

Supplementary file 4: Six high similarity protein sequences of ovine B4GALNT2 for motifs detection

>B4GALNT2_Ovis aries, NP_001305005.1

MTSFGSRYLWILKMS VLFLALGI VLFMFRS VSLYSEFSI YKAPLLQPS VAAGMLKLLPEKHI
KSLFTHDGIWLF PKNQCKCEAW KLQQS YYFENAYGQTELP AVKMRRQAEFEHFQRREGL
PRPPPLLAQANLPFGYPIHG VEV MPLHTIPIGLQFEGPD APIYKVT LKASLGT LNTLADTP
DTVVQGRGQKELTILTSSRTVLNFILQHVT YTSTEYQHPRVD VVS LESNSS VAKFPVTIRFP
VMPKLYDPGPERKLRNLVSIAT KTFLRPHKLKTM LQSIRVYYPDLT VI VADDS KEPLINDS
YVEYYTMPY GKGWFAGRNLAISQ VTT KYVLW VDDDFLFNDKT KIEVLVD VLEKTELDV
VGGS VLG NVFQF KLFLEHS KNGDCLHRRTGSFGPLDGF PNCVVTSGVVNFFLAHTERLQR
VGFDPR LHRVAHSEFFIDGLGSL LVGSCSD VIIGHQPHSS VADPELA ALEKT YRRYRANTN
DKVQFKLALHYFKNHLQCTT

>B4GALNT1_Rattus norvegicus, AAH81799.1

MRLDRRALYALVLLACASLG LLYASTRDAPGLPNPLALWSP PQGPPRLDLLDLATEPRYA
HIPVRIKEQVVGLLAQNNCSCCESSGGRFALPFLRQ VRAIDFTKA FDAEELRAVSISREQEYQ
AFLARSRLADQLLIAPANSPLQYPLQG VEVQPLRSILVPGLSLQEAS VQEIYQVNLIASLG
TWDVAGEVTGVTLTGEGQSDTLASPILD KLN RQLQLVTYSSRS YQANTADT VRFSTKGH
EVAFTILIRHPPNPRLYPPSSLPQGAQYNISALVT VATKTFLRYDRLRALIASIRRFYPTVTIVI
ADDS DKPERISDPHVEHYFMPFGK GWFAGRNLA VSQVTTKYVLW VDDDFVFTARTRLEK
LVDVLERTPLDLVGGAVREISG YATTYRQLLS VEPGAPGFGNCLRQKQGFHHEL AGFPNC
VVTDG VVNFFLARTDKVRQVGFDPR LNRVAHLEFFLDGLGSLRVGSCSDVVVDHASKVK
LPWTSKDPGAELYARYRYPGSLDQSQVAKHRL LFFKHRLQCMTAE

>B4GALNT1_Mus musculus, AAH57199.1

MRLDRRALYALVLLACASLG LLYSSTRNAPSLPNPLALWSP PQGPPRLDLLDLAPEPRYA
HIPVRIKEQVVGLLAQNNCSCESKGGSLPLPFLRQ VRAVDLTKA FDAEELRAVS VAREQEY
QAFLARSRLADQLLIAPANSPLQYPLQG VEVQPLRSILVPGLSLQEAS VQEIYQVNLSASL
GTWDVAGEVTGVTLTGEGQPDLT L ASPVLD KLN RQLQLVTYSSRS YQANTADT VRFSTK
GHEVAFTILVRHPPNPRLYPPSSLPQGA EYNISALVTIATKTFLRYDRLRTLIASIRRFYPTVTI
VIADDS DKPERISDPHVEHYFMPFGK GWFAGRNLA VSQVTTKYVLW VDDDFVFTARTRL
EKLVDVLEKTPLDLVGGAVREISG YATTYRQLLS VEPGAPGLGNCFRQKQGFHHEL VGFPSC
CVTDG VVNFFLARTDKVRQVGFDPR LNRVAHLEFFLDGLGFLRVGSCSDVVVDHASKV
KLPWTAKDPAET YARYRYPGSLDQSQVAKHRL LFFKHRLQCMTAE

>B4GALNT2_Homo sapiens, NP_703147.2

MGSAGFSVGKFHVEVASRGRECVSGTPECGNRLGSAGFGALCLELRGADPAWGPFAAHG
RSRRQGS RFLWLLKILVIILVLGIVGFMFGSMFLQAVFSSPKPELPSPAPGVQKLKLLPEERL
RNLFSDGIWLF PKNQCKCEANKEQGGYNFQDAYGQSDLP AVKARRQAEFEHFQRREGL
PRPLPLLVQPNLPFGYPVHG VEV MPLHTVPIGLQFEGPDAP VYEVTLTASLGT LNTLADV
PDSVVQGRGQKQLIISTDRKLLKFILQHVT YTSTGYQH QKVDIVSLESRSS VAKFPVTIRH
PVIPKLYDPGPERKLRNLVTIATKTFLRPHKLMIM LRSIREYYPDLT VI VADDSQKPLEIKDN
HVEYYTMPFGK GWFAGRNLAISQ VTTKYVLW VDDDFLFNEET KIEVLVD VLEKTELDVV
GGSVLG NVFQFKLLLEQSENGACLHKRMGFFQPLDGF PSCVVTSGVVNFFLAHTERLQRV
GFDPR LQRVAHSEFFIDGLGTLLVGSCPEVIIGHQSRSPVVDSELA ALEKT YNTYRSNTLTR
VQFKLALHYFKNHLQCAA

>B4GALNT2_Mus musculus, NP_032107.1

MTSSVSFASFRFPWLLKTFVLMVGLATVAFMVRKVSLTTDFSTFKPKFPEPARVDPVLKLL
PEEHLRKLFTYSDIWLFPPKNQCDNSGKLRMKYKFQDAYNQKDLPAVNARRQAEFEHFQ
RREGLPRPPPLLAPPNLPFGYPVHGVEVMPLHTILIPGLQYEGPDAPVYEVILKASLGTNLNT
LADVPDDEVQGRGQRQLTISTRHRKVLNFILQHVTYTSTEYYLHKVDTVSMEYESSVAKF
PVTIKQQTVPKLYDPGPERKIRNLVTIATKTFLRPHKLKILLQSIRKYYPDITVI VADDSKEPL
EINDDYVEYYTMPFGKGWFAGRNLAISQVTTKYVLWVDDDFLFSDKTKIEVLVDVLEKT
ELDVVGGSVQGNTYQFRLLYEQTKNGSCLHQRWGSFQALDGFPGCTLTSGVVNFFLAHT
EQLRRVGFDPIQRVAHGEFFIDGLGRLLVGSCPGVIINHQVRTPPKDPKLA ALEKTYDKY
RANTNSVIQFKVALQYFKNHLYCST

>B4GALNT1_Homo sapiens, NP_001469.1

MWLGRRALCALVLLACASLGLLYASTRDAPGLRLPLAPWAPPQSPRRPELPDLAPEPRYA
HIPVRIKEQVVGLLAWNNCSCCESSGGGLPLPFQKQVRAIDLTKAFDPAELRAASATREQEF
QAFLSRSQSPADQLLIAPANSPLQYPLQGVEVQPLRSILVPGLSLQAASGQEVYQVNLTASL
GTWDVAGEVTGVTLTGEGQADLTLVSPGLDQLNRQLQLVTYSSRSYQTN TADTVRFSTEG
HEAFTIRIRHPPNPRLYPPGSLPQGAQYNISALVTIATKTFLRYDRLRALITSIRRFYPTVTV
VIADDSDKPERVSGPYVEHYLMPFGKGWFAGRNLAVSQVTTKYVLWVDDDFVFTARTRL
ERLVDVLERTPLDLVGGAVREISGFATTYRQLLSVEPGAPGLGNCLRQRRGFHHELVGFPG
CVVTDGVVNFFLARTDKVREVGFDPRLSRVAHLEFFLDGLGSLRVGSCSDVVVDHASKLK
LPWTSRDAGAETYARYRYPGSLDESQMAKHRLFFKHRLQCMTSQ