ASDSKNDPAKEAKSFYAQVIILNHPGEIHSGYQPVLDCHTAHVACKFSEIKQKIDRRSGKVLEEMP
KMVKSGDAAMIDLTPSKPMCVEAFSEYAPLGRFAVRDMRQTVAVGVIKSVTKSDGSGGKMTKSA
QKATGKKK*
>TRINITY_DN1614_c0_g1_i1.p1 type:complete len:218 gc:universal TRINITY_DN1614_c0_g1_i1:56-
709(+)
MHKTKICIWLVVRYRSNPFRGYNRRPDLKSAGAKMTKYSTEPENPSKSCKARGSYLRVHFKNTHE
TAQAIKKMHIRKAYRYLKDVVDMKQIIPFRRFNGGVGRKAQAKAHGCSQGRWPKKSAQFLLQL
LKNAESNADLKGLDVDSLVIDHIQVNRAPYMRRRTYRAHGRINPYMSSPCHIEMILAEKEQVVPR
AEEEVEVKKVSKKKLAREKLKSRE*
>TRINITY_DN477_c0_g1_i9.p1 type:complete len:306 gc:universal TRINITY_DN477_c0_g1_i9:1840-
923(-)
MTRQCLGATLNENCGNAALVQFEVCNFQVPCPGLLTNWGPYTQCSATCQKDANSMPTQSRQR
FCTGGSFGGNCGGVQLLQTIGCNQLIICPVYGYWLQWSAFGECSKTCDQGTHVRYRNCTKSIPA
NAGNNCTGPAQEVKPCQVKPCPVTCPLTKKCDCRNMNYLAAAPGISQTVTNDVMGVAAFLDY
WTLDILKQICEGCRMTQLDQSKATVDSQILRTQAVLDRLNIEKRVYRDMITCNENPYITDDLFKVY
NDIWDRIVTTDGVMIELKASKMRFDTAITACRSYDWYHDLFGRFFQIKKSS*

>TRINITY_DN5633_c0_g1_i1.p1 type:complete len:848 gc:universal
TRINITY_DN5633_c0_g1_i1:2881-338(-)

MRRSNFLTIGIIAFFLIFSYVSADETSDEEVEPPKVDDDVGKSRDASKTDDEVVQREEEAINIDGLSV
AEMKQMRESAEKHAFQAEVSRMMKLIINSLYKNKEIFLRELISNSSDALDKIRFLSLTDTEALAAT
DELSVKIKADKENNVLHITDTGIGMTKDDLIKQLGTIAKSGTSEFFQKIQDAGTTDQASDLIGQFG
VGFYSAFLVADRVVVTSKNNDDKQHIWESDSVEFSISEDPRGDTLLRGTQISLYLKEEASDFLEPNT
LKDLIKKYSQFINFNIYLWSSKTEEVEEPIEEEPEKKEDEKKDDDKKEDADDKKDEEKKDDDEDD
AKVEEDKEEEKPKTKKVEKTVWDWELMNSSKPIWLRKPKEVTDDEYNEFYKAISKESDGPLTKT
HFVAEGEVTFKSVLFVPKNSPSDMFQDYGKRRESIKLYVRRVFITDDFQDMMPKYLSFIKGIVDSD
DLPLNVSREQLQQHKLLKVIKKKLVRKALDMIKKIPDEDYIEKFWKEFSTNIKLGVMEDHSNRTR
LAKLLRFRSSNDPEKLTSLTDYVERMKEKQETIFFMAGASLDEVKNSPFVERLLKKGYEVLYLIEPV
DEYCIQSLPEFDGKKFQNVAKEGLKIGNEAKEKARVDELEKEYEPLLKWLKEDALKDLIEKAAVSS
RLTESPCALVANSYGWSGNMERIMNSQAYAKSKDAGANFYATQKKLLEINVYHPLIQELQKRVKT
DKEDQTAKDLARVLFETATMRSGYTVKDSSDFAGRIERMLRLSMGVDVDAKVELPEEDDEEKEEE
KADDEGEEVNADGEEEESKEDIPEIKVDSKTVEPVAEHPTNEDAVENEAPAEGKTEL*
>TRINITY_DN2472_c0_g1_i1.p1 type:complete len:344 gc:universal
TRINITY_DN2472_c0_g1_i1:311-1342(+)

MSSGEIESLRQEAENLRNQIKDAQKVAADTSFSSVAQNVDGINRIQLRTRRTLRGHLAKIYAMHW
ASDSRSLVSASQDGKLIVWDSYTTNKVHAIPLRSSWVMTCAYAQSGNYVACGGLDNICSIYSLKTR
EGNVRVSRELPGHTGYLSCCRFLDDSQILTSSGDTTCCLWDIETGQQLTQFVGHTGDVMSLSLCN
DSGRTFVSGACDASAKVWDIRDGMCRQTFIGHDSDINAVSYFPSGLSFGTGSDDATCRLFDIRSDQ
ELMCYSHDNIICGITSVAFSKSGRLLLAGYDDFNCNIWDTIKGDRSGVLAGHDNRVSCLGVTDDG
MAVGTGSWDSFLRIWN*
>TRINITY_DN332_c0_g1_i1.p1 type:complete len:246 gc:universal TRINITY_DN332_c0_g1_i1:940-
203(-)

MGALTYIFCLFLISSSFAKEEESCRTYAGGQVYPDERKSGVEHALHWSKAQISKPAPHWEGKAVV
NGEFKDLKLTDYKGKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFKKINTEVIAVSVDSVFTHLAWTNT
PRKEGGLGKMKIPLLADLTKQISKDYGVLLEDAGHTLRGLFIIDDKGVLRQITMNDLPVGRSVDE
TLRLVQAFQYTDKHGEVCPAGWKPGSDTIIPDPKEKLNYFNKQKEEI*
>TRINITY_DN1616_c0_g1_i3.p1 type:complete len:3855 gc:universal
TRINITY_DN1616_c0_g1_i3:218-11782(+)

MIIFLAFLAVAVGQEVLLPPYFDIAKGKNITATATCGEDYVAPKGSPGELFCTLADATGKFGIKGLK
CSHCVPGDYGDGDGKNARDHHIRNANDGSNRWWQSPPLSRGLQYRKINITMALGQSFHVAYVI
IKAANSPRPGVWALERSNDNGRTYTPWYYFAPTSSECKQYFGVDSYLPIVKDDTVICSTEYSKIPPF
KNGEIHISLINGRPGASNFSQSKTLQEWTTATNVRLRLLDIKTLLTDLLPLSLEDPTVTRRYYYSIKDI
TIGGRCMCNGFADECTPHTNIVGKYECNCQYNTEGPRCSRCKKGYVQKEWRQRTSTDKFECEKC
NCHGHSDECEYNEEINKRKLSLDVNGNYQGGGVCKNCQHNTLGINCEKCKPFFYQPANVPIDS
PNVCQPCNCDTQFSTGLCAEETGQCECKSNYVGRYCDQCNKGFHMFPVCKPCECDVNGSEDRE
CIPDQINGCKCKKGYAGRYCDECLPGYFGFPDCQPCACLTRYGAVNDNCERDNGQCSCKVGFK
GRRCEECAAGHYQFPFCKECGCDPEKTLDTVCDSGTGVCQCKSNFAGPKCESCSPGFYAHPSCFA
CGCSTAGSTSSVCDQNSGLCSCRPNYSGFKCDRCAEGYYGFPNCILCDCNPEGSRRVGICDRQDG
QCQCKPTYSGQKCDKCLPGFYGFPDCKRCNCPAGTKPGPGGRPGDCSTSNNGQCVCKDNVQ
GLECNECKPGFFNLTESNRKGCSTCGCNGAGTNNGVKSCSVEGTCKCKPLVKQEDKCTECRDGY
YGLKRTNVFGCLGCNCEVGGSSSSVCSKDNGQCPCKDNIVGKRCESVAANSFYPDLCHIKAEME
EGKTTDGDVVRYDYQKEIFPDFSWKGFVAVNDQQPSVVVSINVPKTSEYQVKFRYALNQIQPVTA
TVTAFKGDSKIVGSINFASTQKGSGFVASLATVQDNLVQEMYFPLTEGQWNIKLEAPHSNLVVDY
AVLFPKEYAQGGALKKKVQNACDVMTDEKFCNLYRYIDVADKKDIIVLEAENPVKMRQQKPPVL
FNDTAVLSKLDFQAMVVLSPSNSRQLNHLFNVAKPGKYVVMLQYYHDSDTAKYLDVYVRSQIAV
QNGRALLQSCRYTFGCRQAVLNRGDNGVFVFNIKSTKNHLLTLLSRYAVVAVDSVMLVPYESWH
LDYSTPTLYCVTKDSKCTNMNYDVPAESRLVQANPLEQDLSEKPRYLIDRSVEVRYVKPGVNIINIR
DVKAGNYLLVAHYYQPNFPSFESRAAVYSGRTSGLRARFDFKFCPNLNGCRSPIRRPDSNSNLYVF
EEGEARIRFDIPNGLDAWIEYILMIPEGTNVSSLYTPRVLDYSDDFKKECSIDLNVCTSSNLSSFCKDS

IFTITTDFNNGSFPCKCNMDGSKSSSCQEFGGKCPCKDNVIGRECSRCKVGYYGFPNCKPCNCSN
CDEETGVCTCPRGVIGENCDQCAPGTFGFDPIIGCQKCNCNEIGTGSANAECNVTSGQCPCKEN
YSSRKCSACKPGYFNYPACTKCDCLDAGISAEKCDVLTGKCICQNNVIGLKCNECADGYFKTNDI
KGKQLCAKCWCNGRSTKSCTEAELFRATPITASKGWTVSVDTLNVIENGNGRFTISDVNTLPEPV
YWVAPNQFLGNRGLSYGSHFKYNFQYSVKQPSQNTNGDVVTDAVIKGDGYTIKSMRSVIEKEND
GYSASILMKETEWMLEDGSTIDRELFLAILSDIDTLQILATHGKNTISSTIYDISLETAGENGTDRVYG
IEKCFCPKEYADLSCSKCSKGYTRQKDGSCGKCQCLGKSNICDPQNGKCINCSGNTMGDRCEKC
KPGFYGDKCKACECPFSNPENSFANTCAINVNTSSLVCQCNAGYKGVRCDQCSDGYYGNPLQG
VTCKKCSCNGNINASFTGNCDNTTGDCLKCLYNSDGNQCQECRDGYYGDAVVEKNCTDCQCSI
CGTTTAPCNKATGQCQCKKNVEGSKCNQCKPNTWNFDACNGCEDCNCAEASETQQCDLKTG
QCKCPPTVFGRRCGFCKLGYYNYSSEGCQKCQCPDGKPCDVNTGKCCTGVLNEDCKLCPVGHII
EDGECVECDRCVQRTLQRVNTLIHNVTILEKHIIPAGGLNYGALETLGNRFSNLSNKGDEHISNL
DTLKKAIGFGEYRNHSGNMDYVRMYLVRDFKSCSFIVNIKTPPTSSAPATTMVTNTPGPDPIRDHL
SNKKISDSQCPPSLARVIDEGEKNIKLVEKKVVVLEKDAYESTENATATKKRAEDLLAKLKDFMVD
FKDVLSFANSTLKGNVVINIDGNRSLAEAEEMLKEIKDRNFNSTINRSEREKSAAINATIIAEQLMK
QASELANKAYKFNDTFKDFVKALRNLKMESELALLDANNATNSINLAKAVDFQSIIDNAQKLHS
QNNVTVTQAMEILQNAKSAYENAKDVFNKFHNQTGPLSDLMEELRNYVRKLEFDLQTTSPIVDD
SVKHAKRLRDSADRLKELLQDTKKFADAALRAAKVYQNIVDAINDALDAARMANETAHEADK
KVQQAQQDAVESSITSKVVDTEANDLTEEVKKTLKVDISDMKMRLKELRELRKRIQGRIDNVKED
VKSFAKEKEVGEKAMNISTQADGVMKVANKGNEASQDTNEKVEKDGEKVETLKVDISDINKAIK
DLASNVTLVEDTIPKIRSNIDEVNVKHEQIEEFIKTNVTNNIGYLKYLISNAHDILDQMQLSMKFNS
TSEVVLDAPKSVADPTINNKISLTFKINQGNGFLFIIGDFSGNSSGFMSLHVQNHTVVFDYKLNTG
DVQSLTNPKFIETDVNYDVMVTRNFATAVLNVQKSGNASTLMTAYQNRSNISPVLSLGQDTNVY
VGYHPSTPNQRPNFDGCINQFRFDEELMGLWHWKSAKNVGGCVQDFRSIEGQYSFDGDGFVEF
DLVSPELSGFRKIELRFATLEENGLIFLGTDPPTSLPSDIMFDIPLSNQIIAFNALEIKDGYLVSTLDLG
NGVQRLVHTNAGKVNDGKPHLFEMKVLISSLLIKFKLDKKKITEIAISPDTDIRLRLKEAFIGGLPQ
RAWLPNSNISTKGFTGAIGDAKYRGGEFKLVKRFNNIRKGFILPKGYSASFPEEKSYLRLDACNLK
QNSLFGFSFQTFEKNGIIFHSEEGSGSSRSSIEIILIDGQVKVDVSVGSQKRTLQTSVARGFSDGLWHT
LSLYFEETLQEADIVLLYLAVDKAYITGTVPKVDLKGSMYFGSKPSGTESGFNGNIRQVYCNKNEIN
LASGDVFEGGVVGSLKLLPPLKLADFTVVPTTLPPLTTSITTSESTTTETVMTTSTTSISGTTLEPPKET
TTNMAKTTENPTVKITSSEPIIETTMESTTVAKTTSAITMEESTTTPTSITTSTLETTISTLEPGSIEGSTT
TAEPITTTAEAITTTATEPITTTEPITITQPITTVEVTTEPATTQESTTTPEPITTLETTTTPEPSTTPEPTTP
EELTTTAKPTTTIRVTTEPPKCQSNLEVYDEAYGFGMNEPSFIEFGVDGRKMLKSNQFEFLFYTAEN
DGMMISSEPSNLYDYEYVYMENGAISYAFNAGAGRVRVTSTKKYNDGKWHEVKISRSKESGTLTI
DGELIGTDSKSGKTAVNGIKKIVVGGSSVPYRNIPPKSQVGFKGGMRGFKLFNEALKPLKEIGITEA
YDELPIPEGVSFGPDGGYVALNFKSEYVVRTEYKLALDVRSVSSSGYIFFIGNYGADYLSLYIESDRK
VVAECNNGGGRFSVSIDVPTICNGEFHSILLEKKYKTLDLSVEGVQKSFTTTKGSTSADTGSNPPAF
GGFNGVGSRPKNLETFTGCITAVRIKDKAVDLTAPDVTIFGQVSNGCPSNIR*
>TRINITY_DN3078_c0_g1_i1.p1   type:complete   len:1109   gc:universal
TRINITY_DN3078_c0_g1_i1:3628-302(-)
MKMRIYLFLILFATVYCRVVQKGPNDIPEETKNEIKNQEPKIKFEPEKDKKYFLAKDTTCAHDVDK
HCKNIRRENNFAVFVCLQDVIHKDEDDVAEECHETLWHYKYNLTRDPNFDQAAFKVCENVINEI
QECNDSELLKSPGFVTNCLIENRHAVSEAKCKSFLQKMSAIVFEDYRLIKGFYDSCVEDVKTLKCG
TVAKPTDEEYQHDQTEVISCLEEQLDLVSEKCQAQLVKVATMQADDYHLDRPLFYACQEARERF
CPEVKSGDGRIYKCLVEHKTNEMMLEKCRKKIEIREKLTQKDIKVNELLWKSCKADFTKYNCPKD
GISEHGAASSLLLCLQGKVAEGLPVDQSCQAEMRTFAIELFENYKISPVIVSKCDVEINQFCHHLIG
KTDDGDMMDCLMTQAATNNESVSKKCYDAVSDVIKETGAGNNYKIDRALYLACEPVITTLCQG
KEDAMILGCLMDNAHNSKMPEKCAAQVFHLQYFLSRDFRLDASLYKDCKKDAEEICSANDFNA
ESESKVPDNFVIACLYRNALDRKVDDRKVSQTCAEHVFRVMHQRATNIHLMPELERPCMADLG
KHCIDKGDKEGEEIDCLQTNYEKLSAKCQNAIKVFTIQEAKDFDLDKHLVDKCAPMVQQFCQRE
LEDGNGEKVLPCLVDHKNDIDMDHQCANAVEHWQLIEMKDFEFSPALTEMCLLDIRKHCQKSK
AKIEALHCLSENIVKDASSVTEKCRAQLKNELIEQSENIKLNPELYEACTKDIELFCRDVVPSGGQL

EECLKRNHKKLTDPKCKSLLFKEEKKESFDPELDYRLMHVCKPIIKRYCTQYHQPVDIMECLRQV
THDRDMSRECRAIITERQIEQAESFELDPELSKFCQDDVNRYCKEEIKHAEKGDDDGAIFGCLVNA
MIDNKPIKNDCEMYIRRREAEAAQELDLNPQFLLQCRDEITKICPNMDEDEIIECMKMNIPQIQSK
GCVQEVKKLIVEGIEDVHVDPHLQEQCARDIRTFCQSVPSKSGNVVLCLIDVHKAKNLHLQPNC
ENFLTKRLSLYNAAKVDYAVFDSISAVMNAVSESPNRNYVYMTLLLVLTILFVGGMLFGRYTKKIRS
EIKNR*

TRINITY_DN3339_c0_g1_i1.p1 type:complete len:131 gc:universal TRINITY_DN3339_c0_g1_i1:31-
423(+)

MVRVNVLNDALNSICNAEKRGKRQVLLRPSSKVTVKFLTVMMKHGYIGEFEVIDDHRSGKIVVN
LTGRMNKCGVISPRFDVKLKDIEKWASYLMPSRQFGYIVMTTSAGIMDHEEARRKNTGGKILGYF
Y*

>TRINITY_DN1071_c0_g1_i3.p1   type:internal   len:375   gc:universal
TRINITY_DN1071_c0_g1_i3:1124-3(-)

DPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPTTTTTESTTTPTTTTPATTTTESTTTTTLPTTTTTTTPTTT
QSTTSKETIIITEEPKPTTGLPQKKTTTTPRTTTESPTTTEATTTTPATTTEATTTTQATTTTTKATTTTP
ATTTTKATTTTKATTTTPATTTTKATTTTKATTTTPATTTTKATTTTEATTTPTTKPCECKVLQPVGV
SDGRIPDNQMTANSVLNVSGPTFTGASQARLNNKPSKDGVGAWEPAQQEEIYLEVHFNKIEDV
REIRIQGHPTDKKFTKNFFLSTSQDGVNFEFTDEDLYEGNKDGNTIKSTKVSFKTKAVQIHPFNDVS
VGDPKVAMRVEFYVCPPCGVTTPAITTTEQTTMPT

>TRINITY_DN1112_c0_g1_i1.p1   type:complete   len:200   gc:universal
TRINITY_DN1112_c0_g1_i1:740-141(-)

MSTLKLQKRLAASVLKCGKKKIWLDPNEASEIANANSRQNVRKLIKDGLIIKKPQVVHSRARTRA
NLEAKRKGRHKGFGKRHGTANARMPEKVIWMNRMRVLRRLLRKYRESKKIDLHLYHELYMKA
KGNVFKNKRVLMEYIHKKKAEKKRSKELSDQAEARRNKVKAARTRREERQAQKRAEILQAYAK
EDTAATPAS*

>TRINITY_DN2113_c0_g1_i1.p1   type:complete   len:1704   gc:universal
TRINITY_DN2113_c0_g1_i1:5257-146(-)

MAQLLPIRFQEHLQLQNVGINGANIGFSTLTMESDKFICVREKVGEQSQVVIVDMADANNPTRR
PISADSAIMNPASKVIALKAAKTLQIFNIEMKSKMKAHNLTEDVIFWKWISVNTIGLVTETAVFHW
SMEGDSSPVKMFDRHQSLAGCQIINYKVDHSGQWLLLIGISAQQNRVVGAMQLYSVERKVSQPIE
GHAAVFSQFKVDGNPQTSNIFCFAVRGAAASKLHIIEVGTPPTGNQPFPKKAENIFFPPEADKDFP
VAMQASQKYGVVYLVTKYGYIHLYDIESAQCIYSNRISGDTIFVTASYEPTEGIIGVNRKGQVLSVSV
DEEKMVPFLIQVKQNGELARRLAERCNLPGADNLFLQAFNDKFASGNYQEAAKIAAKAPKGILR
TQQTIQRFQQLPSQQGQTSPLLQYFGILLDQGQLNKYESVELCRPVLMQNRKQLMEKWLKEDKL
DCSEELGDLAKQFDNTLALSVYLRANVPNKVILCFAETGQFQKIVLYAKKVGFEPDYVSLLRNVM
RVNPEAGANFSGMLIQDDEPLADLNQIVDVFMEFNLIPQCTSFLLDALKNNRPAEGPLQTRLLEM
NLLSAPQVADAILGNQMVTHYDRAHVAQLCEKAGLLQRALEHYSDIYDIKRAIVHTHLLNPEW
LVNYFGTLSVEDSIECLKAMLSHNIRQNLQICVQIASKYHEQLTTSSLIEIFESFKSFEGLFYFLGSIVN
FSQEEEVHFKYIQAACKTGQMKEVERICRESNNYEPERVKNFLKEAKLTDQLPLIIVCDRHDFVH
DLVLYLYKNNLQKYIEIYVQKVNPARLSIVVGGLLDVDCSEDVIKSLILSVKGQFSTDDLVAEVEKR
NRLKLLLPWLESRIHEGSEEPATHNALAKIYIDANNNPERFLRENQFYDSAVVGKYCEKRDPHLA
CVAYERGQCDQDLINVCNENSLFKSLARYLVRRRDAELWGTVLVEDNKYRRQLIDQVVQTALSET
QDPEDVSVTVKAFMTADLPNELIELLEKIVLENSVFSDHRNLQNLLILTAIKADRTRVMEYITRLD
NYDAPDIAGIAIVSELFEEAFAIFKKFEVNTSAIQVLIENIQNLDRSYEFAERCNDPAVWSILGKAQL
DQGLIKEAIDSYIKADDPSAYMEVVEASKNCGNFEDLVKFLQMARKKAKETFIDTELIFAFAHTGR
LADLEEFISSPNHANISQVGERCFEQKMFEAAKILFNNISNFARLASTLVHLGEYQNAVDGARKA
NSTRTWKEVCFACVDGQEFRLAQMCGLNIVVHADELDDLIRYYESRGYFEELISLMEAALGLERA
HMGMFTELSILYSKYKPTKMKEHLELFWSRVNIPKVLRACEQSHLWSELVFLYDKYEEYDNAVVT
MMKHPTVAWKESLFKDVITKVANIELYYKALQFYLDNKPLLINDLLVVLTPRMDHTRGVSFFQRA
CYLSLVKPYLRSVQNHNNKAINEALNSLLIDEEDYNGLRASIDAFDNFDNIALAQLLEKHELIEFR
RIGAYLYKGNNRWKQSVELCKKDHLYKDAMQFACESRDKAVAEDLLSWFLSIDKTDCFAATLYM
CYDLLEPDVVLELAWRNNMLDLAMPFMIQFMKDYYTKVDKLAESNAKRDEDKENAPPEAPIM

GVEQLMITAGPSSYVPQPNMYGMPPQGMAPQGMPPQGMPPQGMPPQGMPPQGMPPQQGFPQ
QGFYGGAM*
>TRINITY_DN197343_c0_g1_i1.p1 type:complete len:124 gc:universal
TRINITY_DN197343_c0_g1_i1:399-28(-)
MAKLKAHELRGKRKEELCHQLTELKTELQQLHVAKVTGGAASKLSKIKIVRKSIARVLTVISHNQ
RENIKKFYKTRKYKPLDVRSKKTRAMRRALTTHEASRKTLRQIKKDKHFAIRKYAVKE*
>TRINITY_DN9509_c0_g1_i10.p1 type:5prime_partial len:424 gc:universal
TRINITY_DN9509_c0_g1_i10:1493-222(-)
VRVGDRRRKAARAAAVVRHAKPHVNLGTVGHVDHGKTTLSAAISLVCAQFSETQDTKQKTYEEI
DNAPEERARGITINASHIEYETSNRHYCHVDCPGHADYVKNMITGACQMDGGVLVISSPDGPMA
QTREHILLSKQVGVPRLVCFMNKVDVMDDEELLELVELETREMLTQYGFPGDDTPFIQGSALQAL
EAMKANPGIKKGDDKWCDKILELMETVDEYVELPERDTDKPFLLAVEDVFSISGRGTVATGRVEQ
GIVKKGDDVEILGRGKKPQKSVVTGIRMFNTDLPEGPAGYTVGVLCRGIERSSVLRGQVICAPGAT
STHTKFKANIYLSKKDEGGRSNPIMPGYMPVFYFRTCDVTGQIKTMASSEGNEVQMAMPGDDVT
IQCELISGTPIETGMRFAMREGGRTIGQGLITETM*
>TRINITY_DN477_c0_g1_i7.p1 type:3prime_partial len:1130 gc:universal
TRINITY_DN477_c0_g1_i7:3387-1(-)
MMGSIKVFVGLVLLSFTAIEIAQAQSGTVLSNKQFAFDFVVDGSTSIQDEQWNLLTDFVSRLAVKM
STLNNAKLSALQFSHTLNRILQCNQYANVEEARNTIKNMVQENGATGTLAAMLTSADNLMNVC
SAGDPNRQNVMIVIVDGNQNLEQKSHSEIVQDIKVNVKDKNILVLTLGVGPQVNRNEFGDYASD
SGKGFFVDDFTLLTDELVQRMYDELIRTYGDGPDYLTAWVNGPCSATCNPFPMANRPTLRQTRQ
CQEPNGGNCGGASLEQIINCNENIACAGETYLTAWVDSSACSLTCNPFPVSNQPTKRQTRECRQP
SGSCNGASLTQTINCNENVQCPGETYLTAWIDSSCSATCDTGSNNPVFTQTRQCRQTVGNCDGA
PLQQTRSCNVGVSCTAPTFLTAWSNATPCSATCNPFPMAVRPTLTQVRQCNEPNGGNCGGASLQ
QTVQCNLDVACAGETYLTNWVDLTACSATCDDASNRPVKQQERQCQQPGGNCDNLPLQQTVN
CNIGVSCTVSSSACSSKEISFTFVIDTSASVDNIGFFVLKDFMKKYMSQSTLGTDPRTSVAIVSYGAG
DAKVEVECDTITTQQSFNTTVDNLSQLFGIADDNSFNQALSTAFDASGRCARSSTSLNIIIMLSDGD
PPALENILTRDRIQSSSNYYFMFVAIQASDGAQSTFASLANQGRGLRNASSSFTDLYNFNTDLYYLE
TLSKACDVGGQWTEWSTSACSTTCGPGVVTRTRECRNRITGKLQQDCGPGPAQETQACNLQDC
QGTLTQWTSWSCPATCNINNDVNNPPLALRTRQCLGSTGQGNCNNADKTENEPCVRNVPCPG
AWTTWSVFSACSETCRSQSAFPTRRRTRQCIGGTLNFQCPPQIVNGISYREIWQEDCINVPNCPAK
FTQWTTWSCPVTCNVNNDRNNPPTATRTRTCDDSGTINGCANANILENQPCVQDVQCPGAWS
TWSAYGACSETCQSGNRSPTYTRTRTCLGGTLGFQCPPFITQIGGFQIFGTQTSNCNSEVKCPSKLT
QWTTWSCPVTCNNRNDVNNPPQARRTRRCDTSTGSGICESPIVEEFENCVANVPCPGRLTEFTYD
NCAHTCNVNNDVNNPPQRVGTRRCLDGTLG
>TRINITY_DN484_c0_g1_i1.p1 type:complete len:554 gc:universal TRINITY_DN484_c0_g1_i1:164-
1825(+)
MASMILNGERTTGNDVREQNVMAAASIANIVKSSLGPVGLDKMLVDDIGDVTITNDGATILKLLE
VEHPAAKILCELADLQDQEVGDGTTSVVIIAAELLKNAGNLIKYKLHPTSIITGYRLACREACKYIQ
ENLAVKTADLEREHVINCAKTSMSSKLVGVDSDFFSTMIVDAAMSIKRTGNKGETKIPIKSINILKA
HGGNMKESISVPGYALNCTIACEGMPKKIENAKIALLDFSLQKAKMHLGVQVLIEDPEKLEAVRQ
REMDITKERIEKVLASGANVILLSGGIDDLCMKYFVEAGAMAVRRIKKVDLKRIARATGGTVCLSL
ANLEGEESFEASYLGHADEVAQERICDDELILIRHPKTKAAASIILRGANDFMVDEMERSIHDALC
VVKRVLESKSIVPGGGAVEAALSIYLENFATSLASREQLAIAEFANSLLVIPKTLTVNAAKDSADLVA
KLRAYHNASQTQSDKAHLKWVGLDLINGVIRDNKKAGVLEPTMSKIKCLKFATEAAITILRIDDL
VKIEPEKKDDPNSYQNAIAGGRMG*
>TRINITY_DN3991_c0_g1_i1.p1 type:3prime_partial len:219 gc:universal
TRINITY_DN3991_c0_g1_i1:84-737(+)
MTSWILNFLVLSIIALPCSSISNCKHKLEPVGCFKDRGSARAMPEQILNERDTTSKVYSKQLMSWK
NFHEWLPGFICRCAEVAARKGYSVIGIQFWGECWSGPNAESTYNRHGQVDSCINQNLKKNRAK
LSQCTAASGKHFTNYVYRLAPACHTQYKPVGCFQDNLQKPRPMPYYVSTDRETRLAIFSGKLLN
WKNWNTHMPDMICRCAAVAKSKGHQ

>TRINITY_DN1377_c0_g1_i1.p1 type:complete len:878 gc:universal TRINITY_DN1377_c0_g1_i1:68-2701(+)

MTGRARGRSRGRGRAAQDASQRPGGAQGGPPPQAAAPQQGGGGRGRTRGQPAPQQVAPQQR
PAAQTAVPPTARMAQMSVKDQKPATEERQPRRRRLDPAPDVLVTRPEGRTKEGTGGTPVNIVSNF
FKVIKMPNFKGLYQYNVSFDPEINSSKLKNALLYQMADVLGQTKCFDGMTLFLPKRLPDQITTRS
VTTHQGNAIVIKIMFTNVIPEISPQVLQMINIIFRRQLRCIKMELIGRNYFNSSRKIEVKAHKMEVW
PGFSTSILQYEKDVMLCADVQHKVVRQQSVLSMMYELHQKTREKNRFYELAAKKLIGETVITRYN
KKNYKIDDIEWNKNPNSTFDKNGTQITFKEYFEKTYDAKVGDDQQPLLVSLPKAKNRKSGIVGPI
LLLPEFCLISGLSDEIRSNFSIMKDLAQHTRINPAERAKNLEQFVQDLQTNEESKKELEQWNLKFES
KLLQMTGRAYGSEKMFQREDQFSYKIQDADWSRETRGKKLIHTVNMTDWLLVYYERDEPIATDF
KQTLVKVCGPMGMNVAEPQLCRLKDDTARSYFRALSEQIRPTTQIVVCIVPNNRKDRYDSIKKLC
CVEKPIPSQVIVSRTLSKKQMLMSVCTKIGIQLNCKLGGEIWAVDIPISKNPKDPPSLMVVGFDVYH
DSASKGKSIGGFIASTNRHLTKYYSRITQQQSHQEIADQLRVCMTGALKKFNELNGTMPSRIIVYR
DGVGDGQLRQVFDHELPQFKAAFNAISQGYDPKFTMIVVKKRISTRLFLSERGMKTNPLPGTVVD
TVVTRPEWYDFFLVSQSVRQGTVSPTHYNIIADTSGWKPDIFQRLTYKLCHLYYNWPGTIRVPAPC
QYAHKLAFLVGQSIHAEPDVQLADRLYYL*

>TRINITY_DN428_c0_g1_i1.p1 type:complete len:1949 gc:universal TRINITY_DN428_c0_g1_i1:96-5942(+)

MADDADLKFLMVDRRQVSDPVAHAEWAAKKLVWVPSEELGFVAASVKEEKGDKIIAQIEGGKR
VTFHKDDIQRMNPPKFDKAEDMADLTCLNEASVLHNIKDRYFSDLIYTYSGLFCVVVNPYKRLPI
YTDKVINLYKGKKRHEVPPHVFSIADTAFRSMLQDRDNQSILCTGESGAGKTENTKKVIQYLTAIA
GRANQQKADEKSQGKLEVQLLQANPILEAFGNAKTVKNDNSSRFGKFIRINFDNSGFICGANIES
YLLEKARLVRQAPDERIFHIFYQLLLGASPEVKKQFLLLDTKSYNFLSNGHVQLPNMDDRQEFKV
TLEGMRDMGITQEELDPIFKVVSAVMLFGNMEFKQERKSDQATLPDNTIAQKICHLLGIQVTDFT
KSLLKPKVKVGREFTQKSQTKAQCEFAIEAITKALYERMFKWLVGRINKSLNRGKRDGASFIGILDI
AGFEIFQLNSFEQLCINYTNEKLQQLFNHTMFILEQEEYQKEGIDWKFIDFGLDLQPTIDLIDKPMG
VLSLLDEECWFPKATDKSYVEKLHKQQTKHPKYLKPDFRSNSDFCVIHYAGRVDYSAAQWLTKN
MDPLNDNVVSLLAHSKEAFIASIWKDTENVVGMSVTEGMDTTFGASRTRKGMFRTVSQLYKEQL
SGLMTTLHCTKPNFVRCIIPNYEKRAGKIDNHLVLDQLRCNGVLEGIRICRQGFPNRILFQEFRQR
YEILCPGIVPKGFMDGRKAAKQMIDNLEMDPNLYRIGQSKIFFRAGVLAHLEEERDIKLTEIIIQFQ
AFCRGNIARRNYRKRIQQLSAIRVIQRNGRSWLKLRNWQWWRLFTKVKPLLNVSRQEDELRSKE
EEFKKLQDKSDKLESLQKEQQQANEKLTEEKNTLAEQLQAEIELCQEAEEARNRLLQRKTELEDL
IQDFEMKLGEEEEKAVKYAEDKKKLQQGIQDLEESLEEETQRQKLQLEKVQVEAKLKEMEDERQ
VAEDNNARLTRDKKQLEDRVAEFGQKLAQEEDRAKQLSKAKAKQEAFIAELEDQIAKGDKSTHE
LHKEKRKAEQDLSDLRAQLAQALQRIAELEDDLARREKELAEAIKRGDEEMAKRTTVEREKREL
QALLDELREDMESEKSAKDKVERQKRDLEQDLQELRSELEVTTDATVVQKEFQKKREEELMDLK
KQIEEEAKEHDQQMASLRTKHNGLVEDLNNQVDTFKRGKAALEKNKTALENENAEIAADLQRI
SQLKQEGDRKAKNLEQQLNEANSVRAVQDEKVSSLESEKAKYQKECDSLSTQIEEVETKAASLDR
AKQAAEAQLEDTQDQLAEETRQKLSYQTKLREASDEANRLQEQLEEEDEKKAVQKVLSNLQV
QLDQAKKEIELKIQDFEQAEAARQKQKRENEELRGEVEKLTGDVSRLDKAKKKLQGDLDDVTVS
MERERNSANQMSSKQRKFDQLLAEEKANSQALGIERDNLEKLARQNETKALSLQNANEELEDR
LAEAERQRKQLQMELGDLVESKDDVGKSVHDLEKSKRLLEQQLAEQKTQVEEIEDELQACEDAK
LRLEVNMQAQKAQFDRELQAKEDAIEEGRRGLVKQLRELEAELEDERKLRQSASAAKRQLEGDV
KELEGQLDQANRIKEDGLKQLKKYQNQLKDVQRDLEDSRQSKDDLAAQVKDNEKKLKGLEAEF
LQMQEDLSAAERARRAIESERDELLEELNNSALKNAVAEERKRYEAQLAALEDELEEERTQTEL
MQDKVKRSNLQLEQMNAELQEERSAAQSLDNTRMSLERQNKELQSKLADLESSLRSRQKNTVAT
LEAKINNLEIQLDQEAKERQQQNKALRRNEKRCKDLQMQIEEERSHTESYKQQLEKMNARVKN
MKRQLDESEEEVTRLNTAKRKLQRDFDENQESLESSQREANQLRQRLKGGASLSSSRSSGRGRRA
KDEDDDDDANE*

>TRINITY_DN72959_c0_g1_i1.p1   type:complete   len:216   gc:universal
TRINITY_DN72959_c0_g1_i1:54-701(+)

459

MGRRPARCYRYCKNKPYPKSRFCRGVPDSKIRIFDLGKKKTGVDDFPKCVNLVSDEYEQLSSEALE
AARICANKYMTKTAGKDAFHIRIRVHPFHIVRINKMLSCAGADRLQTGMRGAFGKPQGTVARV
HIGQPLISVRCKDQHEATAIEALRRAKFKFPGRQKIFTSKKWGFTRWDREEYLERRQDGSIKPDGT
NVQYYPCKGPLKDWKWRESR*

>TRINITY_DN72753_c0_g1_i1.p1   type:complete   len:137   gc:universal
TRINITY_DN72753_c0_g1_i1:95-505(+)
MARTKQTARKSTGGKAPRKQLATKAARKSAPSTGGVKKPHRYRPGTVALREIRRYQKSTELLIRK
LPFQRLVREIAQDFKTDLRFQSAAIGALQEAAEAYLVGLFEDTNLCAIHAKRVTIMPKDIQLARRIR
GERA*

>TRINITY_DN535_c0_g1_i1.p1   type:5prime_partial   len:162   gc:universal
TRINITY_DN535_c0_g1_i1:712-227(-)
GKYLVFFFYPLDFTFVCPTEIIAFSDRVEEFRALGCDVLACSVDSHFSHLAWTQQSRKKGGLGQMK
IPILSDLTKSISRDYGVLLENDGIALRGLFIIDDKGILRQITVNDLPVGRSVDETLRLIQAFKFTDEYG
EVCPAGWKPGADTINTGKAHEYFEKQ*

>TRINITY_DN79_c0_g1_i1.p1   type:5prime_partial   len:478   gc:universal
TRINITY_DN79_c0_g1_i1:2132-699(-)
VVSSESNVLVEFYAPWCGHCQSLAPEYAKAAKQLKESKSDIKLAKVDATVETKLAEKYEVQGFPTI
KFFKKGNALDYGGGRTDKEIVAWLNKKTGPPAKLLDNAADVKAFADERDVAILGFFNDKESSEL
AKAFLAVAEAVDDLEFAIAAPDASGDFAVTEDKIIVAKKFDDPQVVYSGEANIADIKKFVRAESIA
LVTEFTDEAAPKIFGGDIKNHLLLFISKKAENFAELKNTFQEAAKGFKGTVLFVYIDTDVEDNGRIL
EFFGLKAADAPTLRLIQLEGDMTKYVPETKDLDKDSVTSFVQNVIDGKIKPFLMSADVPEDWDK
NPVKVLVGKNFAEVALSKDKDVLVEFYAPWCGHCKQLAPIWDKLGEKYKDSENIVIAKMDSTAN
EVEEVKVSSFPTIKYFPKEGGVVDYNGGRTLDDFVKYLESGGKDVSGGADETGEDEDADEEEGM
EEGMEEGDLKPEEPEVAKDEL*

>TRINITY_DN119684_c0_g1_i1.p1   type:complete   len:662   gc:universal
TRINITY_DN119684_c0_g1_i1:2182-197(-)
MKLEIILFTLLVALTVHCSEKKDDSKKDVGTVIGIDLGTTYSCVGVFKNGRVEIIPNDQGNRITPSYV
AFTEEGERLIGDAAKNQLTSNPENTVFDAKRLIGREWGDKAVVHDMKFFPFKVVEKGKKPHVQ
VNVKENEKKTFAAEEISAMVLVKMKEIAEAYLGKKVTHAVVTVPAYFNDAQRQATKDAGVIAGL
NVMRIINEPTAAAIAYGLDKKEGEKNILVFDLGGGTFDVSLLTIDNGVFEVVATNGDTHLGGEDF
DQRVMDHFIKLYKKKKSKDIRKDNRAVQKLRREVEKAKRALSTQHQARIEVESLFDGEDFSETLT
RAKFEELNSDLFKSTMKPVQKVIDDSGLKKKEIHEIVLVGGSTRIPKVQQLVKDFFGGKEPSRGINP
DEAVAYGAAVQGGVLGGEEDTGEIVLLDVNPLTMGIETVGGVMTKLIGRNTVVPTKKSQIFSTAA
DNQQTVTIQVFEGERPMTKDNHLLGKFDLNGIPPAPRGVPQIEVTFEIDVNGILRVSAEDKGTGK
KEKITITNDQNRLSPEDIERMVNDAEKFADEDKKVKEKVDAKNEFESYAYSLKNQISEKDKLGGK
LSEEDKGVLEKAVDEAISWMDSHQDASVDELKEAKKKLEDVATPIVSKIYQQQGGAPPPPGGEG
GEEKEDKEEL*

>TRINITY_DN195948_c0_g1_i1.p1   type:5prime_partial   len:170   gc:universal
TRINITY_DN195948_c0_g1_i1:602-93(-)
NLLRWSRMRLPFRIDLAKNRSRCKMPGGATVKDVDPQYFVTAFAAHLKKSGKLKVPEFVEIVKTS
KGAELGPTDPDWYYIRAAAVARHVYLRPNVGVGAVRKIYGRAKRNGTKPNHFCLGSASVARKV
MQSLEGVKIVSKDVNGGRTITSTGRRDMDRIAGQVLSKEEN*

>TRINITY_DN1080_c0_g1_i3.p1   type:internal   len:425   gc:universal
TRINITY_DN1080_c0_g1_i3:1274-3(-)
EVPVEDEDPSQSIDVTRRQVHRQYMPDPERQGKKQPKPVERLYVTRVIRKPDGTEQLVDESETVYP
LEVTPEEQAPEAIDEEKDSRGVVIRRVVRRPVMVTTKRTVIRRAEVLPSGEEKEIEKSVEEAPKTEQ
EPQKTRRVVSRVVKEPSGQERVVQEPSYVSPLESSTTEESEPEVVEKRLRGQVIRTVKRRSITTSVKR
VIRRVVEGTDGKPSDGPVEDTLEEPVEPTKYSLVRRTVTKSDGTTETVEEPHYEMPVESEPTVEEEK
DRRGVVIRRVVRRPVPIVTRRRVYRKVILALDGTEKGVEEKVEEPTPGMQGLEEEPIAAPMVVDEQ
ESVPDMFGDSGDQTSVLRKTVTIRKRIVRKIIVLPDGSRKEVEEEVPVEDEDPSQSIDVTRRQVHRQ
YMPDPERQGKKQPKPVERLYVTR

>TRINITY_DN2028_c0_g1_i1.p1 type:complete len:274 gc:universal
TRINITY_DN2028_c0_g1_i1:1608-787(-)

MGQSDGDDLTFGQKISREWRDFREFLYNSETGKVMGRSGTSWAKIGGFYLLFYGFLAGFFTALLFI
FYTTIDKPGIGGPKLIQYIENKPGLTRLDRSSKLQSYSASNNDRISSYKTVIDEFLDGYNTSDHSGAL
CGAAGTPKSDKPCIFDTTLLGECAPSKNTTYGLREKKPCIFIKINKVFGWTPADDGTGYLTLSCTG
HATVMPQGFPLTAFPYNGHKVYQSPIVAVKIDATKGKKNVDCTLKGKNIEVSNNFNPSRAFGKIR
IEGISATD*

>TRINITY_DN319_c2_g1_i3.p1 type:complete len:2588 gc:universal TRINITY_DN319_c2_g1_i3:165-7928(+)

MVLLKGQLWILGFIFLTSTKYVMGDVPECSNNATVAVHCRFDEGNTCVDDPHPMHYVCVCNNL
GYMNDTDSVEGYSICKERDCSNSNETPTDLLKRICGVNTKTCTGKILQRECNCNTDSYRSKNGQY
CFFAPCQASPTIQQNCGPGNQCYGNAPNYICDCSARGYKRSAADNRHCELKSDEELTPIEEYCGK
GSLYANGTINNITCTCDTDKGFFPSATGETCISPSCYLNPQMQEKCGPENTCLGGKDDYVCLCSNP
NYKRNATDLQHCIRRTCADTSPAIDFKSICGEGATGCSGYVDKPLCSCDVSNHYVPAADGRSCIK
ATCKGNKKALEQCGQANSCTGSFDNFLCVCDANGYYLNTTNNTCVERECTDPDLVITDICGVGS
LSCNGKAGSPECICDKDKFYYASEDLRSCVKANCLSSETISKKCGKENSCYGSMESYVCNCNAPG
YLLNTTDNQGCYLGMCEDNGLEYDKVCGEGAISCNGTIKNLECNCGMNYVQSPDKKSCIRADC
RANQTMHEQCGEDNDCVGSLEDWMCICSTYGYKPDPMDMMKCKKVMCEEEVVNNVTVCGL
GTTGCKGHILKPECTCDIAADYVPNEDASRCIKGSCENNKMAMKDCGIANSCTGSYNNYVCVC
NGFGYKKLDDTHCVEQMCSDPDIDIRNVCGEGAHYCNGTVNQRVCSCNETEYFYPSADSKSCV
KATCAVSPMVMEQCGVENSCQGSQESFICNCNALGYLLNTTTNQHCYLGTCENGDFDLMQAC
GDGALYCNGTIKNLECQCDESKGYVQAPDKMSCIPNDCRGNLTMYRQCGQLNKCVGSIDDWR
CICDSPYYVAHSDIMKCKLLHCSDSEVDHVEVCGKGTIGCSGSTLHPTCHCNTTENYFASKDGMR
CVAGSCKTNQTAVKKCGNANSCAGSHSEWTCICDGIGYKHDPADPQNCLLKTCNDADIDIVATC
GVGAISCEGYQLMPKCECNDRDYYIPSDDRTSCELASCRANRTAMRACGEMNDCRGSFSSHICL
CHDPAYKSDPSDSRVCLEKTCEAGDFELVRVCGKGATGCSGSMKNIMCECDNAKGYVASADHT
QCIPSDCNNNVTMHLQCGEGNGCVGSLTDWYCVCSAPGYEPHASDHMKCHLKTCADPGVDH
VQICGMGATSCMGPVINPVCYCNESMYYIPSMDRTSCIKASCMSNKTAIAQCGSENSCSGSPDNF
VCLCQAYGYRQDTNNNQACIPSQCEDAGIDFVEICGQGGVGCSGSVLNPVCMCDHMKHFVPSP
DQNSCVLSTCRGNETAMTSCGEQNKCFGSSSSYICVCDAVGYKPHPTNLQECVLQTCEANELNP
VAVCGKGALSCKGTIQSLMCECDNSKGYVAAPGYKSCIPADCRANMTMHAQCGTGNRCRGSM
EDWSCVCDGIGSKPHPTDHMSCIAIDCSDPNVDIKSVCGYGATGCMGLARDPICHCDTSKYYVQ
SEDGRTCVPATCHTNKTAQMQCGPDNSCIGPPNDFICECTGFGYRHHETDKQKCVPIQCNETAL
FDIERVCGKGATGCRGNIRQPICDCDHAMYFHPSEDRRTCIEASCRRNSSIRADCGVENTCFGSTR
SWICDCNSYGSILNPSDVKKCMLATCEAGQLDPVAVCGKGALSCKGSMRDVQCTCNNELGYVH
SPDGKKCLPSDCSGNVTMHHQCGDANKCMGSLTDWVCVCDAPGYKPHAKDKMKCHQISCAD
NNVDPVDVCGIGATSCKGPITNPLCQCDTDNYYITSSDGASCIPATCKTNKTAIHQCGEANSCEG
PADNFICVCNAYGYKLDDNDHQRCVEISCDDPNAHESICGTGSTGCRGTARDPICECDHTQHFV
ASSDLTSCLLASCRANDTVMNHCGDGNTCFGSLTSHICVCEAFGYKLNPNNHKHCLEETCEDD
MLNPVAVCGKGAVSCSGPLKSVKCECDNNAGFFRSPGGMKCESTSCRQNPASQMMCGSQNQCY
GSYDDWYCDCSAPGYMANQTNAAECLKVMCDDMAVDVCGLGATGCTGHTLNPICTCDSSMG
YMMAKDKHSCVPMDCSMNPASSQCGYGNTCHGSYFSYVCVCSTAGTVMNKTNPMECINVACP
ADAVHVCGEGATNCSVTSTNNVECSCEEGYHPADDLHSCVLDDCRFNPKALKACGLLNKCVGS
YKSWKCNCHYPEFTQDPMDHQTCVVGPCMVEQCGKGNAPGSFQHYAVNCSGLYDDPICNCQP
EYTNDAKGGCIPKICSENPVAVQACGSGYCEGTYFKYTCKCDEPAFVQTPDKMQCVPAKCNIQQ
CGHGFDRGLYIDFAESCSGTYADPMCQCKTGFSGTNTSKCGPAIDGCKLDKCDPLATCQTLDVD
GNVKCTCKEGYSGSGMMGECYLDGGFSAYEGTKECSEVCGVNGVAEVTRFCNNPTADPKGKPC
NGTSPETIQVPCNRFACSSCTVRKTCGCGGLKPIFVEFYHEPNSTLEYFTDLKADDVQTALGFLTK
WKELSQQDLCLMYSKIELTVFVTLMGDSETQVSTMKSSLVSARDIMRKKLDCNINLGKKAQYYEA
YETIIKRHLAISNILKDLTIIKNSITKYMNNCDDSEIGMIRDVIGMM*

>TRINITY_DN168534_c0_g1_i1.p1 type:complete len:226 gc:universal
TRINITY_DN168534_c0_g1_i1:774-97(-)

MIRSAIIAIVIASHLYESSAARCYVGYSAVGLPLAIGVRDVDCQKGMDFCTTVKSTIGGITVTQGNC
ARKYGQATCQFMQNSHKAMTDCKETLCRGDYCNSALIEAEQKERKRVGPYKNTLKCTTELKTR
FPLIPFATADIPIGIDECFPGTTRCVTVEYDYIYKFKTKIATRHNHFVLPVIQKMCNRPNIDDCNKW
CTIMSIHQFMHSSCRAKCCTGDNCNAKD*

>TRINITY_DN15599_c0_g1_i2.p1 type:internal len:206 gc:universal TRINITY_DN15599_c0_g1_i2:1-615(+)

KALTSSDPAERTKKLQSELANGRLAMIAIIAMFVQNGITGTTGPEMWRGGGAFENELGVQAPVG
FYDPVGFTLDGDVQSFRRRRSVELKHGRISMLACMGYLTPEIVGKWPGYISPSLGLKFTDIPSGLDA
IGKVPALGVAQIVAYFGFVEFAAGFDDYKPGGTPGDYGWKALTSSDPAERTKKLQAELANGRLA
MIAIIAMFVQ

>TRINITY_DN773_c0_g1_i1.p1 type:complete len:440 gc:universal TRINITY_DN773_c0_g1_i1:1608-289(-)

MVSPPGPQDNKPPHKVADMSLADLGRRYIEMSENEMPGLMSMRKQYGEKKPLKGARVAGCLH
MTIQTAVLIETLTELGAEVQWSSCNIFSTQDHAAAAIAKTGVPVYAWKGETDEEYLWCIEQTLIFP
GGEPLNMILDDGGDLTNLVHEKYPELMKDIRGVSEETTTGVHNLYKMFKEGRLKCPAINVNDSV
TKSKFDNLYGCRESLVDGIKRATDVMIAGKICVVAGYGDVGKGCAEALRAFGARVMITEIDPINA
LQAAMAGYEVTTMDEACSKARMFVTSTGCSGIIEPHHFQQMPEDAIVCNIGHFDCEIDAKWLN
DNCERETVKPQVDRYTLPNGRHIILLAEGRLVNLGCAHGHPSFVMSNSFTNQVLAQIELWQNHK
NYEIGVVMLPKRLDEEVARLHLDHLSVKLTKLSKSQADYLNLPADGPFKPDHYRY*

>TRINITY_DN1172_c0_g2_i2.p1 type:internal len:264 gc:universal TRINITY_DN1172_c0_g2_i2:790-2(-)

GDYGFKVLTSSDPAEKEKKLAAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPLRFFGG
DSGPSYKAFDPATELGVQEPLGFWDPLGFTSDNDEAAFKRRRSVELKHGRVCMAASIGYIVPNYY
TFPGFLSPSAGVKFADVPNGLAALGKVPALGWVQIIFFAGIVEGAFGFDDYKSGAPGDYGWKVLT
SDDPAEKDKKLAAELANGRLAMVATIGMFFQDGLTGSAWGDWALYTASPLRAEPVSTAGVGAA
TKGGTE

>TRINITY_DN40728_c1_g1_i1.p2 type:5prime_partial len:124 gc:universal
TRINITY_DN40728_c1_g1_i1:1-372(+)

KTLTGKTITLDVEASDTIDNVKAKIQDKEGIPPDQQRLIFAGKQLEDGRTLSDYNIQKESTLHLVLR
LRGGVIEPSLAVFARKYNCDKMICRKCYARLPARAVNCRKKKCGHTNMLRPKKKLK*

>TRINITY_DN265_c0_g1_i9.p1 type:complete len:136 gc:universal TRINITY_DN265_c0_g1_i9:136-543(+)

MGRVRTKTVKKAARVIIEKYYTRLTHDFHTNKRMCEEIAIIPSKKLKNKIAGFITHLMKRIELGPVR
GISIKLQEEERERRDNYVPEISALEQDPLEVDPDTKEMLKIIDFANIPNLQVMQPITASGLGTRIPGN
*

>TRINITY_DN2636_c0_g1_i1.p1 type:complete len:314 gc:universal
TRINITY_DN2636_c0_g1_i1:986-45(-)

MSAIAVVVIVIAAVLLHFSVHKIEEGHVAVYRGGALLSSVSGPGYHLMAPMLTKYKSVQTTLQT
DEVKNVPCGTSGGVVIYFDRIEVVNLLSVDKVHDIVKNFTADYDKALIFNKIHHELNQFCSVKSL
QEVYIDLFDQIDENLKRALQQDLNEMAPGLKILAVRVTKPKIPEQIRKNYELMEAEKTKLLIRIQH
QKVVEKEAETERKLAVIQAEKQSQVAGIQYEQKIMEKESMKRMSEIEDLTHLAKRKAMADAEFY
THQKQAESNKMKLTPEYLELMRIEAISKNNKVYYGSNIPNIFLNEGGLSQKTK*

>TRINITY_DN3545_c0_g1_i2.p1 type:5prime_partial len:236 gc:universal
TRINITY_DN3545_c0_g1_i2:3-710(+)

SGPGRSSCRPILSVIKISKINNIDSGKVEGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGK
HCDGVSFETRECNINQCPVDGGYTMWSVYGSCSKSCGGGAQKRVRSCTNPAPANGGKPCDGVS
FETRECNINQCPVCPEIVGTYDISSRHHYGGAKYGTVVFKKLSNSKTVEAYYTINDGRRGVLTCKIE
SAQPDQCSGHGYYGKYFTYYKNRCQIIWSNDVIYTKQNC*

>TRINITY_DN384_c0_g1_i2.p1 type:complete len:314 gc:universal TRINITY_DN384_c0_g1_i2:1018-77(-)

MRIAVALFLVFYLYPTEACKDYLNPTVCRIGVKQKGDCEYYKRLCMKTCGGCGGVIRPTQGPGPG
PVIPAGDCGVSSFQGGRIISGTTAREGAWPWQILLKANGRAGCGGSLISANWVLTAAHCITGGSYS

VVLGEHDRRRRSGHEQEIRVSRAIVHPRWNKRSFEYDYALLRLSQPARMNQYVKPVCLPTGEPRP
GQSCYITGWGKTSSRGQMHYILQQAPMQVIDSNTCNRKNYRAIRIAIRPSMVCGGGSGRISGCQG
DSGGPFVCNEGGKFVLHGDVSHGSRECSSSKTYTVFGRVNHVRSWIRQTANV*
>TRINITY_DN817_c0_g1_i4.p1 type:internal len:176 gc:universal TRINITY_DN817_c0_g1_i4:526-2(-)
TLEISVRKVECPGFATKCATTKFVLDGTTSYRGYCASDYGPYLCTYMESSVKTMTDCKSTLCSGHY
CNIEVERASRKLTINGKGIKCYTGVQMFLPQLPIATGTVPTEVDQCEDQTSQCMSVIFTHLVTDPIR
KIKVKIPTQMRLCQPGYSTCENHCRRLAQHITIENCEASCCK
>TRINITY_DN121866_c0_g1_i1.p1 type:5prime_partial len:460 gc:universal
TRINITY_DN121866_c0_g1_i1:2-1381(+)
LYIINSCEPPSIFFSCHLHFYTLVEETMSTTTAPTTTGTSAATKRLYVGNLGSTVTTQDLKQLFGLETT
PYLRDTCFVELAVCEKTGKSKNFAFVSAPGHVFSELIKLNGIEFYGRQLVIEEAKTKPEEEGEKKDN
KEKKKTPNNKRKGGSNNNRNNNRRYGNKPKSKFNLPTLEPDQVFHLVDCGVNLTNPKFSQHT
DYVIARALSAGVQKMVITGLKLNGCKAAVVMAKTRPNILYAAVGIHPHFVKDDWSDKALDQLE
EQVKQPECVAVGECGLDYKRDYSPRDQQELAFKKQVQLGVRYQKALLVHERDSHDGIIEVLKEF
EASLPPVIIHCFTGTVEQIKTYIERGYYIGVTGYICKDKYGKTLRDAIKDGTLPLNRIIVQTNAPYMT
PNTPRDEIDPVSQTLLDHCYADNEPCTLSIIVRCIAKCLSQEPRHVADVCTETAIKVFRFQKSESE*
>TRINITY_DN1339_c0_g2_i3.p1 type:internal len:185 gc:universal TRINITY_DN1339_c0_g2_i3:553-2(-)
NSRLAMVAILGMFFQDGLTGSAWGDWANYVDSPLRAFENELGVQEPVGFWDPAGFTADGNVE
NFARRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVPNGLAAISKVPAAGWAQI
VAYCAFCELSQDQSAGSPAAAGDFGWKLLTSSDQAELTKKLSAEVANGRLAMMAIIG
>TRINITY_DN89_c0_g1_i1.p1 type:complete len:376 gc:universal TRINITY_DN89_c0_g1_i1:117-1244(+)
MKTFKIFLVACLLLASAYADLMSEMEALEKELEARELADQKEDSSSEKALKDMSTEELMDELKKE
VGKAKKSAVETHREKFDDLTKRLALEEQVEEELKRADAAAKAQASDDESDKDFDNLIKNVIEDEI
KKNSNVPAYAKGTNDATEEDTATFEELKERVKKDYYGDELVPFDQCKDQMPNCNIYKKYCEVYK
KNLIKRCPKTCNFCAKPVTTPAPAVAVHVCRDKLPKRTCKMAKKMCDSENSVQRTRVQKLCAET
CMVCRAPSPPRCENTEYGCCWDKETIKTDRKGTACPACQDEFKYICKTFKDDCVRVTHNSGLFM
YRNCKTTCGVCNNNYCEDDPRFAKSCHFWKKYLKQCEKDTAMKGLCKKTCGHC*
>TRINITY_DN165469_c0_g1_i1.p1 type:complete len:2668 gc:universal
TRINITY_DN165469_c0_g1_i1:41-8044(+)
MVEEDLNRSKELDIPKTLAYCFHNVTTVSLNRKQDIFRLLTQCIESQGCQDGHLKAVCKIISLTVM
RYRDSKSRQLVLKFVQKFLDIHELQAVKCLLTEIHILAKQLIKCGASLFSASCGLALLSWCSSISKKK
VQEASILKILYEVEAMCYSVICTCDSFRVKRLLKRAYLYLQDGKDAEQLENCLGVIISNSNCQLESIC
LVGFIFQYLTTKKEIQRVDEVKKRSLIDIIIKNYIQTKVKADYHYLKHAVPFLKYITHDDFKEILPAIE
KGLLRNPETVLQGVGYLLEGLSIDSSNYIEELSKCIAVHLISKNASLQADAVFAVSVIAKQCSDFSAI
NHLLKQLIKVLNESEGKLVFPEQKNAVLQAIKSVDCTSVTGSDHKENLATTLHDGLFPFILLEGHE
GVLTQALNVMKTWCKYFKNNLPKTFVDNIKKGLSLKVSTTVIQAHYLLVVSEALKGNTVSQASG
LLETLLQVIEKVKGQSHLINNVFLCISSSMVLLKMFLSDDVQVNAAKEDSFWNVILDPVKKNLVSE
KFLLSHQKEYFYHLSQCMNTMFLNYSSRFSQKLLEPWYRAFNVLMVYGDWKTKKSVKILLSKMF
DSGNYDTDEFSRLFADLDSLLDQEMSKSSKIEDTEDILVVNHVVDAYLFLCIWNKKDINEDEVLA
VLRKCLIYVHHDTIYQHDSSLFSKIGSVLKKDVAKEFVEKYKDDLLKYFINLESLSKADNHSLKTLL
SLYPEALLDTLVDEIIKYFTKPDLINVTSQEYEIMKTPDGVAYDQSVFESAKAANQKSGNLKRESKA
YSYKDQKAEMELRKELEKKKGKSDKIELNKKQKEQLEVILTQEKAIRDKLKSLEQGVMKHASILSL
LLDMDSDLLCYHYLDLMNLLLCLCQSHIAAPHVIPIYTKLSEKLFEGDLKHLGQLVANVILRLKKP
VCELPMGWSVENLPEQAKRALNTLHTFVNERNVYLMMTYTRKKTFSVLVFSYCLPLLKSILKDQ
GALVKGSEEFRMKALQLIHIHAKLRSPMDMGSEKNDPELLPRKEMLQILSDVIVSCEGHNKEAKV
QQQATLAFDEVCKCASGRLGCAVATEEEINILLSNILSQCSILRRVSLKGLLEFVDILPTENVVIMTQ
LTRSVLIGRFDIVDENATLAKRLWDEADICIEPSMIQHLVENVTHPLDDVRLAASLALEFSLNERKE
VDIIPQLLDIYFEKLKIPPPIIDNLGRVVSQQFVDSWEARQGVGLALEKIAETVGEDKLGDLFSFFVP
KALGDRNESVRKQMLNASLQYVNLYGQKNMDMLLGVFQDFLDSAPDSKELDTIRQSVIILTGSIA
KHFDKTDPQIKSIFSKLMAALSTPSQSVQQAVANCLPPLCGAMKSEAPELFKNLLEQLLESESYGE

RRGAAFGLGGLVKGLGILSLKQQNVIPTLNDAIQNKKIWKHREGALFAFETLCTMLGRLFEPYVV
HLLPHLLLCFGDGNQYVREAADDTAKAVMKNLSNHGVKLVLPSLLKALEEDAWRTKTGSAELL
GAMSFCAPKQLSSCLPSIVPRLTEILADSHLKVQKAGQQALRQIGGVVRNPEIQEICPIILDALSDP
NKHTVACLQALLSTSFVHFIDAPSLALIMPTLEKALGQRPTETKKMAAQILGNMYALTDPKDLQP
YLQAVVPGLKKSLLDPSPEVRAVSARALGAIVKGMGEVDDLMPWLLETLTSEASSVDRSGAAQG
LSEVLFALGKDKLDKLMPDVIATSMKTELSPNIRDGYLMLYVYLPATFEDQFLDYIGLIIPAVLKGL
ADESEFVRDTSLKAGQRMINMYADSAIELLLPQLEAGLFDDHWRIRLSSVQLLGDLLFKLSGVTG
KQTTVSEEDDNFGTAYSSQVILETLGFDRRNRLFAGLYMGRSDVALGVRQAALHVWKVIVQNTA
KTLREILPVLFELLLGCLASQSYDKRQVAARALGDLVRKLGERILPEIIPILEAGLDHEDGDKRQGV
CIGLSEIMDSTSREMISMFEDSLINTIRKALVDELPNVREAAASSFENLHNTIGHRALEGVLPTVFQ
KLDDPQLSNYALDGLKQVMTVKSKSVLPFLVPKLTTPPVNTKALAILSSVAGEALIKHIEKILPAMI
QAIQVSQGTGLDGDSEFESTRTLILSVYDEVGVRTIVDELTTSSKSQMPGIRKVAASLLMVFCKETR
GDHVPYIQSLFRTIIQLMNDVDQDVVASAWGALDALVKRLDPSEQLQHLSSLRQAVRFIKDDIRN
EQLPGFCILKKGITPVLSIFREGILNGPQEIKEQAANGLGEIIKLTSPEALRPSVVHITGPLIRILGDRF
NSSVKVAILDTLGLLLQKVGALLKPFLPQLQTTFIKSLNDSALGVRQKAAWTLGLLTVLHTRVDSL
FTELKNGIKNNEDSAICETILGALRSITLKAGSKMSEGIRNTLYETLVELISSNEDGIRLKAAAALGA
MCQILPQDQIEQLLNDNLLDINQMLDWSICHGRAVALSYALYHAPSQVFDAVDEDDIVEAVVKY
STYDRVPICTYGVHSLGHLLMFSKDNADVAPQIVVSSIKKTLLNSSVDIRLASLSTIKHVSRNTPEV
MTFERIRYLIPEFISLLRDRNTSVRSSAEITLAFTLQMDKNDILFDECVNTISEASHFLEEFKKNTFSK
LNDSLATKDDYFFAT*
>TRINITY_DN8903_c0_g1_i1.p1   type:5prime_partial   len:447   gc:universal
TRINITY_DN8903_c0_g1_i1:1546-206(-)
DMATKACGLENMCVGSYKSWRCICQAPRYMQDPDNTQSCIHAPCRIEDCGSGYAPGSFQYYAES
CNGTFFNPICNCQEEYEKDMLGGCVPKSCRENPIAVAECGENGYCKGTYFKYECGCQGPKYVQN
PRNTRQCIEAPCNVQNCGHGFENELYVSFADSCIGKHADYTCQCKEGYTGTGTSRCIPDGKECGK
SYCHANATCAPLGKGEFDCTCKPGYSGDGLYCFLDGGWSDFVNTRECNASCGTHGYAEVTRYC
NNPVAERFGKQCGAKSPEQLEVPCNRFDCLGCTVKKDCRCTSVVKPLIVEGYNEPEETLKFFTDL
HPDDVKKAKDTLLKWKAFSNENLCRKYNKTTLHAKFFGVRDAAKEVNKMKSSYGSARDSMRI
KLDCNINIAKKTQYFGVYEMIVKRLFIMKQVVKDLHIIEDYVLKHMENCDDSPVGMIRNTFGK*
>TRINITY_DN106952_c0_g1_i1.p1   type:3prime_partial   len:135   gc:universal
TRINITY_DN106952_c0_g1_i1:18-419(+)
MSDAAAPKGGKHAPKVAKKGEKRAGKKGGKIGGGSEKKRKRKRKETYAIYIYNVLRQVHPDVG
VSSKAMSIMNSFVNDIFERIASEASRLSLQNKKSTISSREIQTAVRLLLPGELAKHAVSEGTKAVTKY
TSS
>TRINITY_DN433_c0_g2_i1.p1 type:complete len:144 gc:universal TRINITY_DN433_c0_g2_i1:1496-
1065(-)
MAQQTTVPRSFKLLEELEEGQKGGDGFVSWGLEKDDDMNLEFWTGMILGPPRTPFENRMYNLK
IRCTDRYPLEPPIISFVTRISLSGVDANGKIDRRACNVLKGWQTKDSIKAVLTDLRRMMTLKDNLR
LSQPPENSQYGPSR*
>TRINITY_DN5276_c0_g1_i12.p2   type:internal   len:228   gc:universal
TRINITY_DN5276_c0_g1_i12:683-3(-)
AQVFLYAANDSGWFDASGNTDFDGMLMLSAMKKEERAPGDEGWRPPLLATDDAELKKKRLNA
EIANCRLATMAISGMFFQDGLTGSAWGDWSLYTASPLRAFESELGVQAPVGFWDPLGLSKDGIM
DNFKRRRATDVKHGRISMLATMGYSTPEFFKWPGFLSPGNSLKFADIPNGLGAISKVPLAGWAQI
FLYAGFVENSANDFGWFDGSGNTDFDGKLMSSAMKK
>TRINITY_DN4101_c0_g1_i3.p2   type:5prime_partial   len:133   gc:universal
TRINITY_DN4101_c0_g1_i3:3-401(+)
QAILAQGLPLPPGGGPPAACRAPRGGVMSGIGAFAQLAHKFVTWPQGSTQGFCNVIKIGTFCRT
VVWPCLPPVLMYQYIRGVDEDAYTLEVLHYKAGSKDPKAFFDSSRIGLSGHWRLQQDLETIRAAV
NAE*
>TRINITY_DN468_c1_g1_i1.p1 type:complete len:191 gc:universal TRINITY_DN468_c1_g1_i1:676-
104(-)

MKTFYTILLLAIVQTNAFFFPKVDTVKDLDLASYTGRWYEVYSSLIQRATFQRNSYCTTADYSLKPS
GAIKVINSGRLKSATGEENTIEGEAKVVDAKEPGALNVKFSTGPQSDKANYLVVKLGPVVDGKYD
YTVITTDYKALVWVLARNPETFKQKYEKDVLAYLKKNGYNWFINKPRPTYQGKDCIYI*
>TRINITY_DN167010_c0_g1_i1.p1   type:5prime_partial   len:506   gc:universal
TRINITY_DN167010_c0_g1_i1:1755-238(-)
SQQNKLLGCYRYLHYNYNYKQNMAGVTSGPKFFDIYELKEELGKGAFSIVKRCVHKENRMEYA
AKIFNTRKLSTRDLQKLEREARICRMLKHPNIVRLHASIPEEGMHYLVFDLVTGGELFEDIVAREYY
SESDASHCIQQILESVLHCHQLHVVHRDLKPENLLLASKEKGAAVKLADFGLAVEIENDKYTWH
GFAGTPGYLSPEVLRKEPYGKPVDVWACGVILYILLVGYPPFWDEDQQRLYGQIKAAAYDYPSPE
WDTVTKEAKELIDCMLTVDPKRRITATEALKHPWIAERHTCASTFHRQETINGLKRFNARRKLKG
AILTTVFARRISGTSGGLFASAAKEKLINDKARKPSEDEVMLPTEEEDAMKATREQEIIKLTQKLIA
GITMWDFETYTKLCDDRMTCFEPEAKGNLVEGLDFHKYYFDNMKQHSLPINTTILSPHVILLSEES
ACISYIRLTQLMDCNGRNSTFQHEETRIWQRKGSQWRCVHLHRSSNST*
>TRINITY_DN160_c0_g1_i1.p1   type:complete   len:1145   gc:universal
TRINITY_DN160_c0_g1_i1:4810-1376(-)
MRLLAIIPLLVMLDIAKSDKLWECNFEENDCWAASSTRNHERNQLTLHWNRWKMRTPTGATAS
PVTGPMEAFEGKHYLYYEATESMDKLKMADGASKGVVTFKDINLMGRTQFILSFYYQVKGNDG
DFYDFDLMVSNTENTHYDLSMKSIDGKDWKHFKHIMKVEGAGVTSIDLKFTARSYGAFADYAID
NIVIEDYPDAGPCKDNRCLANEYCTITSSTQTVCVAKCTQQACGENAECILDSLAINKCKCRQGY
LPRVSNYGDKLNCYRPDASCDIEYNSLGQCRISTSIPIMYGHPSLWHGRYSPVSGNGYYVFKYDNT
ITLDAVSSQKLSFFYLVDNPNMINSLTVEYGSRKFEVPINREKTNIWTLYEVLILASTNQGVQIKASF
YAEGGVIGIDNIQFTQQNEVVVEKIYKESMMAATFEDGSVPTDLKVAMLFVTRYGKIDFGCLPGIE
LETRNGKLYCKDGVVQRQSACSQDSDCIGSNARCVLRNCVCNTNSYQISIGTYGEKATSCAVYPC
EINSPRCHSTAICSNIKTPGQNFYNDYTCKCGRSLNNVETIINPFIGGDKSTQCLAATPSDSYVCND
NNFKPSRTTEYCLKGNQATVEYSLRATNFGNYALFKHCDDPDDEYRSSFNDPGSFWRPIDLVAAA
NENLAVSVTYKTSLSNKFIKCNFEQARFGSKLTLAVNVNSNSRVLTFTNTQTSVNKQNPVYQGQV
FQSDNPTPGAEMSVTFTVTGNQAVDQNVDAILLDNVVCKGFDDVASVNTPCGNNACASNQYC
NPLLSNSEKECLCPTGQKDQNCPDVVPSGSVVSADGPKCIGHHEKYMNGACVCDDGFEKTGDT
CTVKINCGCNDGLCLSGDKCSCPLNLLKVNQACVRTNKDCAKDCVSTLGNGGYCDVTTGMCD
CLTGFVKSGRDDGSYRCDKHAVVQKINDPKGICSATCGTGFVNEIEVCVGATGTGFECMTNIVQG
TLGVCSLPACPATSSQCSIQKECACNNVRVPIGSDGKLRLDFDHEAKLNMIFRFLSKHNQKDLEFK
FREARCDNTKLDSIARTIEDDLKQLEFDTELQAAITTMKSILDCSPSGNDHNAAYWDVFDMLIELS
SYRPHAVSDLQLKKELVMHEQSRCGMRSNLHKVVDGYAFWNKK*
>TRINITY_DN1797_c0_g1_i2.p1   type:3prime_partial   len:998   gc:universal
TRINITY_DN1797_c0_g1_i2:2993-3(-)
MSKIKLNIVYILLLVLWISIVHSQSQDDRCPAIDNEQECPPPDSLNNECLENSDCAGNQICCGDGC
ELKCVVAADELCKVPIDLGFILDSSGSIGSKFDNVKIFVEKIIDAFVIGEDFTHIGIVEYSENASVVLA
FNTYQGAELTKANILTELRKMSLIGGHTRIDLALEVASRDLFSAKGGVRPGKPKIALVLTDGKQTR
GKLAPDAKDLHIASQPLKDSEIHVYSLGIGDDYDIGELLDIASDDTSVFRSQDFDELLNIVSQITEET
CKGCTRAIDIHFALDTSINVGRENFEYMKNFVEAIGYRFVISETSSHMSASIFGEEPMLMFLMNEAT
EQNMFLEEVKQLQYIESANGNMDRLLRMVYDDIFTLEGFTRQSVPKVLVMLTASNCDSCDERVEE
AVKPLKEQGVHVVTIPIGNNVNMDEINAMASYPSSEYVVPRQTYVGLMNDFFIQKVSDMICSGRP
GVCAEPPVEGSCDTIIQECTTDVKCEGNRKCCIKNCKASCELPVSACITPVDLAFAFETTRNGEAD
FENAQKFAANLLDHFKIDRSTTHVSVSTFSETIGTSTFFNEEYDKSNIQQFIKDLGSDSGDQSNLGD
FLEFASRKIFSVQAGLRQSTPRVLVIFTNGIVSAEQSLKAQQEAQKLKAEGLDVSILVVNIGGNIGSV
DLFESIISNGRIFSYVESSELSKFEAETDLAEAICATKVRVRRCPPKRTPDTCNVKDDLCSSDFDCPG
YQDCVSDGCRLRCQTCEYRCEDKLDLLFMIDSSYRIGAEGFQKAKENVNKMLEWFTIAPDNTHV
GVITYSDTANIAMSLPPLGTNNPPQSLPDVQGRINAIPYNGGSKSYLDEALKLAAAQVFVENSDRF
RKGSKKAVVIITDGKDDSTSRLDLASWPLRKQRVVVGKEDYSAIHILAVAIGDELNTNALENVVTP
TLEENFFFAANYKDMYNEIRKLAKSSCEYAGAFTAPPDIYMKGEPGPPGPPGPKGDPGPDGPDGT
R

>TRINITY_DN7314_c0_g2_i1.p1   type:5prime_partial   len:142   gc:universal
TRINITY_DN7314_c0_g2_i1:541-116(-)

AEATEAPVKYVESAADKRLFEQVYVQYAQEYLKGPLYWDPNKLQGIDPQFPGNPITVDGKLTSNT
IGNLKTFSSNELAFFSFLFFGIGLYGNYMFNYGDPQFEKVIRDGGYLNASYIVEAIFLPISFFFHIACYI
QRKNGK*

>TRINITY_DN79126_c0_g1_i1.p1   type:complete   len:115   gc:universal
TRINITY_DN79126_c0_g1_i1:397-53(-)

MVARLVLRRRLSYNTKSNRRRISKTPGGKLVYLYTKKAGATPKCGDCKCKLRGLKAVRPKKLAKL
SKTKKTVTRCYGGSRCGGCVRERIVRAFLIEEQKLVVRVLRAQQVKKSS*

>TRINITY_DN691_c0_g1_i2.p1   type:complete   len:1673   gc:universal
TRINITY_DN691_c0_g1_i2:5503-485(-)

MMNLFRLIVLGVICFSYEGDAQQCGGSCSPCGNLCVGMKGDRGTAGLPGFRGPPGLPGFPGPEG
PIGQKGEKGPAGLNGMEGSQGARGKVGPPGLPGTPGRHGRPGNEGREGEAGLPGCNGTKGDR
GPEGPRGRDGIEGPQGLQGNVGPRGEPGDSTATKLKGQKGEPGSAGQQGEKGGRGMEGMKGD
TGKPGRNGRAGERGPKGEPGTSNVTIIGEKGSKGSVGPPGLPGRQCQVTGDKASNIAQGQKGNQ
GSKGEEGAKGEKGDAGLAGPQGEEGDIGPQGDRGDDGPQGPPGPEGEQGRSGIQGNKGQKGE
VGNNGKDGNDGQTGLTGQRGRQGTPGQKGEPGKDKKGLRGPEGAKGERGNDGEKGSDGPIGP
IGPRGPKGELGPLGMKGFKGSIGSAGPKGENGNPGDPGIKGRRGELGIKGDSGVKGAPGNPGISV
TGPDGMDGDTGPRGQSGGKGAVGFPGKPGPPGVVTIDGEEVLPGEPGPQGLKGFRGVQGDAGS
KGSRGEKGNACESSKCPAGPKGEKGLSGQDGLQGGDGEEGEKGEKGDKGDIGSRGDTGSRGEP
GPQGESGEKGEKGIQGPQGNSGKDIIVQGERGDKGTKGNAGTPGSIGFPGERGSPGESGDRGLSG
VNGLRGETGDRGARGVAGKPGVNGQKGQKGEIGSGARGFKGDKGEVGPDGPAGLRGPGGPVG
PKGDPFPTAVNGKTGEPGEQGAAGPKGAQGPVGPEGPRGFPGDIGPVGEPGDGEKGERGDDGA
RGERGEKGEPGQDGKDGDPGPKGEPGQEGKEGPPGMFKGNKGEKGATGLPGVDGLPGNSAPK
GEAGKDGQDGDPGPAGEKGDPGEAGSPGTEGPIGEDGPVGDKGEPGESRAGPKGNEGRAGAK
GENGRDGRAGRPGIGRPGDKGELGQKGEAVIGAKGSKGEQGLEGPPGPIGKPGVKGDAGVPGK
DGEAGGRGKDGERGLPGDKGDTGDIGFNGSPGAPGDKGEPGYSGQKGAKGMSGPRGPPGSTSN
VVGPKGNRGLPGMKGEPGQQGEKGLIGPQGSKGESGFGSEKGIKGSRGNPGAVGPSGEKGERGD
RGKDGLQGIAGPRGEEGNPGEKGSRGDQGPQGREGPSGELGPEGQKGDPGFAGEKGEKGDRGG
DGQKGDAGEPLRGEPGVAGPPGPTGPQGERGPKGEEGNMGPKGSQGRDGLTGEDGPKGSKGEP
GLDGDVGEKGEAGFQGLQGEKGNQGPQGLEGSTGMDGQKGQIGEKGVEGPPGPPCEPVNSVR
GETGEEGPKGDRGPKGQKGKPGPQSQAATPGEKGSKGEVGQPGPQGIKGEPGREGDFGPKGSPG
AQGEKGDQGQKGEPGQEGPEGLKGEPTRAFGPKGQKGETGLEGLRGPVGPKGEDGQTGPQGP
DGPKGNEGEKGDFGINGLNGAAGPSGPKGAIGLKGDSGPPGPTGAQGPRGSGGSPDFGFYYVK
HSQTTIVPSCPAGMKTLWTGYSFLYAQGNERAYGQDLGQPGSCLKRFSTMPYLFCDLQNQCTVAS
RNDYSFWLSTDEPANMMKPAAGPEVEPYISRCAVCEAPANILAVHSQSVIVPDCPNGWENIWAG
YSFLMYNSAGADGSGQLLASPGSCLEEFRANPFIECHGRGTCWYYGPTLSFWLSTIDDSNQFQIPK
SETLKAGNLKTRVSRCSVCMKTVRNGNFP*

>TRINITY_DN187823_c0_g1_i1.p1   type:complete   len:611   gc:universal
TRINITY_DN187823_c0_g1_i1:1943-111(-)

MWRRIFNFRVSQLDLIKSPEFRYHYLFILPKSLCTMGDNEKISKNELKRRLKLEQKAKDKAEKQAA
TTAIAQEKKAVKSTLNVLVPDEENLDPNQYYKIRQQTVANLKSSGDNPYPHKFEVSISLTDFITKYS
SIEAGKWQDDRVSVAGRIHAKRLSGQKLIFYDLRGEGVKLQVMADQRSSEQDFAQIHGKLRRGDI
VGIKGKPGKTKKGELSIQPSHVELLSPCLHMLPHLHFGLKDKETRFRQRYLDLILNEKVRQKFYTR
SRIINYVRRYLDQMGFLEIETPMMNMIPGGATAKPFVTHHNDLNMDLYLRVAPELYHKMLVVGG
IDRVYEIGRQFRNEGIDMTHNPEFTTCEFYMAYADYNDLIDLTEKMISGMVKLLFGKYKVTYHPD
RNEEGDGEPLEVDFTPPFRRMSMLEELQKVLNISFPNFDLHSEEARKYFDDLCAQKEVDCSSPRTV
SRLLDKLVGEFLESQCVNPTFIMDHPQIMSPLAKWHRSKQGLTERFELFVCCKEICNAYTELNDPL
VQRQMFSNQAKDKAAGDDESMFYDEGYCTALEYGLPPTAGWGMGIDRLCMFLTDSNNIKEVLF
FPAMKPEEKVREVPLSPTKVNP*

>TRINITY_DN2772_c0_g1_i3.p1   type:complete   len:142   gc:universal
TRINITY_DN2772_c0_g1_i3:476-51(-)

MSDAEGDDVPVQQEVAAGGPMDINTALQEILKLSMINDGLARGLRESVKALDKREALLCVLAN
NCDEQMYVKLIEALCAEHEIKLIKVDDNKKLGEWAGLCKIDKEGKARKIVGCSCVVIKDWGKET
QAHEVLKDYFQSKS*

>TRINITY_DN276_c0_g1_i1.p1 type:complete len:151 gc:universal TRINITY_DN276_c0_g1_i1:653-201(-)

MSTEYSESEMMEYRDTFSLFDKQGDGKVECSEIGEMLRALSLNPTEAEIKKIIAEIDPTGQKRVTFE
EFIPLYHTQSKKKVTGNFESFAEGFRIFDRDSNGMVNVGEVRHLLTSLGEKLSADDVNILVQGME
DSNGMVNYEEFVRGVMNG*

>TRINITY_DN2217_c0_g1_i2.p1 type:complete len:254 gc:universal
TRINITY_DN2217_c0_g1_i2:884-123(-)

MNSVDGNTDNAQKECLELCQRNAKATGCEVIWNRHNRGCYIHTQEVARGNNVDRHFCWVFS
KCTLNNVPPAVCPIEKGYCVKGNGHDQNSGVIKMNSVDGNTENAQKECLELCQRNPKATGCEV
IWNQHNRGCYIHTQEVARGNNVDRHFCWVFSKCTLNNVPPAVCPIEKGYCVKGNGHDQNSGV
IKMNSVDGNTENAQKECLELCQRNPKATGCEVIWDRHNRGCYIHTQEIARGNNVARHFCWVFS
KCNL*

>TRINITY_DN6397_c0_g2_i3.p1 type:internal len:130 gc:universal TRINITY_DN6397_c0_g2_i3:387-1(-)

LTSSDQAELTKKLSAEVANGRLAMMAIIGMFFQDGLTGSAWGDWSLYTASPLRAFENELGVQDP
VGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVP
N

>TRINITY_DN16548_c0_g1_i4.p1 type:internal len:171 gc:universal TRINITY_DN16548_c0_g1_i4:2-511(+)

LYTDSPLRAFEGELGVQAPVGFWDPLGLAADGDSVAFRRRRVTEIKHGRISMLACMGYITPELVG
KFPGSLSPSQGIEFADVPNGLAAISKIPSYGWFQIIAYCLYCEASALNFGYFNEAFDQKAPGDYGW
RPPLLATDDAALKTKRLNAELANGRLAMVAIIGMFFQDG

>TRINITY_DN571_c0_g1_i2.p1 type:complete len:186 gc:universal TRINITY_DN571_c0_g1_i2:192-749(+)

MREYKLVVLGSGGVGKSALTVQFVQGIFVEKYDPTIEDSYRKQVEVGSQQAMLEILDTAGTEQFT
AMRDLYMKNGQGFVLVYSITAQSTFNDLMDLRDQILRVKDTEDVPMVLVGNKCDLEDERVVGK
DQGQSLAKQFGNCTFLETSAKMKINVNEIFHDLVRQINRQPENTKSERKKKGCTIL*

>TRINITY_DN902_c1_g1_i1.p1 type:3prime_partial len:153 gc:universal
TRINITY_DN902_c1_g1_i1:146-601(+)

MIRIAIIAIAIAACVYESQAVRCHVGYSAADLPLAMSVRDVECGQGFDHCVTLKYVLDGMKITQG
NCATKFGQATCQFMRNSHAAMTDCSEAICSGDHCNSAVKEAEKIEMKRVGAYENTLKCTTGLQ
SDFPNIPFASPNVPYAVDECFPGT

>TRINITY_DN2885_c0_g1_i2.p1 type:complete len:114 gc:universal TRINITY_DN2885_c0_g1_i2:31-372(+)

MAQPVRLYSKGIFVGYQRGLRNQHEQTSLIKIEGVNTKADTSFYLGKRVAFVYRVSKKTVAKGDK
KPSRIRVVWGKVTRPHGASGVVRAKFRHNLPAKAIGGSVKVMLYPSRI*

>TRINITY_DN6294_c0_g3_i2.p1 type:complete len:134 gc:universal
TRINITY_DN6294_c0_g3_i2:817-416(-)

MGYKRFVEAGRVALINKGKYDGKLVVIADIVDQKRLLCENPVKSVPRHVVRTQDVNLTDLKVNI
PCGARGGKIRKEYEKEEVDSKWEKTVWAQKIKARHVKRTLSDFDRFKSKIQKQRRNRKVKAVLK
SMKKN*

>TRINITY_DN902_c1_g2_i3.p1 type:internal len:178 gc:universal TRINITY_DN902_c1_g2_i3:2-532(+)

AVFKCIKLNYIDHIIKMIKIAIIAIVITALVHESTAVRCNVGYSTADLPMAMSVRQVECGKGLTHCN
TLSYKLDGMSVTQGNCATSGGQASCLFMKNSLQSMTECSEAICNGDHCNKAVKDAENAERARV
GPYKNTLKCTTGLQTDFPDIPFASPNVPVGVDECFPGTKECVTMTYD

>TRINITY_DN3870_c0_g1_i1.p1 type:3prime_partial len:990 gc:universal
TRINITY_DN3870_c0_g1_i1:2969-3(-)

MPQYFQKPENALKRANEFIDIGKKEAALDVLYDVIKSKKHRNWQKIHEPILRAYLTLCVDLKRSV
NAKEGLYQYKLICQQVNIVSLEEVISFFLQLAEKHADEAKNQSIDKVVVEDLDQVQTPEGILLSSV

SAEDAQDRSDRVLLTPWVKFLWEAYRNVLELLRNNNRVERLYQETSQSAFRFCLKYNRRAEFRKL
CTLIKNHLDQVLKYQGQPTAINLNNPESLQMHLETRLFQLENAITMELWQEAFKAIEGIHYLMQ
MSKKPPKPHMMANYYEKVALVFFKADNKLFHAAALLKLFVLIKEQKKTVTHGELEKIGNKVLL
AVLSIPSPPGRSSMEEYLSYDTVSYDKERRLTTLLGLIGIPSRKSLIGDLKSQILPHVSSDLQELFSLLET
KFQPLTMGKRVNEILESVKENDTLVQYIQSLQRITMVKTLKQVSQIYETITFPRLLRILPFTDVHQLE
RSIVSCVKEEDLQISINHQTHSLSFGSTLQVALKEEVPDGPYIQAMPSEILRSQLCSLSEGITEIVRVLE
PEKIQNGILTQRKTLIDQYMRQERKEHVQLLNRKSVIEARKERIESMKNAQERQEQSQLHKQREQ
LKKAEEQRLEAEREKREKERKIQEMKDIQKQQVWDRVESLRGTDIGKRAFKNLSAKEIDEMDPD
DILQRQFEQIDRDKREQTLKLRTQEKRVDHLARAMRMEEIPLREKFIQEKYDLDKEQWNKDEEER
IKNAEKEHHIALKTKDRLIRMLDDRNIFLDKLFGNRNAEYQARLEEFEENLNKIKQERLEARRRK
RMSQRRQEFIMARREEKRKEREEQLRREKEREEQRRKEEEEQRLREQEEKQKKLEELAQKQRERE
LEIEQRQRQRAEESENLRDRGDGPRDRIDGPPSRDSRPTGSVAGGKYVPPSRRSVNPSDGGGDGG
GWRRGDDTPKRDGDRFRRDDDRFRRDDDRPRQEDDRFRRDDDRFRRDDDRPRQEDDRFRRDD
DRFRRD
>TRINITY_DN1631_c0_g1_i1.p1 type:complete len:124 gc:universal TRINITY_DN1631_c0_g1_i1:62-
433(+)
MAEAPKPKPAPKSRYGPSFDDIERRDPAQWHAAHNAWVLERLVEQETVKIYRERMDECYWKEQ
ENFPQNCRKHILKYWKAWNDWKKKDWGQTEEGSVYRFRVPVEEYYREVEELYKNKDKGNE*
>TRINITY_DN8101_c0_g1_i2.p2   type:complete   len:820   gc:universal
TRINITY_DN8101_c0_g1_i2:2597-138(-)
MDGKTGASLKLTILNDRGRVWTMVAGGGASVVYADTVADYGWGHELANYGEYSGAPSTEETFV
YAKTLLSLMMKYKHPEGKFLIIGGGIANFTDVAATFTGLIQALQHFAAEIKEHKIQIWIRRAGPNY
LEGLRKVKAASDKLGLGLKVYGPETHITAVIPMALGLTTPLPEPDLSQACGPPRRAAIAGAGSKPS
TQKAAPAPSAHTIVTATPETTSIVYGLQNRAVQGMLDFDFMCKRKKPSVEAMVFPFSGNHYVKFY
WGTEEVLMPVYTTTKEAVQKHPNTSVFINFASFRSVHETSLEAMQYPNVKTLAIIAEGVPEQQTR
QLIQTAEAKGVGMIGPATVGGIKPGCIRIGNTGGMLDNIVMSRLYRAGSVAYVSKSGGMSNELNN
IVCRNSNGVYEGVAIGGDRYPGSRFLDHFLRYQDDAGAKMLLLLGEVGGTDEYDLIEAVKSGRIT
KPIVAWCVGTCASCFATEVQFGHAGAQARGDMETAAAKNKAMREAGFHVPDSFDKLPELIGQV
YTQLVQEGVVVETPEAETPQVPMDYTWAKKLGMVRKPANFISSIADDRGEELKYCGVTISEVFAQ
ELGVGGVLSLLWFRRQLPPACTKFIEMILMVTADHGPAVSGAHNTIVTARAGKDLVSALCSGLLTI
GPRFGGALDDAAKMFAEAQDSGVSAKDFIEKMKKTNQLIMGIGHRIKSLANPDQRVVLIKDYAK
KHFKNTPVLDFALEVEQLTTRKRANLILNVDGCIAVCFVDMIRSCGAFSREECDDLMAFGCLNGL
FVLGRSIGFIGHYLDQLRLKQPLYRHPWDDITYIQELAAQG*
>TRINITY_DN3034_c0_g1_i1.p1   type:complete   len:1941   gc:universal
TRINITY_DN3034_c0_g1_i1:6289-467(-)
MAEEEDPMKYLQVDPAQALKDQSKTFDAKKWVWVPVIGEDGYAAAQVIKVDGDNVTVETNK
GHEMEVKKEKCDQMNPPKYEKCSDMASLTYLNEASVLYNLKARYTTGLIYTYSGLFCVAVNPYR
RLPIYSDQVVKLYRGKRRAEMPPHIFAIVDTAYQDMLTDHDNQSMLITGESGAGKTENTKKVIQYI
AKVAGVEKKKSDDGPVKRDLDEQVVEANPLLEAFGNAKTTRNNNSSRFGKFIRCHFSQTGKLAG
ADIESYLLEKNRVIHQASAERNYHIFYQLLYATTDEELQKLCLVTRRSEEFEFLKKGVPSVDAIDDN
EEFGYTTNAIEVLGFDEEEKQSMFKICAAILNFGNMKFKQKPRDEQAEVADPADGERVAYLLGLPI
GEFHKSLTKPKVKVGTEFVNKGQNVSQVLYSVAALSKALYERMFWWIVSRVNKALDTKERRSYFI
GVLDIAGFEIFEYNSFEQLCINLTNEKLQQFFNHHMFVLEQEEYKKEGIHWEFIDFGMDLEETIDLI
EKPMGVFAILEEECIVPKASDQTYLQKLHKQHAGKNGSYEKPTPQTKSGGGDFILHHYAGSVGY
SVANWLEKNKDPINAHTAELFSKATVGLVSGLFADYNPDVTGGRRKGSAFQTVSFRHKEQLKNL
MTTLMSTSPHFVRCIIPNEKKTPGLVEGTLILHQLRCNGVLEGIRICRKGFPSRMLFQDFRQRYQIL
AASAIPSGFIDGKVAAEKLIDSLQLDQSEYRVGTTKVFFRAGIIGELEDMRDERLAKIITQFQAYCK
GHLARIEYKKMCEKRIGLAVIQRNVRKFLFLRNWQWWKLYCKVQPLLSIARAEEEMKEKEEELK
KALEKAKEDEEQRKKMEEQLTENIAEKEKLFADLQAETDRLINLEDKLMQIQQQKDRLEANLNE
TLEKLDGEEHSVSVLQEKMHDAEDRIDSLEAEASELKSNCSRLEVERANRDKQIDALNEDINKQD
ESIAKLGKEKKGLEDNIQELNETLQASEDKCSSLTKAKKKVEDALKESENSLSKEKDSKARLDKEK
RRVEGELKETNDKLSEAENELKNTQDTVYKREKAIKELEEARDNQDNQIKQLQKKIQELLQRIEE

LEEELEAERKQKQKSELSRKELESQIEELQDQLETAGGATHAQVEVSKKREQECSRLRKEIEDINA
ANDEALASTKHKFNAQLSEAQEELESVKKAKSKSDKERSQLAGDLEDVQGQLDQVKKQRASSD
KNNRMLEEQLAELRGKVSSLETDMGDSESRNLKFQNESATLLKQLEEAEHKLGLANKQNKQLQ
ASLGESKNVADDEARGKHDMQNKLQNALAQIEELQEQLEDEQTAKMDLQNKYSRANADAQQ
WKNKYDMEGASRVEELEDAKRKLAARVQEMEEALAAAESKAASMEKVKNRMNEEVEDLLLDL
EKAQAQAANLEKKQKKVDQQINEWKLKCDEVQEELEKSQRDNRSYSTELLKMRTANEDTVEKY
ESLKKENRALAAELQSVSEQLSEGGKNSLEVEKLKRKLGLENEELEVALEEAELALEQEEAKFLKI
QLELTQLKQSTDRRSAEKDEELETLRKNHARQLEALQNTIDAEQKGKAEAQKLRKKLEGDLADL
ENRLEGSDRNSADYLKTIKKLQAQIKELQAMIDDESRGRDDMRDTASRSEKRAMDLAVQLDEAR
VALEQSDRLRKLAENEKLENAERVAELQTMYNSIANAKRKAEGDYHSLQEEIEELENEAKMAEE
KANRAMNECARLSSELNGAQENASNAEKSKSLMARQITELQQQLEEAESMGGKSLKNQIRKLE
QKVMEVEGELDNEARKSTESIKIARKADKRVKELQFQLEDEHKAVERAQEVSDKLNQKMKKMR
LQLEESEQQSSSWQSKFKKAVVDLEEAEERCESAEQALQKARQRARSGASGMTTRGVSRARSRVR
SPQNDD*
>TRINITY_DN7504_c0_g1_i1.p1 type:complete len:414 gc:universal TRINITY_DN7504_c0_g1_i1:87-1328(+)

MAKIPGGIVVEMDGDEMTRVIWDMIKTKLIFPFVDLDIKSYDLSIQNRDNTDDKVTVDAAEAML
KYNVGIKCATITPDEKRVEEFNLKKMWKSPNGTIRNILGGTVFREAIICKNIPKLVPGWTKPIVIGR
HAHADQYKATDFLVPEAGTLEMKFTPKGQTEPTISYVVNNFAGAGVAMGMYNTDKSIRDFAHSS
FQCALEKNYPLYLSTKNTILKKYDGRFKDIFQEIYDNEYKGKYEAKGIWYEHRLIDDMVAYALKVE
GGFVWACKNYDGDVQSDTVAQGYGSLGMMTSVLMCPDGKTIEAEAAHGTVTRHYRLHQKGQ
ETSTNPVASIFAWTRGLAHRGKLDGNERLMNFAKLLEEVCVATIENGSMTKDLAICIKGMKNVTR
ADYLNTTEFLQKIADNLTTKLNLSHL*
>TRINITY_DN163801_c0_g1_i1.p1 type:complete len:298 gc:universal TRINITY_DN163801_c0_g1_i1:55-948(+)

MANPLKDIISRFSKGVPAGSSTGLGLLIGAGLAAYGIKESIYTVDGGHRAIIFSRIGGIQPGVYSEGL
HFRIPWFQYPIIYDIRARPRRIMSPTGSKDLQMVNIGLRVLARPLSSTLPHMYQRLGLDFDERVLPSI
CNEVLKSVVAQFNASQLITMRQEVSLMIRRDLTERAKDFDIILDDVSITDLSFSAQYTAAVESKQVA
QQEAQRAAFLVERAVQERQQKIVASEGEAKAATLLGEAMNENPGYLKLRRIRAAQKVARVIAQS
QNKVYLNANNLLLNIKDTDDIDDGLLSKKR*
>TRINITY_DN761_c0_g1_i1.p1 type:complete len:830 gc:universal TRINITY_DN761_c0_g1_i1:129-2618(+)

MTSMFRSEEMTLCQLFLQSESAYACVSELGEIGVVEFRDLNPDVNAFQRKFVNEVRRCDEMERKL
RFMQKEIDKADIAIVDTGENPDAPHPREMIDLEAQFEQLENEMKDSNSNYEALQKSLLELLELRH
ILKKTQSFFEEEGYAETQARLQADHEPGVTGGGQLGFVAGVINRERIPTFERLLWRACRGNVFFK
QAEIDTALYDPGTGDLTHKCVFIVFFQGEQLKIRVKKICEGFRATLYPCPETPNERREMAIGVKTRIE
DLETVISQTQDHRHRLLQTIAKNIRVWLVKVKKIKAIYHTMNMFNLDVTQKCLIAECWAPVADL
DSIQAGLRRGTERSGAQVSSIVNRMSTKQDPPTFNRTNKFTKGFQAIIDAYGVASYQEVNPALYTVI
TFPFLFSVMFGDCGHGAIMALFALWLIMNERKIANWKAGGEMFDTVFQGRYIVFLMGLFSIYSGL
LYNDIFSKSLNIFGSAWVPTLNRTKYDYQPENYKEWSDGDRMLNPLDAPRETPYYFGIDPIWQLTS
NKLTFTNSLKMKLSVIFGVTHMIFGVILSLFNHLHFKQYVNIFCEFIPQLLFISCIFGYLVILIFYKWIA
FSIHSPSQPSILLGLLAMFLNFAKKKTDADRLYNGQDFLEPFLVVVAVICVPWMLLIKPFYLRWQH
NKKKQHGTNFARLHEDTAPLQDNEVNHHDDSGISSKNEEEEEFDFGEVFVHQCIHTIEYCLGCIS
NTASYLRLWALSLAHAQLSEVIWTMVFKIGLSMDGYVGSVAIFAVFAAWAILSVAILLIMEGLSAFL
HTLRLHWVEFNSKFYVGAGSKFVPFSFKDIMNDEAF*
>TRINITY_DN309_c0_g1_i1.p1 type:complete len:454 gc:universal TRINITY_DN309_c0_g1_i1:65-1426(+)

MSNCEHKTQKITIQKKTVKVTSQREEDEYVKARKEGKKYILPWKTPDGLQPPDGFTNLKYIFTPDS
SNVPSSAEKIDEEPLMQKMKPDPSRIENPPETGIRATWLGHCSVLFQLDNVNVLVNPNFNDRGIK
YYFPGDNKRYRTCVYKVDDLPRIDVIFITNTHYDYLDLSSVRALNNKYGEMLLWYVPIGVGEWM
TKAGCHNVVEMNWWREDEVDFIDHTKIDDDEETTTTTFNISCTPSQSFHSRTFDEDNAALWCSW
VIKSPRYKLFISGATGYCDIFKVIGRKYGPFHMAALPIGGYHPKDKFGYGNVTPEEAVQIHQDVLA

MCSLAVGWGTFTLSNEYYLEPPRRLNEELSKQKLSEMQFFLLKHGESRLIEIKEADKDDDEPPQEN
GVPPVVPPVDDTIEGEVCGEEKKDDDDSDVLQQLVDNFTMDEEKKSEEEEEKSEEKEEEKEE*
>TRINITY_DN77_c1_g1_i1.p1   type:3prime_partial   len:1965   gc:universal
TRINITY_DN77_c1_g1_i1:2-5893(+)
MGVQVYSLGIGSNYDIGELLDIASDDASVFRSQDVDELVSIVASITEQTCKGCTRAVDIHFALDASQ
NVGRENFQVIKNFIKAIGFKFIISETGSHMSASIFGEYGTLIFSMDQATQQEDFINEVDNVPYIGDFN
GNIDKALDMVSEDIFTFDGFSRQGVPKVLVVLTASNCDSCEKSVEEAVKPLKAQGVHVVAIPIGSN
ANMEEMDKMASYPTQDYVIPRASYEELLNGVFIQKVSEMVCSGRPGVCEEPPIEGECTEIINECTL
DVNCPANRKCCIKDCKASCEVPAAACITPIDLAFAFETTGFIEENFDEVKSFASSLLDHFRVEPAKT
HISISTYGESVNAKTAFYESYDKSALKQFIKDLEPDGGRQANIGDFLKTANDEIFNITNGIRQSSPR
MLVLFTNGVYSNDQIAKAQEESLKLKAEGQDVNILVINIGSIVEGNSVLRDVVSTPDFRNLHNVT
DLRRLVNFGFENKIAEAICASKVRKTRCKPRTPQACSVRDDLCQTDFDCPGYQECYSDGCRLRCQ
TCENRCGDKVDLLFMIDTSSRIGPEGFKNAKENIKKMLEWFTIEANNTNVAAITYSDNANYAMQ
LPAAGSNDPPQTLFDVQGRLDSIPYSGGSKSNLDKALKMAAAQVFYQNSLRLRKDSKKAIVIVTD
GVDDSTSRLEIASWPLRKQRVVVDGNDYAAIRLLAVTVGNNYNLDTLEKVVSPPIDKNIFLAADF
DDMYNGIRQLAEDSCKYTRQDVEPPVIAVKGDPGPKGEKGRQGNPGTNGTDGMDGIEGPKGER
GDDGPKGEKGDTGIAGPPGGDQGDLKGPDPMAEAVGIIEGTAVKGTRGVTYDLRDGPIGPPGPIG
GVGKTGLPGDSGEQGQKGRGGPPGLRGVFGGQGPKGNPGEDASPGLPGEPGPKGISGKKGPTGS
PGMPGPQGPFGYKGEQGIIGQPGDPGDGGKKGPKGYAGEKGDQGDIGDAGFPGPDGKVGPIGP
PGQRGLRGPEGSSGPIGKTGDIGNKGLPGPRGSRGLKGQSGNAGPRGGKGRTGDVGLVGEKGTQ
GSIGEAGQEGQPGVPGKEGPPGYPGPIGTPGPMGSRGDIGPQGEEGPKGSLGLKGNRGEAGRRG
LTGEKGETGDIGELGPKGAQGQQGKQGKTGKIGPRGQQGPLGFQGLQGQTGDPGQNGRQGPK
GNLGPTGEKGADGPKGSLGSAGLTGPKGLVGEPGNVGRPGLPGRDGKNGPQGANGKDGDPGA
SGPQGLQGSPGSMGTPGSTGDPGSPGDRGATGAVGDKGTRGDSGVRGEPGAFGQQGPPGLRGE
RGEKGPQGTNGVQGSPGPRGTPGLEGLDGIVGRKGTAGRPGNPGQSGEQGAVGSIGVPGPQGIS
GTPGERGDGGSDGGPGEQGPPGLQGSSGSPGRDGMPGRPGQQGTTGGKGKTGLRGPKGANGQ
NGVQGARGPDGLPGAPGLVGNRGTPGPNGIPGLDGNPGPAGKQGKQGKMGTPGMTGPAGLR
GPVGSPGLRGQKGPTGDRGDSGETGPIGVAGDIGPRGFTGELGLRGAIGEMGQIGETGPQGMPGS
QGTPGAAGLTGPAGPSGLPGKDGNKGPIGDPGNAGNPGRDGGPGSPGKDGTPGEPGTPGSQGK
QGLKGPFGPQGAPGEQGQRGLTGRQGSGGKDGPKGFPGNDGSPGISGKRGPRGKDGTPGSPGPI
GKDGRPGKPGINGTDGDPGNNGPKGDPGERGDSGDSGSLGASGDKGKTGSEGPAGFVGPRGSN
GKAGVPGKRGKRGDQGRDGPRGNSGPDGIDGSKGFKGNMGRFGIQGPPGDAGLKGALGPDGT
VGHTGPQGNTGDPGPDGPEGPSGSKGPAGNAGQIGNAGYPGSPGDGGIPGTAGLPGPPGPPGPP
GDMSGAFSGNYWDFVNAGGLQKGPRYYGGRSKRSLDQQDNSIEKVFKSNYETFKNFDTVWNQI
VDDLVIQKTLGSSKNPALTCGDLFKTNPITKSGDYWID
>TRINITY_DN30365_c0_g1_i3.p1 type:internal len:239 gc:universal TRINITY_DN30365_c0_g1_i3:1-
714(+)
LTFIESLRLRYKKLQKQLEFLEVQEEYIKDEQKNLKKEYLHAQEEVKRIQSVPLVIGQFLEAIDQNT
GIVGSTTGSNYYVRILSTIDRELLKPNASVALHKHSNALVDILPPEADSSIAMLQADEKPEVSYVDI
GGMDIQKQEMREAVELPLTHFDLYKQIGIDPPRGVLMYGPPGCGKTMLAKAVAHHTTASFIRVV
GSEFVQKYLGEGPRMVKDVFRLAKENAPAIPSRHLLVQSQ
>TRINITY_DN1789_c0_g1_i1.p1   type:complete   len:393   gc:universal
TRINITY_DN1789_c0_g1_i1:1193-15(-)
MTIDTSNRDKALSDYSKKLIEHREVEARLKQVREQLKELTNDYDKSENNLKALQSVGQIVGEVLK
QLTEEKYIVKATNGPRYVVGIRRGVDKTKLRQGTRVALDMTTLTVMRMLPREVDPLVYNMSHED
PGNISYAQIGGLSEQIRELREVIELPLINPELFQRVGITPPKGCLLYGPPGTGKTLLAKAVASQLDCN
FLKVVSSAIVDKYIGESARLIREMFAYARDHQPCIIFMDEIDAIGARRFSEGTSADREIQRTLMELLN
QMDGFDVLGQVKMIMATNRPDTLDPALLRPGRLDRKIHIDLPNEQGRMDILKIHAAPITKHGEI
DYEAVVKLSDSFNGADLRNVCTEAGMFAIRSERDYVIQEDFMKAVRKVSDNKKLETKLDYKPV*
>TRINITY_DN47849_c0_g1_i1.p1   type:complete   len:689   gc:universal
TRINITY_DN47849_c0_g1_i1:176-2242(+)

MCGIFAYLNYGVPRSRRYILETLVNGLKRLEYRGYDSAGVAFDSEETLKNHECGISIVKTKGKVQSL
NDEIFDNDARAFEAELSYHLGISHTRWATHGEPSPLNAHPHRSSDDNEFVVVHNGIITNYKDIKL
LLAKKGYHTESETDTEVIVKLLKYMYDRDQESDNEKRLNFPELVELVIHQLEGAFALVFKSTHFPN
ECVATRRGSPLLIGVKSNKPIVVDQIPVMCTENGSPGDRTPNGTSIFDSGASAIKANFCVADDAAM
EYYFASDASAIIEHTKRVIFLEDGDIAWSKEGNLNIARMNNSTPAIRDVQTLQLEIQQIMKGSYSTF
MQKEIMEQPESVFNTMRGRVNFEKRKVLLGGLVSHMDYIKRCRRLIFIACGTSYHSAVATRQLLEE
LTELPVMVELASDFLDRQTPIFRDDVCFFISQSGETADTLMALRYCKSRGALLVGITNTVGSSISRET
MCGVHINAGPEIGVASTKAYTSQFLSLVMFACMMAEDRISKQQRVDDIIGALEVFPEKVEEVLKLD
KKIEELAAHFYKQKSLLVMGRGYQFATCLEGALKVKEITYMHSEGILAGELKHGPLALVDEDMPV
LIIALRDKTYDKCMNALQQVLARKGQPIIICSKGDEETKKLGNFCIEIPEVPDCLAGILTVIPLQLLS
FHLAVKRGFDVDFPRNLAKSVTVE*
>TRINITY_DN1989_c0_g1_i1.p1   type:complete   len:546   gc:universal
TRINITY_DN1989_c0_g1_i1:150-1787(+)
MRGNNRGSGGQRKSFDGNRTPNNNSNRGNYGGNKRNWSPSPYKKPQETPPKVSKDEPKHLTP
PVASMSKPTQKNTPDVIITKEVDIPKAQPDFMRHNDPVGKVPMNMKNDMAPPVMQGNPNNG
QGNNELENTKKEEKAPVNRVKYTGREGEKKFSGRCRLFIANMNNGTTEEDLRELFGQFGETGEV
FVNKEKGFGFIRFDFRHNAEIAKSTLDKTEFKGRNIQVRFATHASALEIHGLDRFASNEFIEKAMSI
FGKVERAVVVCDDRGRSKGYAIVEYEWKKTAQKVLDRFKGEMFVLGRLPKPVFAKPLSQVDEEE
GVREEDLERLQGIEGEREFPPRFISPSSFEYTWAKKWRDLYIEEEDKKARLDQELRDSRYKLELEME
SALQEQEALKMREGLIIELRSRQEELRRLEEGLMRRQEITARITRDQDDRKQEFNRSRDESQYPME
GMADTNQSDYNIQQQTEFDTHQGNFDVNRQDLMHQNANIPISGVAGFPQHVVHRMPHGIIQ
AGGKPLPPPPAIPGIHLSNVYPYIDEALPFDE*
>TRINITY_DN3271_c0_g1_i1.p1   type:complete   len:399   gc:universal
TRINITY_DN3271_c0_g1_i1:218-1414(+)
MTRIIWHKIKSELIMPYLDLDCKYYDLGLPYRDETNDQVTVDAAEAILKYNVGIKCATITPDEERV
EEFKLKYMWRSPNGTIRNILGGTVFREPILCDNIPRLVPGWTSPIVIGRHAHGDQYKAQDLVAPGP
GKFEMSFTPLEGSEKVTVNVFEFKENGGCMMGMYNTDDSIKDFAHSCFNYAIGKKWPLYMSTKN
TILKKYDGRFKDIFEEIFQDQYKSQFDALGIWYEHRLIDDMVAQCLKSSGAFVWACKNYDGDVQS
DTLAQGFGSLGLMTSVLLCPDGKTIESEAAHGTVTRHYREHQKGNATSTNPIASIYAWTRGLAHR
AKLDGNPELEKFSNSLELACVKAVEEGNMTKDLAGCIYGLKNVKREHYLLTNEYLDAVRDKLLQ
LWTPPSQV*
>TRINITY_DN1907_c0_g1_i2.p1 type:complete len:210 gc:universal TRINITY_DN1907_c0_g1_i2:53-
682(+)
MDMDTTFPLVISLLFSILCCSFAVELTFELPDNARECFHEEIHNATKCTLEFQVVTGGHYDVDVSLK
DPHGKVLYDEKKKQYDSHTFEATVPGEYVFCFSNEFSSFTHKTVYFDFQSGDEPPLAPGMGKHHT
ALTLLESSAVTIHESLKVIIDYQTHHRLREGTSRDMAEYLNERVQYWSIGQSVIVVAMSIIQVYILRN
FFSEKRDRL*
>TRINITY_DN651_c0_g1_i1.p1 type:complete len:408 gc:universal TRINITY_DN651_c0_g1_i1:122-
1345(+)
MSGHQGGVKRSNDGGNASGGGGPKKMRGDNVTFRFLLLSKHAGGIIGKGGQTIKRLRTEYSAT
VNVPDSPTQERVLSIGASQESAIKVLCECLPLFHEPPYSVGGNHQNQGKYEINFLVHSSQVGGIIGR
GGFKIKELREATNANIKVFQECLPNSTERVVAISGNEDEIVNLLHKILEIMQEAPIKGNIALYDPSQE
AWNGPNDNFGGPPMNMGMGGGNRGGMRGGMRGGRGGGAGVGGNQGGRGGFQGGFQGG
QGGPGGPGGPGGPPGNFGGPNNNRGGFNGGPMGGNGNFNDDYRNNQNFYNQGPGNQNQG
AAPGGGTGNDFSIGDSQTTQVTIPNDLAGAIIGKGGERIRNIRQRSSADIKISDPIEGKSDRIITITGT
QEQIQYSQFLMQQSVRQYSGKPMK*
>TRINITY_DN165_c0_g1_i1.p1 type:complete len:598 gc:universal TRINITY_DN165_c0_g1_i1:147-
1940(+)
MTFHTGFSYCICLAFIFTIVLGSESQSEASQAVEYVKPSLDNLDYIAEPFHSLEEFQSRWVLSSAKKD
GVEENISKYDGKWAIVEPKENPLIGDKGLVFSSEARHGAVSGKLKTPFNFEDKPFIVQYEVRFQNK
HECGGAYIKLLADAPELSLDTFNDKTEYAIMFGPDKCGGDSKLHFIFQHKNPLNGKMEEKHAKK
PSGDFSNIFDDQKTHLVRLIVKPDNTFEIYVDKRRVNEGSLLHNFEPPVNPPKEIDDPNDQKPDD

WDEREKIPDPDAVKPDDWDEDAPKQIEDPNAKKPEGWLDDEPELIPDPQTERPADWDDEEDGE
WEAPQIDNPKCKEIGCGEWKPAVIDNPNYKGKWTPSLIANPKYKGIWSPKKIANPEFFEDNNPFA
MKSIVAVGFELWSMQADILFDNLLVADDLSLADQWTLQTWDLKHTQEVNKEPGVVGGLWNNI
QEATQERPWLWVIFVVLVLLPFVLIYFFCFGGKEDEYAIRKKTDEPTQDDDLVENSEDEPVEDKKES
DPEATEESVDSKKEDEESGKENEEITDEKTKSEVSPNDDNKVDTEKKLSEDSEDSKKEEDESPSPKT
RASKRKTRKE*

>TRINITY_DN1319_c0_g1_i2.p1 type:complete len:134 gc:universal TRINITY_DN1319_c0_g1_i2:86-
487(+)

MVVPSAKRKIVKKRTKKFIRHQSERYKTVKQNWRKPKGIDNRVRRRFKGQYLMPSIGYGSNQKT
RHLMPDGFKKFVVHNVKELELLMMLKGTHAAEIAHCVSRRKRIEIVERANQLAVKVTNATARV
RSEENE*

>TRINITY_DN1339_c6_g1_i1.p1 type:internal len:570 gc:universal TRINITY_DN1339_c6_g1_i1:1-
1707(+)

GMFFQDGLTGSAWGDWALYVDSPLRFFGGGEASTYKTFDPATELGVQEPVGFWDPLGFASDGDE
ATFKRRRSVEIKHGRVCMAASIGYIVPEYYKFPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIF
FAGIVEGAFGVTDDYRNGTPGDYGWKVITSDDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLT
GSAWGDWALYTASPLRAFESELGVQAPVGFWDPAGYTNDGSMENFKRRRATEIKHGRVSMLAC
MGYMTPEITGKLPGYLSPSMKVQFADIPNGLGALSKVPGVGWAQIFAYCAYCELSQDQSAASPGG
AGDFGFKAITSSDPATLTRKLNAEIANGRLAMMAIIGMFFQDGLTGSAWGDWALYVDSPLRFFGG
GEASTYKTFDPATELGVQEPVGFWDPLGFASDGDEATFKRRRSVEIKHGRVCMAASIGYIVPEYYK
FPGFLSPSEGLQFADVPNGLAALSKVPALGWVQIIFFAGIVEGAFGVTDDYRNGTPGDYGWKVITS
DDPAEKEKKLSAELANGRLAMVAIIGMFFQDGLTGSAWGDWALYTASPL

>TRINITY_DN123_c0_g1_i1.p1   type:5prime_partial   len:1231   gc:universal
TRINITY_DN123_c0_g1_i1:2-3694(+)

RGGFRPFGTGLMGSPMLGPYAFGPARSGALGGFGIAPLVRPPTRGGAAGANRGSRSNSNRGGKK
TTPVKNNKSTPEAKKDNNINAKNDKKEDKKDEKKDDKKDEKKDDKKDDKKGGKTPTGKEIKV
EPKDDMKNIKKNFFKDPKVEPKNEKKPDTKAVTVKPEIKKESGPQNVTLDKFNSELHLSIDADGL
SAGNMKGEGFQYMWGGVRGTHGVKKGKVCYEVYLLENIKVHCPGENNPHVLRVGWSVDNSD
YQLGEDKLSWGYGGTAKSSYDSKFLDYGKKYTVGDTITCYIDFESNPKAIFFMLNGEYLGVAFRFG
NELGDKAVFPHITSKNMRFRVNFGKEKPKHHVTNGFRMMQDIPVDQLVLPSPSPKTPKEAEIIM
MVGLPACGKSFWCEKYAKENPDKKYYILGTNNIIERMKVSGLTRKRNYHGRWEMLIKRASLVLN
KLFTVAKNNPRNYVLDQTNVYFTARRRKMESFAGYKKIAAVIINKPDVLASRTEKQQKIEGKMVP
EGAVMEMKFNFTLPEKGPSFNEVWYLEETLPKAQELAANYRREGSNFKTKSKRKPESSPSQPESSP
SSEKKPKLDPKIISRGFDKPFSKPNTSPQQSTFKAPSPAQNNANKTPNQDRFSKNEKSTSKVETNS
DNSRSKAGNFNKGHDGNKSNERPFFSNTPDRGNASNRGNDSNRGNSSDRGNAPNKGNSSDRG
NAPNKGNFADKGNAPNKGNSSDRGNAPNKGNASDSANKNSKNEKPKEESKKTPKRAIRGTLD
QLNSIINSEARKTENNSGNIRDSAQSGKNEKMGSLMDIDRTPQRESDSYQNLQSRNRDALSNQG
GKNKESQSAGLMDIRNVPQGNQDYRGKAGILDSSRNTSQDYRGKPGILDSSRNTPQDYRGKPGIL
DSSRNTARRNEYESPVGRGNNSYSDSPARGVSTPRGRASFNDSPARGARGGRGQSDISRSGSLAKS
QGSGGNRGGRGRGRSKHLGDVNKYDPVGNMGGYYSALKALPSVKDLIGNRSSFSSYSTRIDEPSR
FDQLYSSYEPYSFGRTQNANDSRSLNYSFGQTDSYSSLERDGGYRDSQNSKDFLGSYQQRKDSSYS
DNRGSQGGQRGYQDSSYNADGLDAKDQYQNDDYQESYSSQKDKSSYDQNTQSSRSYNQETSYE
ESSDYGRSRNQEQDEYARSGTYERGDTSYGTDDANRSSRRYEDDLQESEPMDGNYSTQDYGRSSQ
SSQRARIW*

>TRINITY_DN15847_c0_g1_i1.p1   type:5prime_partial   len:166   gc:universal
TRINITY_DN15847_c0_g1_i1:3-500(+)

NRQGATQYKMSEQTERAFQKQPTIFQNKKRVVGKESKGKEQRFSKSVGLGFKTPREAIEGTYIDK
KCPFTGNVSIRGRILSGIVQSMKMKRTIIIRRDYLHFIKKYQRYEKRHKNLAAHMSPCFRDVQLGD
LVTVGQCRPLSKTVRFNVLKVNKSTSAKKSFEKF*

>TRINITY_DN135129_c0_g1_i1.p1   type:internal   len:155   gc:universal
TRINITY_DN135129_c0_g1_i1:1-462(+)

SSFSYMSTSPSRSMDISASSDEALTPGGTLIIRDNVDNRTSFYERLQEKDSFIAETSSALNTPQNSPRP
STTTPLPRTPQQDRTPPKRSPLVRMKSDSSDIEKRAKFSKDNVSSTFRPVSMLNLSVFASNRPKRLH
TGSESELSEHVPLSTHRR

>TRINITY_DN240_c0_g1_i4.p1   type:5prime_partial   len:397   gc:universal
TRINITY_DN240_c0_g1_i4:1327-137(-)
LKAAAAFSGVSPFALVQPRARVPSRSRVAMVRRSPLPVLGLAGAACFFARSPCFIPGGPLRRQPWA
AAAGSAAVLGATPALADPIGDAAKKLADASYPFAKEVDWNSGIYLQAPGKLAPLEALKAIDKMI
VLGSQADPKLLKAAADAHHKAISSASGPTGMTSKADWEAVNAALGRVFASVPESSVMDVYNAV
AKITDPGVPAYLKSKVNGADAEKAYAAFLEFKDVVKANQVSSAAAAPVPAAGGDKIGAAAQAL
ADQSYPFLKSVDWTSDLYLKPLPGVSAAKALKAVDKAIVMGSAMDGNLLKAAASAHHQAIGSI
DAAGVTSAADYASVTAALGRAIASAPTSKVMDVYNAFAGIVEPSVPNTLFSKVDPLAANAAASA
FYEFKDVVKAAQR*

>TRINITY_DN11643_c0_g1_i1.p1   type:complete   len:187   gc:universal
TRINITY_DN11643_c0_g1_i1:1748-1188(-)
MPAKGKLTQEEEVLLQDFSRTVSKKSQALFYGNALMISVLPLWLFWKVHLMDPMSYAALFICGTL
SAAYLVAFAYKNTKFALKHKVAQKREVAITREVNTELDSRPETKKLSRKEKDDRILWKKNNVADT
EATTFSIFYTNTLYLFIIIIASFYVLRSFSPAVNFTLSTGMAAGTVALLSTGTQSS*

>TRINITY_DN333_c0_g1_i1.p1   type:5prime_partial   len:384   gc:universal
TRINITY_DN333_c0_g1_i1:3-1154(+)
IFVKQIILSYRSRALITAKMDMRQLSPFIFTVIGFLLFITQECNAQRNNFCSHNGCRGIPLQTVPYLA
RRVSLKASRKGQYPDNIMRIATWNISGIPVDRAVVNRRRRRPTGLCLSILKMGLTLFSLQGVDSEQ
LKGLQQCLRSHVFLPNTLIGDGNLIGFRRQRRLVKHAAGQFYLSETPFERSKLRGASDYATCTWA
KLSFANVVGKRNETVETAYSKLLGLLKHYSNQRRGSSRRVTRLRKIYRYFTFYTVNVAKVDEENKA
IAKEQMKICLSHLYNDIMERRRYPIIVTGRLNWESSFTTSNNVRTKNENFNLKNGMDDADMTYY
TFSNIDKERNTKELKDYVTYNGFDSLLTAVLVNRNSERKKRNINRPVVSFLYHS*

>TRINITY_DN1744_c0_g1_i2.p1   type:3prime_partial   len:141   gc:universal
TRINITY_DN1744_c0_g1_i2:422-3(-)
MPLSQDDWIKALSHISDADKLQATIKGSFYGSLGIGLLAMVCSVILGPFGLLIGGISGSIIAYRYMKG
SYKPLSSVLTSLNPEQRALFFKEIENIRSQITVQDYLELILLLQGHGGLLMKKELLKSTFEFVKKNFN
MDVP

>TRINITY_DN6390_c0_g1_i1.p1   type:3prime_partial   len:1941   gc:universal
TRINITY_DN6390_c0_g1_i1:5820-1(-)
MVIAPKCKFSIFSYLVFGILSYNWNELDASTNIELVDGTGVLLQRDVDNVLNDAVVQKEYQQNIK
HKPVDKRCLGEPFYQGLCKEKLEDAIQQNITEGGCHNLLVKIQKDECSNGPKTLGGKGYCNFICS
QEICNSIYDIDKCVSKRLVHHFNKDKNECEEIMQADCGSESFTSSNQCQKRCIGNSDDKRETKVY
CDQFCLNGGKCIGEVYCQCPPAYHTATCGLSYCNPSCGVGGKCVKTGEGKYGCQFPGYKGVK
CDKEDSKNMPVVKGLCLSAIKSVLTSPNTSFHDKPEEEKNYCLKYLFDLESNCDKQRPFVNYTEE
QCNHFCASDICDNIYSNDCGSIEERYGYVSSTGRCSKFLYNGCLGNTNNFKDKAACDTKYSPING
LMTSVALLRPLNHTCYIRGKTNFITFDGKVYDLLSGCSHYLVHDSDTTSDFNVILHNDPKVNYNE
KSKRKLEITADGKNVLLNQKVSSDRFFVQVDGRSVPLPYNDVPKIRQAGRYILVLTGDGVSIAFDG
YEDISITVNDYYRTGDGGDHRLNGLCGNLDGNSHNDWLDFTGELRENVRDFAKVYQTDRSTCK
MDNLSLKSLVYNPLHNDQEVFERAERHCDVINTDAFKPCHSVVSPEQYKVLCMQDYIKCNDDK
RDDCVCSSLSFYSRVCHKYGKDIKWRRANLCPITCQRNMKYYECGSACPKTCDNLITPTKCQTDC

VDGCHCPPDLYYDKSTENCVPRNLCSCYRDGIAYKHGSVRSFHCEECTCNGGSWECNKKDCEAT
CDIAGDPHIKTFDGLNYQMYGKCSYVLVDHCYGNTGIKEFEVIVENKNCNDDALYTSCVRHLS
VNILQTNTRVSLDTAKDNNGTVLPVAFVNGKEGKEFRSKDYTITSVGGRNIIFQYKVNQLKVSWT
GHNAYVTVGHQFENQTCGLCGTYNFNKQDDFHTRSDTVEKSVTAFTQSWVYQSSDKVQDPSKC
HTAKWETSEKPCQIYTNKAQYAKTQCSIIIKPDGPFEDCHSIVPPGEYYSMCQDDACKCDDCYH
IVAAYAKRCTDLNIRVGNWRDETLSCKQTCQAPKVLKQCNAIDSLDDDLSESLKCPSTCYELSQN
DTSICQSRGCIEGCYCPEGYFENEQNECVKQDQCSCYHDGKVYRHDEIRKDRCNECVCKGGRFE
CTDFDCVAHCASKGLVYSDCGKTCSNFNFNPQDSKCQAGCFCPAGKVLHENGTCVNPQTECQC
KEGDQFFDAGEVSPSDCSKVCNGDRSWKNLPGKDAKPQYDCSAFGQMHYRTLDGRMFKFSGG
LCPYVLLTDCRQDSATGFCDLTKANVNIHVRNLRCVNSYEAYMCKEVTLDLRLPNGEMAEFVLM
QNKIKMKTGLVTKVFDKGSYPQPKTAVVDGVEIFKSGLYLVVRAYHLNITVKYDRQNRVYVVPGR
EYKDAGKLAGLCGNYNGLDDDDFRRPDNSNAENELQFAKSWQDSNSACPDPSESDTCSSNKER
LPWAQKGCNVMKTGNFTACHKTVSPEPFIESCQQETCLCKSGGDCACFCSAVAAYVQECNRHG
VPIYWRRDGLCKLDCCDPCGHSYGYYTDNHVPNTCGVKDKVCKENDRCCKGAVVEGCGCPPG
TYDDGIKCQNETTTNVIPCSPSSSIVPSTSISVPSTIIEPVSSSSPSPMTSSVESQSPSPSSSVVSPTPSSSII
QSMSSSEIESISTTSSSFVSSIESSVQSSTSIVFPVVSSNSGESSVSSSMLPSTSWVGIHSVSSSMGESSVST
NVLPTDYLRTTDVFPLSSSEITYPSSSSSLEPHTPSSSILQESSSSVSKPVGISSVIEPEISSIRYSSMSSQN
VMSSSVSSSVSKPVGISSVIEPEISSIRYPSMSSGSVLESSVSTSFVLPSETVLSTSVFSTNTESPSSSMTLS
TSSSGFVFPSVTSTFQTSSKVLSSLPRSGPAENTVPLSTMFTKTV
>TRINITY_DN8707_c0_g1_i2.p1   type:complete   len:564   gc:universal
TRINITY_DN8707_c0_g1_i2:2751-1060(-)
MSGFVRQSKYRHVFGSPARKDGCYEGFRVTNCAFDGNFIAANKHFIAVCVEVGGGGAFIIVPVGS
TGRLDVNIPKVSAHKEYILDLQWNPYNDFMLASCSEDGTIKIWEIPEKGLFMNIGDEKALLSLEYH
EKRCTQVLWHPSASNVLMSVSQEPKVCVWNLDEGSVEVEILEHPELIYNATWSQKGDKIGTTCK
DKKIRIFDAREGTLLVQGMGHEGAKPSRVIFTFQDKYLFTTGFSKMSERQYACWNAETIEQLGLEE
LDTANGCLVPTYDADSQLVFLNAKGDSNIRYYELVDGDPYYFYLSTYQSSAPQRGFGFIPKRCINV
NANEISKGYKLHGTKTGYIEPVSFTVPRKSETFQQDLYPDAIGDEAALEPDDWFSGKNAEPKRIA
MSTFFKGKTKPTGAAGGGLKKGGLKGLKAKKEAKTAAKSAAKSEPAKPAPVKTESKDKVDAAP
PAAAAVEQKSSSTAVAAPAAAAPVVVSGVDEKVVKELQNEIKSLKDGDKKLQKEIISLKDKLKDY
DTLRSDIKLLCDAVKKNDERITALESLVAEETDEEETGEGGDE*
>TRINITY_DN22492_c0_g1_i1.p1   type:complete   len:1026   gc:universal
TRINITY_DN22492_c0_g1_i1:171-3248(+)
MLQKTLIYTLLGCWITLLSHAAIVRKSGGDDFSLKVGKPQKPIGQPKLKDAKKEVKEEPTSDVIPQ
QDENNDTTDRQKHKEQVSPDAVESGMPPRYPLKAMSAEVSAHDNEIGGCRDHPRASRVCKNC
GNRNFAAEHESYTYSYCRKSCRHCDPELSSFHTFWRLRAASQFDPTWMVKEIEFYPKPTEYDNLA
TDPQRAYASSSYPGFKPSYAFDGNNKTSWYPSGWGLHDNNDDWIGFEFPVAVRVHAIRMVLDE
MHRTAAPQRIFVEASDKKDGPFTTKWKISNPTYEVDNVYKLLQCPVLWRKFESDEGSWCFRLIAK
FETWEVARNECTVEGGDLATIATEEEKRFLTDELNLGGFAWIGLNHKDQAYYWQDRANSSYKN
WKAGWSYSEVQKQNLNCVATDQDGFWYNFHCTNKYYFVCKKKLEPQAAPREDLILKAWPYEP
EIPPMIFLYPNITVPVINTKNLEPGVFPDENGKVPEEEEEETTADDLFYEQTVEHLKEKGLKPSEEIS
NDVDKEETDYTQQLNKIALKTQSRDDFRNETESDKLKFNSTEAVKQAKDLEEQKSVNLDQNFN
QYNSTDGVKQQSQPVVAAPSDGPSGNSGDNNTLPRIVNGKPVESPSVNPNNVGKPNTPVASPES
PENTDFAQPGDTTFTTPTPTVQSGDPGNAEKSNPQKATNDQQAGGQQPNQESGSNANQSQVQ
QQSQQQQPQQQQQQQAQNNNNNQNGQQNASNQQNNNNNNNQNNNNNQQQNNQQQ
NNQNNQQQNNQNNQQQNNQNNQQQNGNNNGGNNNDLPNGLPPVMGGPAPQKIPEPPAP
KEGTKDNDSEKSVGGQADVMPDDAPSNDNDGGDETTTGNEENNDESNNNNNNNNNMNNV
NNNNDNNQSRTLDKPLPNQGKNSSETVDKATNVGGTNKQENNDFMKLQKAKPGIRTHKIGHK
KSAGLKKTHMKNVVSPLKKVKTEKKINKQVKTVKKIKAVKVKHHKKALKKEVVIHKSEDDEEE
GSGSGDEGDQEDVDDILESITNGLW*
>TRINITY_DN956_c0_g1_i2.p1 type:complete len:267 gc:universal TRINITY_DN956_c0_g1_i2:93-
893(+)

MSRYKLFIGHLSPDVRTKDLERFFKDHGFSKTIQEVVVKAGYGFVIFDDRRDADDAIYELNGKELL
GTRIQVEYAKPTGRFDDGRGGGGGGGGGGGGGGGRGGGGGYDRGSRYDDRGRGSAQGGGYSSKY
GRPYNTEYRLIIENLSTRCNWQDIKDYFRQAGEVTFAKCHREKMGEGVVEFASYKDMKNAIRKL
DDTDLFGKRIKLTYRGGGSRSRSRSRSRSPRRRSRSPSGSPPPRRYSRSASRSPRKSLSRSPRRSPSRSRS
RSR*

>TRINITY_DN3773_c0_g1_i1.p1   type:complete   len:504   gc:universal
TRINITY_DN3773_c0_g1_i1:168-1679(+)

MAPVVGDLMDLSDIDASKQHNQAVVRDYISQPRLIYKTVSGVNGPLVILDQVKFPKFAEIVTLTLP
DGTRRSGQVLEVSGSKAVVQVFEGTSGIDAKHTTCEFTGDILRTPISSDMLGRVFNGSGKPIDNGP
PILAEDFLDIMGQPINPWSRIYPEEMIQTGISAIDTMNSIARGQKIPIFSAAGLPHNEIAAQICRQAG
LVKHSKGTMDYSDDNFAIVFAAMGVNRETARFFEQDFKENGSMDNVCLFLNLANDPTIERIITPR
LALTAAEYFAYQCEKHVLVILTDMSSYAEALREVSAAREEVPGRRGFPGYMYTDLATIYERAGRVE
GRNGSITQIPILTMPNDDITHPIPDLTGYITEGQIYVDRQLQNRQIHPPINVLPSLSRLMKSAIGEGM
TRKDHSDVSNQLYANYAIGKDVQAMKAVVGEEALTPDDLLYLEFLQKFEKEFISQGAYENRTIFES
LDIGWKLLRIFPKEMLKRIPAKTLAEFYPRDGRKEETD*

>TRINITY_DN32522_c0_g1_i1.p1   type:complete   len:235   gc:universal
TRINITY_DN32522_c0_g1_i1:147-851(+)

MAAWLDSYRETEQLGHDIMELINERNTLKRSASNTSKVQSSIRIKMQQYSSGLQRLKDLLLRDSSS
YNVTQQELQRRQNQLDVLVSKEQQLNQAFKPTQSNYDRSNLFGEKYGDDLNGRYGGASASNGL
DDDLTPQNFRQQQEQILKEQDKGLDSLHEVIQRQKMMGKAIGNELEYQNDLIDDITKGVSRVDN
KVNATERKVKKVHRKTGSCAMIVVIILLLIAILVVAVFPTN*

>TRINITY_DN1130_c0_g1_i1.p1   type:complete   len:317   gc:universal
TRINITY_DN1130_c0_g1_i1:1199-249(-)

MDSSQRILVSFFCLIGLAYSASWNYDEGAATGPDAWQNSYPKCSGKSQSPIDIITADVTYDELPTIQ
FGSNWDMLLDNSSLELSNNGHTAVVNVKHPTQITTTQGGKTYILAQFHLHWGTTDDTGSEHKI
DGKFYPAEVHFVHYNSKYADLGTAVPKADGLMVLGYFIKVDNSALTSSFLHLIMEGLDDVVYKD
EKTSLPANGRSLYDLFHPFSTTKYFHYSGSLTTPTCDESVAWNVMHPENGLTITSTMMAKLRAMS
QNKRGEAMKVQSGNYRPVLALNGRSVRRNFDKSSASSIGSLLSITIPMLAIAIKLSS*

>TRINITY_DN116_c0_g1_i1.p1 type:complete len:297 gc:universal TRINITY_DN116_c0_g1_i1:72-
962(+)

MGFVKAIKNKQYFKRFQVKFKRRREGKTDYYARKRLVTQDKNKYNTPKYRLIVRFTNKDIVCQIA
YAKIAGDVIVCAAYSHELPRYGVKVGLTNYAAAYCTGLLVARRLLHKLNLHETYSGQTEVDGDEY
NVESVDDGPAAFRCYLDIGLNRTTTGARVFGALKGAVDGGLEIPHSVSRFPGFDSESDDFNAEVH
RNHIFGKNVGDYMRALQDEDEDAFKRQFSKYIKEGVKPDNIEGMYKKCHAAIRADPAHKPSGK
EKFKGKRYGRKKMSFAQKMDSVRQKKEAFKRKMEQDED*

>TRINITY_DN34191_c0_g1_i1.p1 type:internal len:238 gc:universal TRINITY_DN34191_c0_g1_i1:1-
711(+)

VRQRSAPAPGGGPPFATMAGRFDPSKLLQAFASRGAPLAAGGAVLFGGAYAVQNAVYTVDAGH
VAIKYHRMSGIGSSTYREGVHFMLPWFERPIVFDVRARPHTMTSLTGSRDLQMVNISLRALCKPDP
SRLPDIYRNLGPDYDEKVLPSIINEVLKSVVAQYNAAQLIMQRELVSRMIRQRLVQRANDFSILLDD
VAITHLSFSSEYEKAVESKQVAQQQAERARYLVLKAQEEKK

>TRINITY_DN2301_c0_g1_i1.p1   type:5prime_partial   len:452   gc:universal
TRINITY_DN2301_c0_g1_i1:2886-1531(-)

TCVCRNHIAKMEGKSTCQQLLFVITIILSCISALFGKTLVLLDNANIKETHSIFFENLKDKGFELVFK
AADDPSLTLVKHGEYLYKNLIVFSPTVEEFGGSVDVPAITTFVDNGGNVLVAGSSNVGNPIRELGSE
CGIEYDEEKTSVIDHHNFDQSDDGTHTTILTDAKNLIKSNVIIPSKVDSPIMFNGVGMTADTDNPL
VLEILSAESTAYSYYPDMKITEYPLAVGKNTLLIGGQQARNNARIVFCGSLDFFSDQYFMSGAQNA
AQSGSTYFIQSGNMKVAVDVALWTFRHNGVLRVSQVNHHLLGEVDPPPAYTIEQEVVYSIKIEEFS
NGQWVPFQAKDVQLEFFRIDPFVRTYLKSSTDGVYNVNFKLPDVYGVFKFKVDYDRVGYTHLFSS
TQVSVRPKQHTQYERFIVSAYPYYASAFSMMAGICIFSVVFLHHKETSKVKDE*

>TRINITY_DN97809_c0_g1_i1.p1 type:internal len:184 gc:universal TRINITY_DN97809_c0_g1_i1:2-
550(+)

LGPDQVDVAGAGRDPRHLPRPLGRRLRVLDRHRGRVRQRHKAEADQDPKLETARLDVRRPGVQ
VRRVRHPRPSSRDQCHRDCHAPGRVEGRAQVDRGRRGLGRRRVEHEVHGAAQPAARGQEKGR
LRAQQILAVAAGQEEAVDVGARNRQGPPSALAAVSRAPHAQFARLAQRDRRVARAKGW
>TRINITY_DN413_c0_g1_i4.p1   type:3prime_partial   len:463   gc:universal
TRINITY_DN413_c0_g1_i4:1388-3(-)
MVSLSVTCLSLLLFVTVNAEESDHCGYDEKSWYKAMGWCYHSGSRLLLGDFNGDKRTDFFCHD
SNGKNWVAVSNSDGSFGSTTWQDSKERWCASPNILLTGDFNGDGVTDILCHGTATGKKWIKYFN
KYGVPSGKSFYRAMSWCNHKGSQLYIGDFNGDKRDDLLCHDTSGRYWTSYAGTDESKVFHHTS
WYKALEWCRHATSKLYLGDFNGDKKTDVLCTDGKGYKWIMYAKTSGNLFTGTDWHTNLDWC
HESSTVFLRIGDVNGDGKDDLVCHSTAGNSWVAYTQPKGGFGNFCHLAKWCAAGKESFFLGYF
NQDSRADILCHDTKYGKKWIRYAECSFAEESDHCGYDGKSWHKAMRWCYHSGSRLLLGDFNG
DKRTDFLCHDSRGINWVAVSNSDGSFGSTTWHDSKERWCTSPNILLTGDFNGDGVTDMLCHDY
KTGKKWIKYFNKHGVPSGKSFYR
>TRINITY_DN55_c0_g1_i1.p1 type:5prime_partial len:104 gc:universal TRINITY_DN55_c0_g1_i1:3-
314(+)
TGLHTDFPDIPFASPNVPFAVDECFPGTKECVTMEYEYLYRFESAIATPNNEFKLPFVQKMCNRPYI
PCNAWCTLFSVRQTIGDCKATCCEGDNCNAGGRDEL*
>TRINITY_DN104063_c0_g1_i1.p1   type:internal   len:181   gc:universal
TRINITY_DN104063_c0_g1_i1:542-3(-)
PLPLLLRLGVDLDRVLGVAAVRRVVRAGVLAVTHEVGEYLVRREALGREPRLHGLGDRRAGLAL
HRDLVAPPREEACQRVPRLVVAPVRRIHRPRVLPGAQQEPLKRGDGVGVQVAGRRDVLLHSLRG
GFGGVQELLQGHGGLRAPEGRVGAQVLLLDGKALARQPRLERFDRQRLERAV
>TRINITY_DN26679_c0_g1_i1.p3   type:5prime_partial   len:108   gc:universal
TRINITY_DN26679_c0_g1_i1:1-324(+)
TKSLNRRGWRLAAPAFRARKPTTRLKLPAPGCACAALKPAHLDQATAVGAHEDQDRHQDGPH
QLVVRVHLHATLPLRKLSGQRLLLREGHVAPLARPHQLDLHLRRQ*
>TRINITY_DN2230_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN2230_c0_g1_i1:796-50(-)
MKLNVAYPANGTQKLLEIEDEIKLRSFYEKRMAQELSVDFLGDEWKGYVVRITGGNDKQGFPMK
QGVLTPGRARLLLSKGHSCYRPRRTGERKRKSVRGCIVDGNLSVLNLVVIKKGDNEIPGLTDRVIP
RRLGPKRVGKIRKLFNLSKEDDVRQYIIRRPIATPEGKPDPKKPKTKAPKIQRLVTPQRLQRKRHVK
ALKRERANKAKLEAATYAKLLAKRHKEAKEKRHQEHMKRRRLSSLRESKSQ*
>TRINITY_DN109115_c0_g1_i1.p1   type:internal   len:125   gc:universal
TRINITY_DN109115_c0_g1_i1:3-374(+)
NEFLTRELAEDGYSGVEVRVTPIRTEIIILATRTQNVLGEKGRRIRELTSVVQKRFGFPEGTVELYAEK
VATRGLCAIAQCESLRYKLIGGLAVRRACYGVLRFIMESGAKGCEVVVSGKLRGQ
>TRINITY_DN73587_c0_g1_i1.p1   type:complete   len:533   gc:universal
TRINITY_DN73587_c0_g1_i1:94-1692(+)
MLRQAVRRLSRGTNKRSLLRKSSERLLPACVNACQRFVSTDVTNNQAAAAAKAADKSPAAAVA
VGQIVAVIGAVVDVQFDAGLPPILNALEVQGHGSRLVLEVAQHLGENVVRTIAMDGTEGLVRGQ
RIVDTGNPISIPVGPETLGRIMNVIGEPIDERGPIETKSKAPIHTEAPEFVEMNVNQEILETGIKVVDL
LAPYAKGGKIGLFGGAGVGKTVLIMELINNIAKSHGGYSVFAGVGERTREGNDLYHEFIETGVINL
KDDSSKVALVYGQMNEPPGARARVALTGLTIAEYFRDVEGQDVLLFIDNIFRFTQAGSEVSALLGR
IPSAVGYQPTLATDMGSMQERITTTRKGSITSVQAIYVPADDLTDPAPATTFAHLDANTVLSRGIAE
LGIYPAVDPLDSNSRILDPNVVGEEHYQIARNVQKILQDHKSLQDIIAILGMDELSEEDKLTVARAR
KIQRFLSQPFQVAEIFTGHMGKLVELKDSINGFKQILSGELDHLPEVAFYMVGDISEVESKATRLAE
EAS*
>TRINITY_DN751_c0_g1_i1.p1 type:complete len:227 gc:universal TRINITY_DN751_c0_g1_i1:731-
51(-)
MAMKIVLCTLAALMCCAYAQDGITAITDIINPENINTALDAAEKLKNLIHTTSESKIQSREKTQGFE
FLNMKANAQYTRGMKKHHLMRMMNRYLVPFSRSSADMKEVVDTLKEFIEDDVEEHQEQFFGL

MTQGGGGTTEAIFVYYKLRDDGKYNFKRMTFRGTFRLAADLVITHSSKSGFFSSESKDVINWLPRR
GVTAQNVQELLDIIVPKLATVMSEFAPKDSI*

>TRINITY_DN1505_c0_g1_i1.p1 type:complete len:154 gc:universal TRINITY_DN1505_c0_g1_i1:98-559(+)

MSLVIPEKFQHILRVMNTNIDGKTKIMYAMTSIKGVGRRFSNICLKKADIDMTKRAGELSDEEVER
LVTIMQNPRQYKIPDYFLNRKKDIKDGKFSQVLANGLDNKLREDLERLKKIRAHRGLRHYWGLR
VRGQHTKTTGRKGRTVGVSKKKN*

>TRINITY_DN925_c0_g1_i1.p1 type:complete len:261 gc:universal TRINITY_DN925_c0_g1_i1:826-44(-)

MGRVIRGQRKGAGSIFKAHVKKRKGAAKLRSLDFAERNGYVKGVVKDIIHDPGRGAPLAIVAFR
DPYKFKLRKELFIATEGMHTGQFIYCGKKATLQIGNILPVGTMPEGTIICNLEEKSGDRGKLARAS
GDYATVVSHNRDSKVTRVKLPSGVKKAIPSFNRASVGIVAGGGRIDKPLLKAGRAYHKYKVKRNC
WPKVRGVAMNPVEHPHGGGNHQHIGFPSTVRRDTSAGRKVGLIAARRTGRIRGTAKVKDVGGD
KE*

>TRINITY_DN165536_c0_g1_i1.p1   type:complete   len:249   gc:universal
TRINITY_DN165536_c0_g1_i1:851-105(-)

MSEQEISNLVEQAKLAEQAERYDDMVKYMKELTEKSTEGLSDEQRNLLSVAFKNVVGARRSAWR
IIHSLEEKKGNEGGNTELISSYRKEIEKELKERCNEVLSLIDKYLLPSAQKEGQKGTEGKVFYEKMK
GDYYRYLVEVTTGEDRANLSAQSKEAYDKATETATGLATTHPIKLGLALNFSVFHYEIMNDGKKA
CELAKKAFDDAIAELDSLKEDSYKDSTLIMQLLRDNLTLWTSENDNEENDAQ*

>TRINITY_DN1283_c0_g1_i1.p1 type:complete len:542 gc:universal TRINITY_DN1283_c0_g1_i1:81-1706(+)

MPRWNKKQRAPEVFDSIADGLQKVYKEKLLPLEETYKFHDFHSPKLENSDFFGKPMVLLVGQYS
TGKTTFLKYLIEEEFPGMRVGPEPTTDCFTVLMNGNHSRVVPGNAVVVDTQKRFKSLSAFGNAF
MNRFCCSELPNPVLETMTFVDSPGILSGEKQDIDRGYDFTGILEWFAERVDRIILLFDAHKLDISDE
FRRCIEALHGFDDKIRIVLNKADMISTQQLMRIYGALMWSLGKVIQTPEVTRVYIGSFWDQPLTID
DNRKFFEMEETDLFDDLQSLPQNAALRKLNDLIKRARLAKVHAYIISILNEEMPSVFAKDRKKAEL
IKNLGDIFKRVQMEHKISPGDFPNLERMQEYLKISDFSKFSTLKEGLIKNVDELLGHDIPRLIGMLP
QETDDNMEAQKVKGGVFQNTNGDFNPFAAGAAEGFQLGSETDKWAVEMYGKLEEYNRLFESL
NPVDGRITGKAAKDEMVKSKLAVNTLGKIWKLSDVDKDGHLDKEEFALAMYLIHVKKNSADKI
PEKLFPHLIPPSKKNLIIPNGH*

>TRINITY_DN200_c0_g1_i2.p1 type:complete len:551 gc:universal TRINITY_DN200_c0_g1_i2:123-1775(+)

MITARLARSLAKNAPKNLLKQYQGAGAVAAIIASRHVQTSKAASATAEVSAILEERILKTSSQVQL
EEAGKVLSVGDGIARVYGLKNVQAEEMVEFSSGLKGMALNLEPDNVGVVVFGNDKLIKEGDVV
KRTGAIVDVPVGEGLLGRVVDALGNPIDGLGPIPADNRARVGVKAPGIIPRTSVKEPMLTGIKAVD
SLVPIGRGQRELIIGDRQTGKTAIAIDTIINQKRFNDAQDEKKKLYCIYVAIGQKRSTVAQLVKRLGD
ADALKYTIIVSATASDAAPLQYLAPYSGCAMGEYFRDNGKHALIIYDDLSKQAVAYRQMSLLLRR
PPGREAYPGDVFYLHSRLLERAAKMSDDFGGGSLTALPVIETQAGDVSAYIPTNVISITDGQIFLESE
LFYKGIRPAINVGLSVSRVGSAAQTKAMKQVAGSMKLELAQYREVAAFAQFGSDLDAATQALLN
RGVRLTELLKQGQYVPMDIGEQVAAIYAGVRGHLDKIDPSKVVKFEEEFVKHVKTAHQDLLDLIR
KEGQISEATDAKLKEIVVAFMQSFE*

>TRINITY_DN7671_c0_g1_i1.p1   type:complete   len:123   gc:universal
TRINITY_DN7671_c0_g1_i1:425-57(-)

MTSKRRNGGRNKNGRGHVRYVRCTNCARCVPKDKAIKKFVIRNIVEAAAVRDLSEASVYDGYA
LPKLYAKLSYCVSCAIHSKVVRNRSREDRKIRTPPPRFGMRREDNKRPGQPGAPGAQRT*

>TRINITY_DN1468_c0_g1_i1.p1   type:complete   len:245   gc:universal
TRINITY_DN1468_c0_g1_i1:766-32(-)

MADSNKLPGVPETLLKRRKTLEKVKAARAAAQLKTKKHLKEKRKVIFKRAEQYVKEYRSKERDE
IRLRRMAKKAGNFYVPAEAKLAFVIRIRGINQVSPKVKKALQLLRLRQIHNGVFVKLNKSTLNML
RLVEPYIAWGYPNLKSVRELIYKRGFAKVNHQRIPITDNQIIENVLGEQDIICVEDLIHEIFTVGSNF
KKANNFLWPFKLSAPTGGMRLKTNHYVEGGDHGNREDFINNLIRQMN*

>TRINITY_DN4595_c0_g1_i4.p1   type:5prime_partial   len:1639   gc:universal
TRINITY_DN4595_c0_g1_i4:5857-941(-)
QCGVNTGTQVVYRRCNAALCKYQGNDYTRNQEVNIRTQACTVACDYTPWQNTQSCTKTCDGG
VLVQTRTERAFNKIETRNGNTPCNTQACAQELGPKQLRTCNVGQCGVNTGAQVVYRRCNAAL
CKYQGNDYTRNQEVNIRTQACTVACDYTPWQDTQSCTKTCGGGVLVQSRTERAFNKVETRNGN
TPCNTQVCSSELGPEQLRTCNVGQCGVNTGTQVVYRVCNAALCRYQGSDYTRNQEVNIRTQAC
TVACDYTPWQDTQSCTKSCDGGVLVQTRIERAFNRVETRDGTTPCNTRSCASDFSAERLRSCLNV
NQCGVNTGTQTVYIVCNGNFCRYQGREYNINEEVNVRQQNCTIACDYTAWEDTTICSKICDGGV
LEQRRLERAFNRLERRNGTTPCNTRACDSGFSAVLSRNCVNVNQCGVSNGTQLLYRVCNGEPCIL
QERSYKINDVVVVGSRACSVPCNYTEWRDTTSCSKTCGGGFFFETRTEQAFQKTESRLGKTLCNE
NSCVKDNFGNWTEWTACSKTCGMGMRYRSRECLKGFECIGLIEETETCKLGCRTETCPMGRPYP
GDCNFEDDCGKSWNQVNSIQRNAFFIVTSKDLAHQGLLPNMETTFNTKDCGRTMKLNSSVAGD
VNYLWTKRMMITDINTDVDDDVAAIDNYFKEENEQCVEFNFAVMANSLDKIGDMQVYLYYLEY
PNASLIYSKKGNTGLKWELVKRSIRVDTNKAFVILFQVNQGQSNVQYGDIGIDGFKVNPGNCQLK
GWSHWGEWKCSATCGFGTQTRMRHCLDKVNRTACVGMDRENKPCPMMKECPMNRDGNWG
QWTEFSKCSKTCDTGTYFRTRKCDSPSAKYNGSLCRVSQTKFNLPVVNDFEIDFKPCSVQQCNNT
FSQWTTWSSCSGTCGPGQRTRTRTCESGKRCSGIFEEIETCYMGCRLEKCPKFTAEIDCNFEDRNKS
DCQWKYYTVSGTSSWSFKTQPKNRLLSGPSGDSTIGCGYFLYYPSQTLSSAYAWGPNIYPTMDSYC
VKFKYSMVTSVNSSMGNLTVIKHFLNRPRKADTPLFFHSGVSQKQWNPMAIDITTDIQRSPFVIMF
KGQSDPNNAGLSDIAIDDYMLMAGKCNKSYSEWSEWSTCSRTCGVGQRTRTRVCLDDDIKVCK
MGDVATEGEACVKPLCAVPVDGNWGQWSAYSQCNARCNGTQKRERFCNNPAPSNGGRMCLL
GDTIFQLRNNYHAQIRPCSIDCGDNDTFSSYKRINDTCHFDCITGRVLQERECEQDTCFDGNTRFS
KGEKQYTQRACSIKEYCETSEYKCREFRSVCSTNTPSSCLDPQNRAVKSCECQVERGCSSMTNPGQ
TVKHKEFDVFYRPCRYVGVCFTDYETDAFSPYEKVNDTCHLSCSNGKVFEERECRQDNCIDGSNT
LTRGAKQYRETQCTTKEYCETSQYSCREISGPCSSNPPSSCQDPANKSLKVCTCQVTTGCASMLTA
GQAVSYLAEETFSRPCKYTGACNANGNTDKTFSPYERVNDTCHISCADGKVKQMRECKKDACV
DGGQNFPRGFKQFKDSSCTPNEFCETAQYSCRELSSACTSNPPSSCLVSTNKAVKMCDCNDPNGC
DSMITPGKKVNQGEKEFLQRPCRYTGVCFTDAETGT*
>TRINITY_DN12629_c0_g1_i1.p1   type:complete   len:727   gc:universal
TRINITY_DN12629_c0_g1_i1:250-2430(+)
MSDRKRRLDVDGSSSQFKKTREEDMRKQVLSSSFPPSNHYVMTSFKETPPKINPFTQKPYSEKFQTI
LKKRLLLPVWEYRDEFIKLTTQNQCLVLVGETGSGKTTQIPQWCLDLVLLGRRKHVCCTQPRRVA
AMSVAQRVADEMDCVLGQEVGYSIRFEDCSSSRTVMKYMTDGMLLREAMTDPLLDRYGVILLDE
AHERTLATDILMGLIKEVIKQRPDLKVIVMSATLDAGKFQNYFDNAPLMTIPGRTHPVEIFYTPEP
ERDYLEAAIRTVVQIHLCEESQGDILLFLTGQEEIDEACKRIKREVDNLGPEVGEMKVIPLYSTLPP
NLQQRIFEAAPPAKANGAIGRKVVVSTNIAETSLTIDGVVFVIDPGFSKQKVYNPRIRVESLLVSAIS
KASAQQRAGRAGRTRPGKCFRLYTEKAYKSEMQSNTYPEILRSNLGTVVLQLKKLGIDDLVHFDF
MDPPAPETLMRALELLNYLGALDDDGDLTELGSMMAEFPLDPQLAKMVIASTDYNCSNEALSIV
AMLSVQQVFMRPNEQKKAADEAKMKFAHIDGDHLTLLNVYHAFKQNHEEAQWCYDNFLNVR
SLKSADNVRQQLARIMDRFNLKRTSTDFNSREYYVNIRRSLVTGFFMQIAHLERTGHYLTVKDNQ
VVQLHPSTCLDHKPEWVLYNEFVLTTKNYIRTCTDVKAEWLIRTAAQYYDMNNFPNCEAKKVLE
RVIERLKRGK*
>TRINITY_DN131028_c0_g1_i1.p2   type:5prime_partial   len:104   gc:universal
TRINITY_DN131028_c0_g1_i1:2-313(+)
FDKYHPGYFGKVGMRNFHFIKHGKVIPTINVERLWSLVSEQTRTYYKEHTDKAPIIDVLKAGYMK
VTGKGQLPEQAVIVKARYFTKEAETKIKEAGGVCVLCA*
>TRINITY_DN1272_c0_g1_i1.p1   type:complete   len:262   gc:universal
TRINITY_DN1272_c0_g1_i1:957-172(-)
MRCQLFLLVACMAIATCSAYDWRNKVQNMLKYAKVNIFDRAAYILGDKRQHQLGKPWFCHKL
DCPAFQVVGNYTNKKDGFEERCYPETAWVMTSKEVDANENDIETRDMFMKLFKYIQGENEKQE
KIEMTVPVFTYSQLKKDDPSKRYISMHFFVPPSQEKNIPKPTRDDVTIMDVKADCYYVRSFGGYV

MSFGSKIMNEEKKIHAALEKNNLDFEARKTMAAGYDSPFRLFNRHNEVWVAKRKTMDSGCCTP
RKSTNVMY*

>TRINITY_DN453_c0_g1_i1.p1 type:complete len:249 gc:universal TRINITY_DN453_c0_g1_i1:944-198(-)

MDIDQLKYEIIELGKQIETVHVAIAVVVLTTILLWIAIRSRRSGDTVLLLGLCDSGKTLLFSLLTAGKS
AATQTSIKENKSRLTMGKKSWAIVDLPGHERLRAKYLYNHKDSARGIVLMIDSVEFPREIRDVAEL
MYDLLANRTIKKNKVSILVACNKQDLTTAKACNVIKSQLEKEINNLRKTRSAALLGIDDNTSSKN
AFIGKKGKDFEFAHVKPIKIEFCECCLKDENGESKTDYNGIEEWMKKL*

>TRINITY_DN59667_c0_g1_i1.p1   type:3prime_partial   len:225   gc:universal
TRINITY_DN59667_c0_g1_i1:673-2(-)

MGKAKKGQKIDESKFEGKGTDFKCKLIGFVNVPSARGDDICQEAITKLKHLALKLNKEKKEHKQ
KITVNITVKGIRLIDEPTERIEHAHPINRISYICHDNDDKRTFGYIVGTKEGYKLFAIRTMKEAEYITK
TLKDLFQVVFERHQAQKAASDTSEIKGQEQVEEKDDEEKFEVGEEQNEEPTESPLLDWEHGINEQ
IQAMQNDAMSTSGFPDPFGDAQFDSA

>TRINITY_DN16120_c0_g1_i2.p1   type:5prime_partial   len:232   gc:universal
TRINITY_DN16120_c0_g1_i2:734-39(-)

GFFLKGLNGPPGPPGPPGPSGEPGPPGLPGAPGAPGHVGEDGAPGPMGPPGPPGPGGPPGFPGE
KGDPGVAGLPGSAGLPGAPGLPGPQGPPGIAGPEPITPNFTVICEGEKGWVQCKQYELIKITKAF
WGRDDYETCPKVPAGLTAGRLCETNTANTEAKVNGQCKNEQGCEVVASNIFFDDNSCGNVYKY
LKIGYECIPDESNAVDVLREGGRRKRKRATKDKRSFRDS*

>TRINITY_DN22594_c0_g1_i1.p2   type:internal   len:268   gc:universal
TRINITY_DN22594_c0_g1_i1:801-1(-)

DFQDPTLNLETAHNKLIYGLGSGPMWWLLLFCGIIESLRFRQLGLDFGKLTLENAGDLDFGKGFL
PKTEEGIVQMKIKELKNGRLAMLAVSGALTQSMAYGVYTFPWTLPAPNAVQSRTALRAVEFKGQS
GPFGALDVAEPKTLELTDRVKAVIKSKGSLDRESYREIFLQPKAETVFAGGLVGSEYHGWGTYQW
DPAGLATRYPEHLPWYREAELKHCRVAMLAWLGLIVPDFVRIPLDDFQDPSLDLENAHNKLIYGL
GSGPMWW

>TRINITY_DN98420_c0_g1_i1.p1   type:5prime_partial   len:286   gc:universal
TRINITY_DN98420_c0_g1_i1:1007-150(-)

LHKEARSTVINKMASRLLNSLGKVGVGLAVVGGVVNNALYNVDGGHRAVIFDRFRGVLPDVSG
EGTHFLIPWVQRAIIYDVRSKPRNVPVITGSKDLQNVNITLRILFRPVASELPKIYMSLGEDYDERVL
PSITTEVLKAIVARFDASELITQRDNVSLNVQEALVERCKAFGLILDDISLTHLTFGKEFTEAVELKQ
VAQQEAERARFLVERAEQQKQAAIITAEGDAVGAQLLSDAFKKAGNGLIELRKIEASEEIAQNLSG
SRNVVYLPDGQGMLMNLPAP*

>TRINITY_DN1559_c0_g1_i1.p1   type:complete   len:311   gc:universal
TRINITY_DN1559_c0_g1_i1:221-1153(+)

MAEKKATFKLGFAENFALSGAAAVISKTAAAPIERVKLLVQNQDEMIKQGKLSEPYKGVIDCTTRT
FKTEGLAPFWRGNLANCIRYFPTQALNFAFKDKIKAAFKVSKSDGYALGFGKNIASGGCAGALSL
CFVYSLDFARTKLANDTKSSKKGGSREYNGLVDVYRKTLKSDGVAGLYRGFVLSCVGIFVYRGCYF
GFYDTLKPVLLGADASLFMSFILGYGVTVTAGLISYPIDTIRRMMMTSGQAVKYKGSIDCATQILK
NEGAMSLMKGAGANILRGVAGAGVLAGFDKFKEVYIAMRKRQMGLE*

>TRINITY_DN1583_c0_g1_i1.p1   type:complete   len:314   gc:universal
TRINITY_DN1583_c0_g1_i1:1007-66(-)

MSEGIEALQLKEDDVTKFLASGTHLGAQNVDSHCESYVFKRKADGIHIINLRKTWEKLILAARIIA
GIENPADVCVISSRPYGTRAVLKFAQATGATPIAGRFTPGTFTNQIQKAFREPRLLVTTDPQFDHQA
ITEASYVNIPVIALCNTDSPLKYVDCAIPCNNKGIQSIGTMWWWMLAREVLYLRGIISRKTPWEVMP
DLYFYREPEDIEKEEQAAALAAAKPEETYQPGEWTQPPQTGDQQPGDWTEPGPIATTTDWGAEP
AVFGSTSKDWAAEPMPASNDEWGGKAADWESKEVATTNADWAAPTTEDWS*

>TRINITY_DN1428_c0_g1_i1.p1   type:5prime_partial   len:165   gc:universal
TRINITY_DN1428_c0_g1_i1:1-495(+)

HLSLNEQASSGLFVNLKMSDALATITIHKEYGYVVLTAFSSFVMLMYKAIKVGKARKLYNVPYPIM
YASDDNDKAKIFNCVQRAHQNTLEVYAPTMISLLLGGIQHPVLSSVAGMVWILGRIAYAQGYATG
DPSKRMRGTFGYLGLFTMYGCTISFALHLLKVV*

>TRINITY_DN2805_c0_g1_i1.p1   type:complete   len:189   gc:universal
TRINITY_DN2805_c0_g1_i1:623-57(-)

MGFEKVVIIDGKGHLMGRLASVIAKSLLQGQRIVVVRCEGINISGNFYRNKLKVLDYLRKRMNTK
PSRGPYHFRAPSKCLFKVVRGMIPRKTKRGMEALNRLKVFDGIPPPYDRMKRMVVPSALRVLKLK
PGRKYCSIGRLSHETGWKYKALIESLEEKRKAKAELYYKARKQTEAVRQKAIQQVAAS*

>TRINITY_DN20323_c0_g1_i1.p1   type:5prime_partial   len:338   gc:universal
TRINITY_DN20323_c0_g1_i1:3-1016(+)

GFWKERLPEIMAAVSVTRRAVASLQRTLQRTISYEATRPSLMIGKDTKVICQGFTGKQGTFHSEQAI
AYGTNVVGGVSPKKAGTLHLGQPVFASVKEAKDATSADATVIYVPPPGAAAAIIEAVEAEVPLIV
CITEGIPQQDMVKVKHVLERQDKSRLIGPNCPGIIKPGECKIGIMPGHIHQPGTVGIVSRSGTLTYE
AVHQTTKVGLGQTLCVGIGGDPFNGTNFIDCLDCFLKDPSTKAIIMIGEIGGAAEERAAEFLIKNN
SGENRKPVVGFIAGLTAPPGRRMGHAGAIISGGKGGAEDKIKALEDAGVVVTRSPAQMGSTLRQI
YDKHYMV*

>TRINITY_DN95987_c0_g1_i1.p1   type:complete   len:113   gc:universal
TRINITY_DN95987_c0_g1_i1:390-52(-)

MSEGSPQFPGCEGPESMFVKLISSDGFEFIVKREHALTSGTIKAMLSCPGQFEENDTNEVLFREIPSH
VLEKVCSYFCYKVKYTNSSEEIPEFPIQPDIALELLMAANFLDC*

>TRINITY_DN118520_c0_g1_i1.p1   type:complete   len:581   gc:universal
TRINITY_DN118520_c0_g1_i1:1895-153(-)

MYRLLSVIRKTTQTAKLRQGLSACISTTTHYCSPKEIKTGTDARALMLKGVDQLADTVAVTLGPK
GKNVMIEQSFGGPKITKDGVTVAKAIELPDKYMNIGAKLVQDVANNTNEEAGDGTTTATVLARA
IARSGFEAVSKGANPNEVRKGVMAAVEVVTQGLKDLARPVTTTEEIAQVASISANNDAAIGKLIS
DAMEKVGKDGVITVKDGKTVYDELEVIEGMKFDRGYISPYFINTAKGQKVEYQNVLVLICQSKIS
NVQDIVPVLELANQHKRPLLIIAEDVDGEALTALVINRLKIGLQVVAVKAPGFGDNRKNTLKDVA
ISTGAEVFGDDLNLKLDEVQLSDLGQIGELVVTKDDCLMMKGRGNTDLVNQRANHIHDEIKATN
SDYEREKFQERLAKLVGGVAVIKVGGSSEVEVNEKKDRVTDALNATRAAAAEGIVPGGGTALIRC
AKLLDTFQVPTEDQKWGVDIIRAALFKPCSTIVANTGIESAVVVEKVSSSKDPEYGYDAASGEFAN
LIKAGIIDPVKVVRIALSDAAGVASLLTTAEAVITEIPKEDPSMPPMGGGMGGMGGMGGMM*

>TRINITY_DN7333_c0_g1_i1.p1 type:complete len:192 gc:universal TRINITY_DN7333_c0_g1_i1:47-
622(+)

MQTIKCVVVGDGAVGKTCLLISYTTNKFPSEYVPTVFDNYAVTVMIGGEPYTLGLFDTAGQEDYD
RLRPLSYPQTDVFLVCFSVVAPASFENVKEKWVPEITHHCPKTPFLLVGTQVDLRDDAAIVEKLAK
TKQKPISYEQGEKLARELKAVKYVECSALTQKGLKNVFDEAILAALEPPEQIKKRKCTII*

>TRINITY_DN1084_c0_g1_i1.p1   type:complete   len:301   gc:universal
TRINITY_DN1084_c0_g1_i1:1131-229(-)

MGRPGFGGGGGRGGFGGGRGGRGGGGGRGGGRGGGGGRGGGRGGTPRGRGGRGGGRGGMR
GGKKTIIEPHRHEGVFIARGKEDALVTKNLVAGNTVYGEKKITVEGDETKTEYRVWNPFRSKLAA
AILGGVESIHMKPGSKVLYLGAASGTTVSHVSDLVGPDGLVYAVEFSHRSGRDLLNVAKQRTNIIPI
IEDARHPHKYRMLVGMVDTIFADVAQPDQARIVAINAHHFLKNSGHFVISIKANCIDSTAAPAAV
FAGEVKKLQSEKLKPQEQLTLEPYERDHAVVVGTYRPPPKKKD*

>TRINITY_DN10497_c0_g1_i1.p1   type:complete   len:206   gc:universal
TRINITY_DN10497_c0_g1_i1:84-701(+)

MEDDQRMSNFGDGNKINMNIPERIVLSAGYDGDDNKDTNRIFQDSSSVFDETPIVNPDQVMGG
MLTPPSVLTIDHSSDIFKVASPNWHTEGGADQDESVSSLQKYTRLKEEEAENNEDDYSRSSYMSP
QRPITIAGEENHSNSMLPLDDPRAMQKYFISMQRRVTILENELDYQHRVSNVWKYLLLTLTVVNP
FIINYFFGRRR*

>TRINITY_DN36_c0_g1_i12.p1 type:complete len:222 gc:universal TRINITY_DN36_c0_g1_i12:931-
266(-)

MFKLSVIALIIATCVFESTAIRCYVGYSAPDLPLAISVRDVECGKQFDHCTTIKYTLGGQAVIQGNC
ARKYGQAMCQFMRNPHKTMTDCSETLCEGDHCNTAVHESEQAERKKVGPFANTLQCYTGLLTE
FPDIPFASADVPLGVDACFPGSEECVTMTYNYIYKFETQVATKDNIFKLPVIQKMCNRPKVNCDH
WCGMLSKNQAMENCKTTCCKGNYCNA*

>TRINITY_DN10940_c0_g1_i1.p1   type:complete   len:135   gc:universal
TRINITY_DN10940_c0_g1_i1:1786-1382(-)
MSWDGYIDNLLGHCKDNADKAAIIGIDGSKWTSDASPKAIKVSPAEAKNIGDVFKNKAFQTFQG
SGVIVEGQKYTYLRVLDDKLVFAKKKGEGSLSLQCTNTAVVLAHTIEGKSQGETNKGVAVIAEYLE
SLNM*

>TRINITY_DN1339_c0_g2_i5.p1   type:internal   len:362   gc:universal
TRINITY_DN1339_c0_g2_i5:1085-3(-)
NSRLAMVAILGMFFQDGLTGSAWGDWANYVDSPLRAFENELGVQEPVGFWDPAGFTADGNVE
NFARRRQTELKHGRVSMLATMGYITPELTGKLPGYLSPSAGLKFADVPNGLAAISKVPAAGWAQI
VAYCAFCELSQDQSAGSPAAAGDFGWKLLTSSDQGELTKKLSAEVANGRLAMMAIIGMFFQDGL
TGSAWGDWALYTASPLRAFENELGVQEPVGFWDPAGFTADGNVENFRRRRQTELKHGRVSMLA
TMGYITPELTGKLPGFLSPSAGLKFADIPNGLGAISKVPAAGWAQIVAYCAFCELSQDQSAGSPAA
AGDFGWKLLTSSDQGELTKKLSAEVANGRLAMMAIIGMFFQ

>TRINITY_DN118208_c0_g1_i1.p1   type:complete   len:422   gc:universal
TRINITY_DN118208_c0_g1_i1:121-1386(+)
MVSGTLYTYNGSHQAYKILITAGYSGAEVKLADFEFGKTNTSDAFLQKFPLGRVPAFEDANGHHL
SETNAITRYLSNDQLKGGSNAIDQALVQQYIDFADHEIQPSACAWTYPTLGFKQYNKQDTEKAM
THIKKCMDLLNNLLLGRTFLVGERVTLADISLCCNLLSLYVQVLDPKFREAYGNVNRWFLTCINQ
PAFKKVLGEIKLCEKMAAFDNKKYQELHPKQQKKATKESKPKEQPKKEEKVAKPEAEEPPPKPK
KIDYFADVPKSDFVLDDWKKMYSNNEVDVSTPWLWNNFDNNAWSFWYCEYQYNEECTVDFLS
MNLIGGFYQRIEGLRKHAFANMLLVKSDKEEHFCLRGVWMIRGKKLAFSLNQDWNVDAEQYTF
RPLDPVGNAEDKKLVNNYLEWEGDAFTEYKVRDGHTFK*

>TRINITY_DN598_c1_g1_i2.p1   type:5prime_partial   len:742   gc:universal
TRINITY_DN598_c1_g1_i2:2-2227(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPSVRGKTLEQRLKDLEKFLKVATEGGSIDFARTLLGKGIF
TFMKKKIQEGLPIDDIDKAAEGFLEKLRGDVGEKKMNEILSSQGDATLMFTIDTTGSMKDEINAA
KAIAKQIISATRDYEVDYILSPFNDPRTGPVTHRSSSNRASFVTDIDRLRATGGGDCPELSFTGMLN
ALNQGPQYGSPMFVFTDASAKDDSASNIDSLKAAADLTDATINFFTNLNGCKGAKSVESYKEIAS
YTGGQVFPLKNEAELKKFTNYVKTSLQQDTVITSGGTLNSKSYKRSLYSMQAHDFMVDDGIIMIS
VAISVQKYASQVTILDPNGRRVNPSTTLSLSLVYQISHPPPGQWKINFPSSVGKYGYTVQAVSSSAIA
FAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQKGIGTD
RLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAKLGKGPY
AAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSDRITVTVK
RQSTGEIVSHHTSILLVV*

>TRINITY_DN123_c1_g1_i1.p1   type:3prime_partial   len:1051   gc:universal
TRINITY_DN123_c1_g1_i1:49-3198(+)
MSFQRGGFRPFGRGGMMGNSMGGPPFGPRRGGLGGPRFGLNPIVRPPAHGDFRGGYMGGPRGP
RPPFSKDTKYHSPAASRSNVFQKAPPLLETKKDNRVNNEKDDKKEEKKDDKQEEKKDSKTEEKK
DDNKVEKKDDKKDDKKDDKKDDKRDGKSSDGKDIKEEPIEKSDPKKDEKKDEKKNEVN
KDSKVGSKSDPKPVKEEKPDIKPLIANPEVTTEFATANVTLDRLNSELHLTIESDGFTAGNMQGDG
FQFMWAGVRGTHGVSKGKVCYEVHLLENIKVNCPDEKSPHVLRVGWSADNTDFQLGEDKLSW
GYGGTAKSSYDSKFLDYGKRYTVGDVVTCYIDLDARPRAIFFMLNGEYLGVAYRFGSELGDKAVF
PHVTCKNMRFRVNFGKEKPKHNVTNGFRMMSDVPADQLELPSPSPKSPKEAEIIMMVGLPACGK
SFWCEKYAKENKDKKYYILGTNNIIDRMKVSGLLRKRNYHGRWEELIKRASLVLNKLFTITKSNPR
NYILDQTNVYFTARRRKMEAFAGYKKVAAVMINKPEVLADRTEKQQKVEGKIVPEAAVMEMKY
NFTLPEKGPSFDEVWYLEETMPKAQELVASYRREGSNFKNQAKRKPDGQINPENSPANEKKPKL

DSKPISRGFDKPLGKPDNDLSKQSSTKDSNMKKTDQDRFSKSERPMLKDETHGDSTSSSSGNFIRR
PDGDINKDRGSFGNTSDRGKSFDSGNREERNDRQFPPREDRNTPMKDGRDSLDQRSPFQPSDAL
GMTKDHDDFRLPTQFGKPEGRSSLMDIDRLPRRDSDSFQSPQFRGREELSNRGGGRGRGTPPFRG
GFNDFRNSPQGSQDFRSGPGMRDTPRNTRWDAPGSRGPSEFTNTPGRGGFTPGGRGGPNDFTDS
PGRGGFSPSGRGHSNFNDPSARGSFTAGIGRGGSMLRSQDSAKEREDQLTEDLEELIPPKMRKTRF
SDAPPINKYDPVGNSRVGFNAPEINSSSGNIRSFPPPAGNQGLKDTPSRFDGPPRFDRTNPQNEPP
RFDRTNPQNEPPRFDRTNPQ
>TRINITY_DN60705_c0_g1_i1.p1   type:5prime_partial   len:169   gc:universal
TRINITY_DN60705_c0_g1_i1:1-507(+)
SITHPNDVKSTTLLCPHGIKNKCEEEFAERARKEKKLWLMPESLEEYREMMKVACHKELHIPELYL
KGAFQIYVLKQEVYGKVAVALREEENLHLLERNLEKLTKPVLLVWGKEDKILDVACVDVIKSKLP
APPTVHLLDNCGHTFVIERARKTANLMSEFINTIELN*
>TRINITY_DN11097_c0_g1_i1.p1   type:complete   len:730   gc:universal
TRINITY_DN11097_c0_g1_i1:2348-159(-)
MVRPQGVTQEHSSKPSTSERNSFVFSALSKSGCFETLPSIYDSIIIQRSHWLHTEGFSMRTSSTGSQQ
TSRRAFYEELQAFSSTIPFYESLSWALLSLSGCLNPVSTPNIREEILADLEGRSVDESREVLLVFATLFD
VYKSYQNSIVVEISAILPGGILRCISLGQTEGFNSYNTVGLINYQPIVYPVGRNVLGRLFNVTGSCID
LYNEVTMDMPFVRSVSTEETHTPQKTTLIKTGANADTSSDSDCVKANALFKECTSHINVKETSLD
HLISLYCGCYMGMTSAPIAPISRLPIEAESSRAPEHMVQKLQECMGTYSGSADPSTPNQIGSKKQPF
WLSKEALESGVSPIHSTPLPISKLRVDLSLFETGIKVVDLLTPYKKGGKIGLFGGAGVGKTVVIMEFI
RNLAIEHKGISIFCGVGERTREGNDLYSEMAEAGIICKDYTTMKPSDPSSNGGPTGSIDQHSVTFTR
SSVTLVYGQMNESPGCRMRVAHAGLTVAEFFRDVFKQDVLVFVDNVFRFLQAGSELSTLLGRMPS
AVGYQPTLATEMGAFQERIIAALWGSITSIQAIYVPADDLTDPAPVTIFTHLDAVSSLSRELAAKGIY
PAVDPFNSTSRMLDPQCLTSEHFRVALEVQQILQRYRELQDVIAILGIEELSEEDLKTVERARKIERF
LSQPFSVAEVFTKIKGIFVPLEATIRSFAMVLSGALDDVPEGNFYMKGGLDTLKL*
>TRINITY_DN1534_c2_g1_i1.p1   type:complete   len:547   gc:universal
TRINITY_DN1534_c2_g1_i1:1914-274(-)
MHRVNSSFVKVAERTSKLCGNLGIKNSKIPSSLIARSSSTDTTDGVGESEPGFLEMVSIFTENAHSIT
LDKLLSAKPAPGKRAEDTGVREKRIKGILDIIKPTNTALAVNFPLRRDNGDYELITGYRAQHSHHR
LPCKGGIRYAPDVNLDEVKALAMLMTFKCAVVDVPFGGAKGGICIKKSDYSENEVEKITRRFTVE
LARKGFIGPGIDVPAPDMGTGEKEMSWMADTYAMTLGYGDMNSSGCVTGKPISQGGIHGRMSA
TGRGVYHGIDNFANNEEYMNLIGLKPGLKGKTFIVQGFGNVGLHSCRYLHRYGARCIGVIEHDG
SIMNPNGIDPKDLEDYKLDNGTIVGFPGATDTTEDLMVAECDILVPAANELQITAKNAPHIKAKII
AEGANGPTTPQADKILQQRKRLVIPDLYINAGGVTVSYFEWLKNLNHVSYGRLTWKYEESSNYNL
LSSVQESLEKHFGGNIPINPSSTFLQSIQGASEKDIVHSGLAYTMERSANRIMKTAKDYDLGLDVRA
AAYVVALEKIFNTYSEAGLTFT*
>TRINITY_DN1534_c2_g1_i1.p1   type:complete   len:547   gc:universal
TRINITY_DN1534_c2_g1_i1:1914-274(-)
MHRVNSSFVKVAERTSKLCGNLGIKNSKIPSSLIARSSSTDTTDGVGESEPGFLEMVSIFTENAHSIT
LDKLLSAKPAPGKRAEDTGVREKRIKGILDIIKPTNTALAVNFPLRRDNGDYELITGYRAQHSHHR
LPCKGGIRYAPDVNLDEVKALAMLMTFKCAVVDVPFGGAKGGICIKKSDYSENEVEKITRRFTVE
LARKGFIGPGIDVPAPDMGTGEKEMSWMADTYAMTLGYGDMNSSGCVTGKPISQGGIHGRMSA
TGRGVYHGIDNFANNEEYMNLIGLKPGLKGKTFIVQGFGNVGLHSCRYLHRYGARCIGVIEHDG
SIMNPNGIDPKDLEDYKLDNGTIVGFPGATDTTEDLMVAECDILVPAANELQITAKNAPHIKAKII
AEGANGPTTPQADKILQQRKRLVIPDLYINAGGVTVSYFEWLKNLNHVSYGRLTWKYEESSNYNL
LSSVQESLEKHFGGNIPINPSSTFLQSIQGASEKDIVHSGLAYTMERSANRIMKTAKDYDLGLDVRA
AAYVVALEKIFNTYSEAGLTFT*
>TRINITY_DN147947_c0_g1_i1.p1   type:internal   len:168   gc:universal
TRINITY_DN147947_c0_g1_i1:501-1(-)
VGKSALTIQFIQSHFVPDYDPTIEDSYRKQCVIDDRVAHLDILDTAGQEEFSAMREQYMRTGEGFL
LVFSVTDRSSFDEIHKFHTQILRVKDKDEFPMILVGNKSDLENERTVSTAEAQELGRKLSVPYLESS
AKQRINVDAAFHDLVRAIRRSNNVEALPIKNKKK

>TRINITY_DN436_c0_g1_i1.p1 type:complete len:116 gc:universal TRINITY_DN436_c0_g1_i1:74-421(+)

MAVSRAAGSASTFQKFANAFRSWYIYAAGYRQLGLRADDLHMEENPDVSAAIKRLPEEDQYLRIF
RIKRALDLSLKHNILPKEEWTKPEEDQYYLTPIIEAVKAERKEREQWDRM*

>TRINITY_DN7112_c0_g1_i2.p1 type:complete len:224 gc:universal TRINITY_DN7112_c0_g1_i2:79-750(+)

MAPMQVGYWTIRGLAQPIRVLLGYTNTEFEDVLYDCGEAPSYDRSCWMNVKESMGLAFPNLPY
LIDGDHKITQSNAIMRYIARKHNLEGETEEERSRVDVMENQSMDFRNGFVRLCYGSTPSDIEQKS
KAYDQSVSVLLGRFEKYIGDRKFFAGDKLTFVDFLMYELLQHHLVYKSSILDDFPTLQAFCKRFEE
VPEIAAFMKSDKCFKGPINNKMALIGSKV*

>TRINITY_DN1378_c0_g1_i1.p1 type:complete len:443 gc:universal TRINITY_DN1378_c0_g1_i1:2151-823(-)

MLRFAVLVVVASIGVSALYDSSDDVVELTQSFNNHVIGSDDIWLVEFYAPWCGHCRNLAPAWK
QAATALKGIVKVGAVDMDQHQSVGGPYNVRGFPTIKVFGANKMSPSDYNGARSAQAIVDEAM
KVVQRVVSDRLGGRSSGGGGRRSGGSSGGSGNKDDVIELTDSNFEKEVLNTKDMVLVEFFAPWC
GHCQRLAPEWAKAATELKGKVKLAALDATVHGQTASRFQVQGYPTIKFFPAGDKDFSSAQDYQ
GGRTASDIVAWALAKHAENVDPPEILEITSNSVLTENCNEKPLCVISFLPDILDSMAAGRNGYISTL
KELGDKYKSKMWGWLWTAPGLHSNLEQALGVGGFGYPAMAVVNIRKKVYVLLRGSFGIDGIDE
LLKSIAVGRGRTEKLTQGLPTLKDVEAWDGKDGQLPEEEDIDLSDVELDDLDDEPKQEL*

>TRINITY_DN98968_c0_g1_i1.p1 type:3prime_partial len:424 gc:universal TRINITY_DN98968_c0_g1_i1:1269-1(-)

MEYKNILTSCIFLISVITNTQQTSYVNYFNDQSDLLRSFNIPVKPERSFNTGLPASYMKYARTNDFY
HLYARLFNENQDGKQMAFLTKPISFPSNIETVCVYFEYWMHNLGNTQLYIVGDTTDSTQMQNIN
VNNLVNTENRKERLVQTANEPNSCWREVNSCFNVKGKTKFTLHIQLVPPSTGIVSTNGAIALDSVI
VTTDKRIESTACTRRVGRRIKRDVSFTNLVSNPAAIPGMNLIFHNYDASKTTQDFECGDDLGLCGN
KYLGWTLTNQCSSSCGNGFIIESRTYRGQAIIAQYRQNFQQACNRGSCSTGPPQPPGNNLGPEQL
ATCSVDQCGVNTGTQVVFRVCNAALCQYQGTDYSLNQQVTIRVQSCTVACDYTAWQDTSACSK
TCDGGVLVQRRTERAFNKVETRNGNTPCNTQA

>TRINITY_DN164351_c0_g1_i1.p1 type:complete len:212 gc:universal TRINITY_DN164351_c0_g1_i1:694-59(-)

MEDWGEPGEQEAVGPTSIEVQDIKLFGKWNPDEVQVSDISLTDYIAVKEKHAVYLPHTAARYAVK
RFRKAQCPIVERLTNSLMMHGRNNGKKLMTVRIVRHAFEIIHLLTGGENPLQVLCDAIINSGPRE
DSTRIGRAGTVRRQAVDVAPLRRVNQAIWLLCTGAREASFRNIKSIAECLADELINASKGSSNSYAI
KKKDELERVAKSNR*

>TRINITY_DN10907_c0_g1_i1.p1 type:complete len:206 gc:universal TRINITY_DN10907_c0_g1_i1:1010-393(-)

MAKKAYDYLFKLLLIGDSGVGKTCLLFRFSDDAFNTTFISTIGIDFKIKTVEVDGKKIKLQIWDTAG
QERFHTITTSYYRGAMGIMLVYDITQEKTFDNIAKWLRNIDEHASEGVERMILGNKCDMEEKRM
VSKEKGEGIAREHSIKFFETSAKENICVEEAFMQLTQDILRKHQAGATHEQSPSGVVIEKDSHNRS
KGGMNCCN*

>TRINITY_DN138_c0_g1_i1.p1 type:complete len:401 gc:universal TRINITY_DN138_c0_g1_i1:157-1359(+)

MAARFLFITVILIVGNLIGDVCPERCERNWIKIGCFHDRIFPNRPYPFELVNHRDPINNHWDGNLI
NWRKYPDSIEKLACICANKTRTKGYQYFGLQFYGECWSGPSYNFHRDGPSTKCIGNDFKPCDDSS
KTECVGRAFTNYIYKLKDENPKVDGKWSEWEKWSPCSATCGYGERYRERFCSNPEPENGGQTCE
GEAREYEECNHGECQTTCDKEIDFGIALDYSSSVRQVNWNRTLDFVVELSKGFNISPEKVHFGVLS
FSHRTRFDFGLSDKTYWNSESFEKKIKSLEYRWGYTWTDKALKKVKQLIFCEKCGLRKDSLKYLLV
FTDGRSNNVKTDLKTVSDSIKDMGVNVISVGAGHTINHRELEEIATDDNHVFYVGGYAYLGDNM
NAIRRLTCG*

>TRINITY_DN1320_c0_g2_i1.p1 type:complete len:260 gc:universal TRINITY_DN1320_c0_g2_i1:97-876(+)

MRCLSMIFAILLVYLFDQVSSRACRDYVNYQCRKYLCHVPKYHRFVNMYCKATCGLCPVIHGLQ
MSTMSTPTTTATTTTTTTTTTKTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAATIVLLSGGKTISGTPEDAS
GPAVRCTDGDVTTLCITTQAIDAYFQVDLGSQKKVSRMEIKNYFHYENQLELKFLVSNDVTFATST
ICDTWDVRSVNEGDVQDKKRDCNSNVSSQTFRYARVQTVNNANEPEHLRVGEFEVYGVA*
>TRINITY_DN164128_c0_g1_i1.p1   type:complete   len:166   gc:universal
TRINITY_DN164128_c0_g1_i1:117-614(+)
MGPKFDPTAITIVYLRVVGGEVGATSSLAPKIGPLGLSPKKVGDDIAKSTGDWKGLKVTVQLTIQN
RQAKISVVPSAASLIIKALKEPPRDRKKVKHVQHNGDISFETVLDIARQMRERSMARKLEGTVKEI
LGTAQSVGCTIDGENPHDMIDMVNSGEKEVPES*
>TRINITY_DN164753_c0_g1_i1.p1   type:complete   len:143   gc:universal
TRINITY_DN164753_c0_g1_i1:491-63(-)
MAQSSVQVFGRKKTATAVAFCKRGNGMIKVNGRPLDLVQPVTLRMKVQEPVLLLGKERFAGIDI
RVRVKGGGQVAQLYAIRQAISKAIVAYYQKFVDEASKKEIKDLLVQYDRSLLVADPRRCEAKKFGG
PAARARFQKSYR*
>TRINITY_DN58867_c0_g1_i2.p1   type:complete   len:354   gc:universal
TRINITY_DN58867_c0_g1_i2:80-1141(+)
MVSLYGDMMFNIENGYLEGLVRGFRSGILNRTDYLNLIQCETLEDLKLHLQSTDYGNFLSNEAGP
LTVSVIDEKLREKLVIEFDHLRIQAVEPLSQFMDYITYSYMIDNIILLITGTLHQRSISELIPKCHPLGR
FPEMASINIASTPAELYNAVLVDTPLAPFFVDCISEQDLDEMNIEIIRNSLYKSYLESFSRFCDSLGGT
NSEVMKTILQFEADRRAIMITINSFGTELNKDDRSKLYPKCGKLYPDGLARLARAEDYDQVRQVA
DCYAEYQPLFEGTGTNPGDKTLEDKFFEYEVKLNVNSFMQQFHFGVFYAYVKLKEQECRNIVWIA
ECISQRNKSKIDNYINIFE*
>TRINITY_DN598_c1_g1_i1.p1   type:5prime_partial   len:745   gc:universal
TRINITY_DN598_c1_g1_i1:2-2236(+)
RWSGCSKSCGVGVKTKSRECDNPRPSGGGRYCTGERTATEACKIQDCGVDGKFSHWSTWTACSK
TCGGGAQKRARQCNSPPPSGDGKDCAGAREEFKGCSNDFCKGPTGVAKAQEIIERFLENFHKKT
YPDREPSGKFLKAIFAIQKAVAEEFISVDPYVRSKTLEQRLKDLENFLKVATEGGSIDFARTLLGKGV
FTFMKQKIKDGLPIDDIDKAAEGFLEKLRGDLGDKKMDEILSSQGDATLMFTIDTTGSMKQEINA
AKAIAKQIISATRDYEVDYILSPFSDPGTGPVTHRSASERASFVSDIDRLRARGGGDCPELSFGGML
NALNNDPQYGSPMFVFTDATAKDDTDANVASLKAAADATDATINFFTNLAGCNGRRDRKRGIE
SYKEIASYTGGQVFPLKNEAELIKFTSYVKTSLQQDTVITSGGTLNSKSKRSLYSMQARHFMVDDGI
SKLVISVGVQQLASQVALVDPNGKKVYPSTTLALSLIYQVSHPSPGQWKLDFPTSVGKYSYNVQAV
SSSAIAFAHNFIYQQSVRKNSPPIPLANPLKGVKNMMVVRLGGTKNFDLNSIKIDLVDTSGNVLQ
KGIGTDRLDSDEVRHATIDPPSGPFKVRLTGKTKSGYNFERVSQGISRPVSAAMRTNFAGYDFTAK
LGKGPYAAQMLFINRGAHENFYFYAKANYGSIPNYKQTKRVTSQGFVTFTYKAPRQYNLKGKSD
RITVTVKRQSTGEIVSHHTSILLVV*
>TRINITY_DN614_c0_g1_i1.p1 type:complete len:183 gc:universal TRINITY_DN614_c0_g1_i1:194-
742(+)
MGQMFGKLFSGLFGKKEMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNISFTVW
DVGGQDKIRPLWRHYFQNTQGLIFVVDSNDKERVTEAKGELAKMLGEDELREAALLVFANKQD
LPNAMNAADLTKQLALHDLKSRSWYIQATCATSGDGLYEGLDWLSTELKKKKN*
>TRINITY_DN4_c0_g1_i1.p1 type:5prime_partial len:586 gc:universal TRINITY_DN4_c0_g1_i1:2-
1759(+)
SMAEIVSVLFFHTMRYKVSDPRDASSDRFVLSKGHSAPILYAAWSLAGLFPESDLMNLRKIDCDLE
GHPTPRLSFVDVATGSLGQGLSCACGMAYTGKYFDKSSYRVFAVLGDGESAEGSVIEAANFASFYK
LDNLVAIVDINRLGQSDPTSLGHELDVYQRRWESSGWNTIVIDGHDVEALCKAFFTAEEPSAKPT
VILAKTFKGRGIPGIEDQMNWHGKPLGAKTDAAIEAIESCIVNKEINGEKVNSRMVVDDAAPTD
MSPITLSEKPNYSPDVKVATRNAYGTALAKLGRTSNKVIALDGDTKNSTFAITFQKEFPDRFVECFI
AEQNMVGVGIGCATRNRTVAFASAFACFLSRAYDQIRMGAISQTQLKMAGSHVGVSIGEDGPSQ
MALEDLAMFRAIPNCTVFYPSDPVSCERAVELAANLRNMCYIRTSRPATVPVYSNDEVFEPGKGK
VIRQSENDTCLLVGAGITLHECVKAHETLKAEGINVRVFDPFTLKPFDNDGLIANAKACHGNVV
TVEDHFPQGGLGETVCGAVDMETGIRVKRLAVNGVPRSGPSSVLLDMFGISASHVVNAVKTAFN*

>TRINITY_DN932_c0_g1_i1.p1 type:complete len:475 gc:universal TRINITY_DN932_c0_g1_i1:1940-516(-)

MGFKFLELLKPFISVLPEVSKPERKIQFREKVLWTAITLFIFLVCCQIPLFGIMSSDSADPFYWLRVIM
ASNRGTLMELGISPIVTSGLIMQLLAGAKILEVGDTPRDRALFNGAQKLFGMVITVGQAIVYVMT
GMYGEPSELGAGVCLLIIIQLFCAGLIVLLLDELLQKGYGLGSGISLFIATNICETIVWKAFSPATVNT
GRGTEFEGAIIALFHLLATRQDKVRALREAFYRQNLPNLMNLLATVFVFAIVIYFQGFRVDLPIKSA
RYRGQYSSYPIKLFYTSNIPIILQSALVSNVYIISQMLSAKFAGNFLVNLLGVWNEQGGPSRSYPIGG
LCYYLSPPESLGQIGQDPVHALLYIVFMLGSCAFFSKTWIDVSGSSAKDVAKQLKEQQMVMKGHR
EKSMIHELNRYIPTAAAFGGLCIGALSVLADFMGAIGSGTGILLAVTIIYQYFELFVKEQSEQGGMS
TLLF*

>TRINITY_DN11545_c0_g1_i1.p1   type:5prime_partial   len:452   gc:universal
TRINITY_DN11545_c0_g1_i1:1-1356(+)

LTFIESLRLSRFMYSIRSKLKEIHRLKSIRKMASLSSVGDNLKDVTLNGQNEVEENQVVNILHVEAK
DNKGIDYDKLIKQFGSNKVTDAQIEKIEKLTGKKAHHFLKRGIFFSQRDLDFILSQVDKGKPFFLYT
GRGPSSDSMHLGHLIPFMFTKYLQDAFDVPLVIQITDDEKFLMREHLSLEETYRLAYENVKDIIAC
GFDKDKTFIFSDIDYVGNSSAFYRNILKVQRCVTFNQVKGIFGFTDGDKIGKISFPAIQAAPSFSSSFP
QIFGDKSNIPCLIPCAIDQDPYFRMTRDVAPRLNLHKPALLHSTFFPALQGAKTKMSSSDANSSIFL
TDTAKQIKTKINKYAFSGGRDTIEEHREMGGDITVDISYQYLTFFLEDDDRLQQIKEDYASGKMLT
GELKKELIAVLQPLVAAQIERRKLVTDDLVKEFMTPRPLNFKGVSKSMN*

>TRINITY_DN3052_c0_g1_i1.p1 type:complete len:362 gc:universal TRINITY_DN3052_c0_g1_i1:45-1130(+)

MAHLSQEQRNELKKNAESIVAPGKGILAADESTGTVGKRFAGINVENNEENRRLYRQLLFTADKS
ISNYLGGIILFHETLYHKDDNGKPLVELIKELGINPGIKVDKGIVPLHGTNNEGTTQGLDGLAERC
KQYKQDGCTFAKFRCVIKINTPLGVPTDIAIQENAQVLARYANICQANGLVPIVEPEILIDGDHNL
ATSQRVTERVLACVYKTLVDHHVYLEGTLLKPNMVTPGQSCPEKASAEEVGVATVKALRRTVPA
AVPGITFLSGGQSEVEATKHLDAMNKTDLARPWALSFSYGRALQASVLKAWGGKKENVAEAQK
VLLHRAHLNSLASLGKYEGENASGATGDSLFVANHQY*

>TRINITY_DN11662_c0_g1_i1.p1   type:complete   len:398   gc:universal
TRINITY_DN11662_c0_g1_i1:75-1268(+)

MALSRPVYIIAAKRTAFGSFGGSFKGLTATQLGQKAAAAIVDAKLDPSLINSVIFGNVAQSSSDA
AYVARHIGLGNDIPFASTALTVNRLCGSGFQAVVNGAQEVVLGEADIVLAGGTENMSQCPFAIRN
ARWGINLGETREIEDTLWSALTDSFIQTPMGITAENLAEQYGITRLECDEYALASQQRWAAANDN
GLFKAEIAPIEVKQKRKMVPVDKDEHPRAGITIEALNKLPPVFKKNGTVSAGNASGICDGAAALV
LASEEACKQHNLAPLAKVVSYGISGVEPSIMGIGPCPAIKQALSRADMSLSDMAFIEVNEAFAAQY
LAVEKELGLDRSITNACGGAIALGHPLATSGARILTHLVHTLKRTKENHAIGSACIGGGQGIAVLL
ENVM*

>TRINITY_DN1065_c0_g1_i1.p1 type:complete len:373 gc:universal TRINITY_DN1065_c0_g1_i1:53-1171(+)

MSGRGKVKAQRISLSKRAGTIFPVGRIRRLMKGCTHKFRVGIGAPIYQAAVMEYLAAEILELAGN
AARDNKRRRITPRHILLAIANDEELNKLLRNVTIAQGGVMPHIQPELLRRKEGNKFSLPSNMKAK
ALKAQNAGVQKAKAKPAPVKKAAPAKKAAPAKAESKQAPKKAPQTNASPKKKSDQPWTVLSE
KTLFLGQKFLVVQGNVADIKCDAVVHPTNASFSTTGEVGKALIAAGGDDLKKAISELHKSHGDL
QVATALLGDAPNLKAKHVVHVHSPVWGTGNPEQDLENVVKSALTLADEKNVQTIAFPAIGSGA
GFKKNVAAQLMVRSMSNYFVDVSPSSIKNIYIFVTDAESIGFYTLELAKVDSS*

>TRINITY_DN10995_c0_g1_i2.p3   type:5prime_partial   len:152   gc:universal
TRINITY_DN10995_c0_g1_i2:3-458(+)

FWLKPRRPKAAGSPTLRDRGRPERVGACSLDRQGMASRSRALLSAVRASRVRRSGGFGSPRDHEP
AWIENWNKDHRAGKDSLDWFFRAFNSTGIYEIFLKSSPRFYGFIIGAGVLGGYYWSRMWDHIWN
HINQGKLYAHNPYVYPPPEDDE*

>TRINITY_DN5153_c0_g1_i1.p1 type:complete len:862 gc:universal TRINITY_DN5153_c0_g1_i1:61-2646(+)

MSEKKEFHRLSRSVRPIHYNITLKPDLENFTFAGNEDIDLEIKKETKHIKVNSLDIKVSSAVLTVDSQ
DIEPSDIRYKEDEETVTFKFSNPIPVGNAKLSLKFTGELNDKMKGFYRSKYTSASGEEKHMAVTQFE
PTDARRAFPCWDEPAVKATFDITMIAPKDRVVLSNMDVKSEKDHAEDDSFKEVAFNTTPIMSTYL
VAFVIGEFDFIEETLENGVLARVYTPLGKTEQGTFALKITSKTLPFYEEYFGIKYPLPKIDLIAIPDFAA
GAMENWGLVTYRETALLVDEKESSASSKQWVAIVVGHELAHQWFGNLTTMEWWTHLWLNEGF
ASWIEYLCVDYCCPEYDIWTQFVTNDFTRALELDALSNSHPIEVKVGHPSEVDEIFDAISYSKGSCV
IRMLHDFVGVGDFKRGLNSYLTTYKYANGETEDLWYHLEKASGKPVANVMATWTKQMGYPVLS
VSAEYVDTQCILKISQKKFTADGSADPNDQRWAIPINIMTNDNPKFSTLMTDPEMVLFMENEPES
NYIKLNPGQIGFYRTCYSSDLITKLVPVINSLSPVDRLGLESDLFALSIAGVSKTVDFLNILKGYKDE
MNYTVWTDIDSNISSLGVILQNTDNFELFKEYVIKLYKPISEALGWEPKDDDDHLTALLRNLILRRL
GNYGDADTLAEGQRKFKAHVDGTELVNADIRSAVYSMVSKHGDEETVDQFINLYRNTTHSEEKT
RILTYIGASYKSEVIEKSLKFSISDDVRSQDTVFALCSSTGSLNGRRLTWNFVKENWDDLFKRYQGG
FLLSRLISRTISNFATVEEANDVKTFFEEHKAPAAERCIKQGIESIQLNNAWLTRDGESINQWLFQE
N*