

Supplementary Table S1. *Gastrodia elata*, *Phalaenopsis equestris*, and *Dendrobium* GFP proteins sequences

Protein id	Organism	Protein sequence
AAZ76593.1	<i>Gastrodia elata</i>	MASPASSAVIFFFAVAALMSLLAMPALAASQLNAGQTLGTGQSLAQGPNQFIQNDCNLVLYASNKAVWATGTNGKASGCVLRMQRDGNLVIYSGSKV IWASNTNRRDDNYLLQLQRDRNVVIYDSSNNAIWSTGTNLGNAAVTVIPHSNGTAAASGAAQNKVNEYLRP
AAK59994.1	<i>Gastrodia elata</i>	MASPASSAVIFLFAVAALMSLLAMPALAASQLNAGQTLGTGQSLAQGPDPQFVIQNDCNLVLYDSNRVWASGTNGKASGCVLRMQRDGNLVIYSGSR VIWASNTNRRDDNYLLQLQRDRNVVIYDSSNNAIWATGTNVGNAAITVIPHSNGTAAASGAAQNKVNEYLRP
AAX10108.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNAGKSLGAGGSLAQGPYLFIMQSDCNLVLYDNNRAVWASGTNGKASNCILKMQRDGNLVIYSGSRA MWASNTNRQDGNYYLILQRDRNVVIYDNSNNAIWASGTNVGNAEITVIAHSNGTAAASGAAQNKVNELYISMY
AAX10109.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNAGKSLNTGASLAQGGYLFIMQSDCNLVLYDNNKAIWASGTNGKASNCILKMQRDGNLVIYSGSRAI WASNTNRQDGNYYLILQRDRNVVIYDNSNNAIWASGTNVGNAEITVIAHSNGTAAASGAAQNKVNELYISMY
CAB94238.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNSGHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASGCMLKMQNDGNLVIYSGSRA IWASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITVIPHSNGTAAASGAAQNKVNELYISMY
CAB94239.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTVMMSLSAIPAFASDRLNSGHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASGCMLKMQNDGNLVIYSGSRAI WASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITVIPHSNGTAAASGAAQNKVNELYISMY
AAG52664.2	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNSGHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASGCVLKMQNDGNLVIYSGSRAI WASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITAIPHSNGTAAASGAAQNKVNELYISMYSRSKRIAG
CAB94240.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTVMMSLSAIPAFASDRLNSGHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASNCFLKMQNDGNLVIYSGSRAI WASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITVIPHSNGTAAASGAAQNKVNELYISMY
CAB94237.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNSGHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASNCFLKMQNDGNLVIYSGSRAI WASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITVIPHSNGTAAASGAAQNKVNELYISMY
AAG53455.1	<i>Gastrodia elata</i>	MAASASTAVILFFAVTTMMSLSAIPAFASDRLNSDHQLDTGGSLAQGGYLFIIQNDCNLVLYDNNRAVWASGTNGKASNCFLKMQNDGNLVIYSGSRAI WASNTNRQKGNYYLILQRDRNVVIYDNSNNAIWATHTNVGNAEITVIPHSNGTAAASGAAQNKVNELYISMY
XP_020579629.1	<i>Phalaenopsis equestris</i>	MHSAKQSITQTTPKSQLNHKTMASISTAFLLLVGTLLSLQTAPVSAADRLNAGQSLGGGQSLAQGPYIFIMQKDCNLVLYDNNKAVWATGTNGKA SGCYVTMQRDGNLVIYSGTRVIWASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATGTNVGNAAIVVIPHSNGTAAASGAAQNKVKELYP
XP_020574364.1	<i>Phalaenopsis equestris</i>	MVFRDPNLHYHALSQAQKNYNTHSPQVPNKTLTSLQTAPVSAADRLNAGQSLGGGQSLAQGPYIFIMQKDCNLVLYDNNKAVWATGTNGKASGCYVT MQRDGNLVIYSGTRVIWASNTNRQNGNYYLILQRDRNVVIYDNSNNAIWATGTNVGNAAIVVIPHSNGTAAASGAAQNKVKELYP
XP_020579587.1	<i>Phalaenopsis equestris</i>	MTFFITFPSIFLLSLAVLSILPTTPASAASTLYAGQSLNPGQSLTQGNYSFIMQQDCNLVLYDKNRAVWSTETSGRASGCVLRLQINGNLIYSGVRVIWQS NSSGFVGIYYLILQTDNRNVVIYDFHDAIWSTGTEVPSADSVDKAAFFAVAKEKVVIEDNVLEG
XP_020598103.1	<i>Phalaenopsis equestris</i>	MVFSSMIKSLFAASLTILLANPSSAQNYNHLLAGQRLNTGESLRTDNYIFIIQYDCNLVLYESNTAIWASGTDGRGQGCYLTMQHDGNLVVYDYTNTA VWASNTDRENGNYILIVQRDRNVVIYSNPIWATGTNYAGSVGVVVAARNGTVGVSQAKQNKVREMGNIREVIN
XP_020598757.1	<i>Phalaenopsis equestris</i>	MVFSSMIKSLFASLTILLANPSSAQNYNHLLAGQRLNTGESLRTDNLKFIQYDCNLVLYVNNIAIWASGTNGKGQDCYVTLQHDGNLVVYDYINTAV WASKTDRENGNYILILQRDRNVAIYSNPIWSTETNYAGSVGVVVAAHNGTVGGSGAKQNKVREMGMKIMEVIN

XP_020595050.1	<i>Phalaenopsis equestris</i>	MAFFPMIKTLILFSASLTILLAIIPSSAQTYNHLLAGERLNPGLSLVQGHYFFTMQYDCNLVLYDYSTPLWASGTQNKGSGCYAIMQRDGNLVVYDSNNN PLWASNTNGEENYILILQKDRNVVIYSNPIWATGTNQVGWIGVVVAAAARNGTVGVSGAEQNKVREMKGIMEV
XP_020572028.1	<i>Phalaenopsis equestris</i>	MASYPMFKTLILCAAFLTILLANPSSAQYYNHLLAGERLRPGESLVQGHYFFTMQYDCNLVLYDDSTPIWASGTQKGSGSGCYVIMQQDGNLVIYDSKKK PLWASNTNVGKGNYVLVLQKDRNVVIYSKPIWATGTNKGWGTGVVVAAAAGNGTVGVSGAEQNKVREMRFVLMNDV
XP_020576869.1	<i>Phalaenopsis equestris</i>	MVLSQMIKSLLFAASLTILLADPSSAQTYNHLLSGERLNGGESLRSMNLQLIIQYDCNLVLYDSNSAIWASGTGGSGSGCYLAMQNDGNLVIYDYSNRAI WASNTGRDNGYYILVLQKDRNVVIYGNPIWATGTNYGGSVAVVVTAARNGTVGVSAAKQNKVRKMGKIMEGMI
XP_020597564.1	<i>Phalaenopsis equestris</i>	MVLSPMIKSLLFAAALTILLAKPSSAQTDNYLLSGERLEGGKSLKSGNLEFIIQDDCNLVLVYHKKAVWASGTDGFSLSCYLVLQQDGNLVIYNYLDRAI WESYTFGIDGHYILVLQKDRNVAIYGDRIWATENKDLGSMVAVVVAARDGTGVGVSGAKQNMVRKMGKIMEVIN
XP_020576867.1	<i>Phalaenopsis equestris</i>	MVLSPMIKSLLFAAALTILLAKPSSAQTDNYLLSGERLEGGKSLKSGNLEFIIQDDCNLVLVYHKKAVWASGTDGFSLSCYLVLQQDGNLVIYNYLDRAI WESYTFGIDGHYILVLQKDRNVAIYGDRIWDTDNKYPGSVAVVVVAARDGTGVGVSGAKQNMARMKMGKIMEVIN
XP_020676062.1	<i>Dendrobium catenatum</i>	MASSPSSPTILLLLSVATLFSLLTTPASAANRLNAGQSLGPGQSLAQGPYLFIMQPDCNLVLYDNIKAVWATGTNGRASGCVLKMQTDGNLVIYSGSRV IWASNTNRQNGNYLLQLQDRNVVIYDNSNNAIWATGTNVGNAAVVVIPHSNGTAAASGAAQNKVKELYP
XP_020688140.1	<i>Dendrobium catenatum</i>	MASSPSSPAILLFLTVATLFSLLTTPASAANRLNAGQSLGPGQSLAQGPYLFIMQQDCNLVLYDNNRAVWATGTNGRAFSCVLKMQTDGNLVIYSGSK VIWASNTNRQIGNYYLLQLQDRNVVIYDGANNIAIWATGTNIGNAAVVVIPHSNGTAAASGAAQNMKELYP
XP_020695144.1	<i>Dendrobium catenatum</i>	MASSPSSPTILLLLSVATLFSLLITPASAANRLNAGQSLGPGQSLAQGAYLFIMQQDCNLVLYDNNRAVWATGTNGRASGCVLKMQTDGNLVIYSGSR VIWASNTNRQNGNYLLQLQDRNVVIYDNSNNAIWATGTNVGNAAVVVIPHSNGTAAASGAAQNKVKELYP
XP_020692119.1	<i>Dendrobium catenatum</i>	MASSPSSPTILLFLLSAATLFSLLTTPASATNRLNAGQSLGPGQSLTQGPYLFIMQPDCNLVLYDNIKAVWATGTNGRAFSCVLKMQTDGNLVIYSGSRV IWASNTNRQIGNYYLLQLQDRNVVIYDSANNIAIWATGTNVGNAAVVVIPHSNGTAAASGAAQNMKELHP
XP_020676077.1	<i>Dendrobium catenatum</i>	MASSPSSPTILLFLVATLFSLLTTPAFADDRLNAGQSLGPGQSLAQGGYLFIMQQDCNLVLYDNGGAVWATGTNGRASGCVLRMQTDGNLVIYSGSNVI WASNTNRQNGNYLIVQRDRNVVIYDNSNNAIWATGTNVGNAAVVVIPHSNGTAAASGAAQNKVKKLHP
XP_020702983.1	<i>Dendrobium catenatum</i>	MASSPTILLLLLSATALFSLLTPPVSADDRLNAGQSLNPGQSLAEGTYLFIMQQDCNLVLYDNGGAVWASGTNGQASDCVLTMQTDGNLVIYSNGDAI WASNTNRQDGDYYLILQKDRNVVIYDNANNIAIWATGTNVGNADVFIPIHSNGTAATSGAAQNKVKELYP
PKU68029.1	<i>Dendrobium catenatum</i>	MASFTFFLFAATLTVLLATPASCQYYNHLLAGERLNTGQALTQGGYSFIIQSDCNLVLVEYGSIAWSSGTNGKGKGCYVTMQTDGNLVIYNRKNKAIWA SNTNRETGNYILILQKDRNVVIYSLPIWATGTNTVGSAGVAIAGAGNGTVAVSGAEQNKVREMKGKMEVLSDE
XP_028555350.1	<i>Dendrobium catenatum</i>	MAFLIRTLLLCAASLTFLAAPSSGQLFNHLLDGERLGTGQALTQGGFAFVIQSDCNLVLVEFGNPLWSSGTNGQGLGCYVTLQSDGNLVIYDQSNKAIW ASNTNGETGNYLLILQKDRNVVIYSLPIWATGTNTVGSAGVVIAGARNGTVGVTGAEQNKVREMKGIMEECCPNDINGAYAADRKFETLTKTSFRRSNP
PKU68030.1	<i>Dendrobium catenatum</i>	NPLIQIKSAKQPQSSAMASFTFFLFAATLTVLLATPASCQYYNHLLAGERLNTGQALTQGGYSFIIQSDCNLVLVEYGSIAWSSGTNGKGKGCYVTMQTD GNLVIYNRKNKAIWASNTNRETGNYILILQKDRNVVIYSLPIWATGTNTVGSAGVAIAGAGNGTVAVSGAEQNKVREMKGKMEVLSDE
XP_020702049.1	<i>Dendrobium catenatum</i>	MAFLIRTLLLCAASLTFLAAPSSGQLFNHLLDGERLGTGQALTQGGFAFVIQSDCNLVLVEFGNPLWSSGTNGQGLGCYVTLQSDGNLVIYDQSNKAIW ASNTNGETGNYLLILQKDRNVVIYSLPIWATGTNTVGSAGVVIAGARNGTVGVTGAEQNKVREMKGIMEVEGDE
XP_020702049.1	<i>Dendrobium catenatum</i>	MAFFSMIKILLCAASLSVLLLATPASGQSYNHLLSGERLNAQSLIQGSYQFIIQNDCNLVLVYMYGTPRWASNTGGQASGCVLAMQSDGNLVVYDYGN RAIWASNTGGENGYNLILQKDGNNVIYKPIWATGTSYSGSAVVVADARNGTVGASGAEQNKVKEMGKIVQVHGDE
XP_020685020.1	<i>Dendrobium catenatum</i>	MTFSISSAMIFLLSLALFSTLVSADNHLLPGDRLNPGNFLKQDRYMLIMQEDCNLVLVNLNKP EWATKTANRGSRFCVTLQSDGNFVIYDDHEERNEAIW ASNTDGQNGNYVILQKDGNLVLYSKPIFATGTNRFGSTAVVVAKRNRKAHFVGEQNIIEVTNL

PKU80952.1	<i>Dendrobium catenatum</i>	MMASTTISICVAILLLLIFAPSNSSCRTTMNSGDTLITSDSLVLGFCGFTMQSDCNLVLYVLGRSVWDTKSYGRGDRCQLELTRNGQLVISNNGVSVWKN SFQGEDDNYVLKLQEDGNVVFNSNENGWFTNTSVSCS MAMLRQASFFYFLALFMAACGLFAGGSMAQMSHMLSGDVLKTGQNISNPLYTLVMQADCNLALYRSPSVFVWSTGTNGKGGSGCELWLKTDGNLVIN XP_028552382.1 <i>Dendrobium catenatum</i> DKDEKLIWQTGTNGTVGHYVLLLQRDRNLVIYSVPAWDSGTGTRPKLKIYKSNEASASSTGVSTAPTNQLLPGDILKTGQKISNANYTLLMQPDCNLVL YGSSSQAIWYHTNDKGSECELRLQTDGNLAIHDKDGKLIWQTATNGTIGNYVLLMQRDHNVVLYGKPIWDSGTGSRVPPTTY XP_020688646.1 <i>Dendrobium catenatum</i> MAFSISSTMIFLLSIALFSTLVSADNHLLPGERLNPNGNFKQDRYMLIMQEDCNLVLYNLNKPEWATNTANQGSRCFVTLQSDGNFVIYDEQEGRNEAIW ASKTDGENGNVVIILQKDGNLVLYSKPIFATGTNRFGSTAVVVAKRNRKAHFVGEQNIIEVTNL XP_020702047.1 <i>Dendrobium catenatum</i> MIKVLLCCTSLSLFFTTPGSGQYSNYLLSGERLDTDRYLTGMVYKFIMQNDCNLVLYQLTNLIWSSSGGFYLTFRDGNLIHNNENEIHWETEIRSEGK YILILQRGGIVAAAGPSVWSTETNGYGSDEVVAIALNGTMGVSGGEQNNVRETGKIMEVI XP_020682802.1 <i>Dendrobium catenatum</i> MTSMKNSPSSAAKSSILLSLAVLLLLNAPASCSSSFNNVLSSGYPLNAGCSLVQGKYNFTMQYDCNLVLYESEVAIWSSQTDGKGSNCSLVLQNYGELF ISTAAGHIVRSETGGEYGHFVLVLQPNGDVVVYGDAVWSTGTYRAPIAISGDKP MOKDCNLVLYDNQALWSSHTDNKGVCNCFVLQNNGELVIISNYRITVWRSETGGQAGKYALVLQPNGDVVVYGNPVWSTGTSSATFLVSI AVLILA PKU64224.1 <i>Dendrobium catenatum</i> TSTDHSAKFYGNVLKSGGKLDGTESLVHGNYSFVMQKDCNLVLYDNQALWSSHTDNKGVCNCFVLQNNGELVIISNYRITVWRSETGGQAGKYALV LQPNGDVVVYGNPVWSTGTSNIEIPKH XP_020703015.1 <i>Dendrobium catenatum</i> MTITTYSAKSSVALLSTTLLLLISSSSSTSFSTNINVLKSGQRLHSGSFLSLGNYVFAMQADCNLVLYNNNTILWSSNTGGKGKNCYLSLESDGELHIYGD GGRKVWRSETGGEYGDHALVLQPNGNVVIYGSPVWSTGLSYQTPNTDNYEQNTIN KAI0524813.1 <i>Dendrobium nobile</i> MASSPSSPTILLLLTVATLFSLLTPVSAANRLNAGQSLGPGQSLAQGPYLFIMQQDCNLVLYDNNRAVWATGTNGRAFGCVLKMQIDGNLVIYSGSK VIWASNTNRQIGNYYLLLQRDRNVVIYDSANNAIWATGTNIGNAAVAVIPHSNGTAAESGAAQNKVNELYP KAI0499027.1 <i>Dendrobium nobile</i> MASSPSSPTILLLLSATALFSLLTPASAANRLNAGQSLGPGQSLAQGPYLFIMQPDCNLVLYDNIRAVWATGTNGRAFGCVLKMQTDGNLVIYSGSRVI WASNTSRQIGNYYLLLQRDRNVVIYDSANNAIWATGTNVGNTAVVVIPHSNGTAAASGAAQNKVKELHP KAI0519187.1 <i>Dendrobium nobile</i> MASSFSSPTILLLLSAAATLFGLLTPASAANRLNAGQSLGPGQSLAQGAYLFIMQQDCNLVLYDNNKAVWATGTNGRASGCVLKMQADGNLVIYSGSR VIWASNTNRQNGNYYLILQRDRNVVIYDNNNAIWATGTNVGNAAVVVIPHSNGTAAHPARRRTR KAI0519205.1 <i>Dendrobium nobile</i> MASSLSSPTILLLLSTAALFSLLTPASADNRLNANQLLEPGQSLAQGAYLFIMQQDCNLVLYDNGGAVWATGTNGQASDCVLNMQNDGNLVIYSDSN VIWASNTNRQDGDYFLLLQRDRNVVIYDNANNAIWATGTNIGNAAVDVIPHSNSTAATTGAAQNKVKELYP KAI0519194.1 <i>Dendrobium nobile</i> MASSPTILLLLLFATALISLLTPVPSADDRRLNAGQSLNPGQSLAEGAYLFIMQQDCNLVLYDNGGAVWSSGTNGQASDCILTMQTDGNLVIYSGDAIWA SNTNRQDGDYFLLILQRDRNVVIYDNANNAIWATGTNVGNAYVVFIPHSNDTAAMSGAAQNKVKELYP KAI0519204.1 <i>Dendrobium nobile</i> MASFPSSPTILLLLSAAALFSLLTPVPSADDRRLNSGQSLNTGQSLTQGAYVFIMQLDCNLVLYDNGHAVWASGTDEKASDCVLTMQSDGNLVIYSGDAI WASKTNREDGYFLLILQSDRNVVIYDNNNPIWATGTNVVNADVVFIPHSNGTAAASGTAQNKVKLYP KAI0519202.1 <i>Dendrobium nobile</i> MAFPSSPTILPLLLSTAALCSLLTPSVSADDRLDAGKSLNTGQSLTQGAYVFIMQQDCNLVLYDNGHAVWATGTDEQASDCVLDMQTNGNLVIYGNG VVIWGSDSNRQEGYYFLLILQTDNRNVVIYDSSNPIWATGTNVVNADVVFIPHSNGTAAASGAAQNKVKELYP KAI0519203.1 <i>Dendrobium nobile</i> MAFPSSPTILLLLSTAALCSLLTPSVSADDRLDAGKSLNTGQSLTQGAYVFIMQQDCNLVLYDNGHAVWATGTDEQASDCVLDMQTNGNLVIYGNG VVIWGSDSNRQEGYYFLLILQTDNRNVVIYDSSNPIWATGTNVVNADVVFIPHSNGTAAASGAAQNKVKELYP KAI0511066.1 <i>Dendrobium nobile</i> MASFTFFLFAATLTVLLATPASSQYNNHLLAGERLNTGQALTQGGYAFIIQSDCNLVLYEYGSIAIWSSGTNGKKGKCYVTMQTDGNLVIYNRKNKAIWA SNTNRDTGNYILILQKDRNVVIYSLPIWATGTNTVGSAGVAIAGAGNGTVGVSGAEQNKVREMGMVEIKSDE
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KAI0519125.1	<i>Dendrobium nobile</i>	MAFFIKTLLLCFASLTLLAAPSSGQLFNHLLDGERLGTGQALTQGGFAFVIQSDCNLVLYEFGNPLWASGTNGQGLGCYVTLQSDGNLVIYDHSNKAIW ASNTNGETGNYLLILQKDRNVVIYSLPIWATGTNTVGSAGVVIAGARNGTVGVTGAEQNKVREMKGIVEVEGDE
KAI0519123.1	<i>Dendrobium nobile</i>	MAFFSLIKILLCTASLSVLLLATPVSGQNYNHLLSGERLNQGESLTQQNYQFIIQNDCNLVLYIYGTPRWASNTGGLASGCYLAMQSDGNLVVYDYGNR AIWASNTGGENGYYNLILQKDGNVVIYGKPIWATGTSYSGSAVVVAAARNGTVGASGAEQNKVKEMGKIVQVHGDE
KAI0519122.1	<i>Dendrobium nobile</i>	MAFFSMMKIFLLCTASLSLLLATPASGQNHLPPGERLNSGQSLIEGSYTLTIQRDCNFVLYKDGEPKWASQTGHRQGSICYVTMQTDGNLVIYGYENRAI WASNTAGEKGNFVFLQKDGNNAVIYSKPTWSTGTSSYGSASVVIKPGLNGTVGAYGAENKVKRKMKGIMEVMRDE
KAI0512221.1	<i>Dendrobium nobile</i>	MAINLASPRTSAISLLSSSILLLLISSGSSTSLGNVLKNGYELGAGLLSIGNYKFIMQRDCNLVLYENNTVLWETKTQKGTLCSLSLQSNGELFVFSES RK ALWRSETGGEFGNYALVLQPNGNVVYVYGSPMWSTGTYYQSTASNAPPRYFVSPNP
KAI0488594.1	<i>Dendrobium nobile</i>	MAFSISSTMIFLLSIALFSTLVSA DNHLLPGERLNP GNFLKQDRYMLIMQEDCNLVLYNLNKPEWATKTANQGSRCFATLQSDGNFVIYDEQEGRNEAIW ASKTDGNGNYVILQKDGNLVLYSKPIFATGTNRFGSTAVVVAKRNRKAHFQVEQNIIEVTNL
KAI0519118.1	<i>Dendrobium nobile</i>	MAFFMIKVLLLCTTSLSLTTPASGQQYNYLLSGDRLNTGKALIQGNYKFIIQDDCNLVLYQFREPVWSSKTSGLDSDCYLTLNETGILIINNNANHHIWT SNTANGKNGNYILILKNSHGAAVYGPSIWSTELKPKGSNDVVIATALNGTTGVSGEEQNKVREMKGIMEVI
KAI0512280.1	<i>Dendrobium nobile</i>	MTSMKNTPSSTAKSSILLSLAVLLLLNAPASCSSSFNNVLSSGYPLNAGCSLVQGKYSFTMQYDCNLVLYESEVAIWSSQTDGKGSNCSLVLQNNGELFI SPAAGIIVWRSETGGEYGHFVLVLQPNGDVVYVGDAVWSTGTYPHAPHAISGDKP
KAI0512223.1	<i>Dendrobium nobile</i>	MAINIVSASTLLSSSIFLLLIASSSSTRFGYPASPGNVLRSGEELSTDKLSIGNYTLIMQKDCNLVLYENDKAIWESSTSEMGINCSLVLQSNGELHIFSDVG PPVWRTETSQRDGKYALVLLPNGNVVYVYGSPIWSTGTHTQRKAMNAPPTNYAPKIENP
KAH0465276.1	<i>Dendrobium chrysotoxum</i>	MASSLSSPTIFLLLLSAAATLFSLLTTPASAAANRLNAGQSLGPGQSLAQGPYLFIMQQDCNLVLYDNNKAVWATGTNGRASGCVLKMQIDGNLVIYSGTR VIWASNTNRQIGFYLLILQRDRNVVIYDSSNNAIWATGTNIGNAAVVVIPHSSNGTAAASGATQNKVKELYP
KAH0465907.1	<i>Dendrobium chrysotoxum</i>	MASSLSSPTILLLLLSAAATLFSLLTTPASAAANRLNAGQFLGPGQSLAQGPYLFIMQQDCNLVLYDNNKAVWATGTNGRASGCILKMQTDGNLVIYSGTRV IWASNTNRQIGFYLLILQRDRNVVIYDSSNNAIWATGTNIGNAAVDVIPHSNGTAAASGAAQNKVKELYP
KAH0465275.1	<i>Dendrobium chrysotoxum</i>	MASSPSSPTILLLLSAAALFSLLTTPASARDRLTAGFELEPGQSLRQGAYSFIMQHDCNLVLYDNGRAVWATGTNGQASGCELRMQNDGNLVIYSGRRAI WASKTNRQMNFIYVILQRDRNVVIYSIGGYAIWATGTNVGNAAVVVIPHSSNGTAAASGAAQNKDLSTQMAGKLIFSLDGNLIVEGINYGNIQFEMQFE DFKLSVDGEEMIDLSAGIRRNVPVKITLGSQVDSPIFKMEDDVTPLPIVPFA
KAH0464855.1	<i>Dendrobium chrysotoxum</i>	MIKVLLLLCAASLSVLLLATPASGQSYNHLLSGERLNAGQSLIQGSAQLIIQDDCNLVLYIYGAARWASSTGGLASGCYLAMQTDGNLVVYDYGNRAIWA SNTGRENGNYILILQKDYNVVIYGNPIWATETSYSGSAAVVVIAAARNGTVGASGAEQNKVKEMGKIVQVVQGDA
KAH0465791.1	<i>Dendrobium chrysotoxum</i>	MAFFSTNKILLLLCAASLSVLLLATPASGQSYNHLLSGERLNAGQSLIQGNYQFIIQNDCNLVLYIYGSPRWASNTGGLASGCYLAMQTDGNLVVYDYGN RAIWASNTGGQNGYYNLILQKDGNVVIYGKPIWATGTSYSGSAVVVIAAARNGTVGASGAEQNKVKEMGKIVQVVQGDDE
KAH0465460.1	<i>Dendrobium chrysotoxum</i>	MQTDGNLVIYGYENRAIWASNTAREKGDFVFLQKDGNVVIYSQPIWSTGTTYYSASVVIKAAALNGTVGASGAKQNKVLLCTTSLSLLLTTPASGNN YLLSSERLNTGYSLIEGVYQFIIQNDCNLVLYQFRDPIWSSGTNNQSGCYLTFEKDGNLVIYDYENKIVWETKTNGIEGNYVLILQRDRNVVIYGPGGW ATKTNAYGSNNVVIATALNSTMGVSGEEQNKVLLCTTSLSLLLTTPASGSNYLLSSERLNTGYSLIEGVYQFIIQNDCNLVLYHFRDPIWSSGTNNQSGG CYLTFEKDGNLVIYDYENKIVWETKTNGIEGNYVLILQRDRNVVIYGPGRWATKTNAYGSNNVVVATALNGTMGVSGEEQNKVMKMGKIMEVMRDE
KAH0448068.1	<i>Dendrobium chrysotoxum</i>	MAFSIRSETVFVLSVVFSTLAAAENYLLPGDWLNRGASLQEGKYTFTLQEDCNLVLYNSKKPVWASETANKSTYCFAILQPDGNFVITESIFSLTEPIWAS NTGGKNGNYVLILQRDGNVVLVSNPIFSTGTNKGISADVVASLKS NRKVLPGA EQNKVFEMKKVIVDVAGSL

KAH0464854.1	<i>Dendrobium chrysotoxum</i>	MAFFSMIKVLLLCCTTSLSLATLALGQNSTNYLLSGERLNTNQYLIEGNTKFIIQNDCDLVLYKSQVLVWHSNTTNEGSGCYLIFQPNGKLVIFDNKNEVV WDTTSIREIGNYILTLNRDHNVIYGPVWDNENNTIGSDDVVVATSLNGPMGASGVKNNKMMEMGKIIEVMSNE
KAH0466093.1	<i>Dendrobium chrysotoxum</i>	MAFFSMIKVLLLCCTTSLSLATLALGQNSTNYLLSGERLNTNQYLIEGNTKFIIQNDCDLVLYKSQERAWHSNTTNEGSGCYLIFQPNGKLVIFDNQNEVV WDTTLTREIGNYILTFNRDHNVIYGPVWANENNTIGLDDVVVATSLNGPMGASGVKNNKMMEMVKIIEVMSNE
KAH0465987.1	<i>Dendrobium chrysotoxum</i>	MAFFSMIKVLLLCCTTSLSLVTALGQNSTNYLLSGERLNTNQYLIEGNTKFIIQNDCDLVLYKSQVLVWHSNTTNEGSGCYLIFQPNGKLVIFDNKNEVV WDTTSIREIGNYILTLNRGHNVIYGPVWDNENNTIGSDDVVVATSLNGPMGALGLKNNKMMEMGKIIIEFMSNE
KAH0461948.1	<i>Dendrobium chrysotoxum</i>	MTITTYTAKSSVALLSTILLLLISSSSSTSFSSNVNLKSGQRLDSGSFLSYGNYAFAMQADCNLVLYNNNTVLWSSHTDGKGKDCYLSLVPDGELYIYG DGGKMVWRSETGGEYGHYALVLQPNGNVVIYGSPVWSTGLSYQTPNAYQTPNPGNYEANTFKSNNP

Supplementary Table S2. Sequences of conserved motifs in GAFPs

Motif	Sequence
Motif1	LAQGNLYFIMQNDCNLVLYDNNKAVWASGTNGKASGCYLKMQTDGNLVIY
Motif2	SGNRAIWASNTNRZBGNYYLILQRDRNVVIY
Motif3	NAAVVVIPHSNGTAAASGAAQNKVKELYK
Motif4	TTPASAA NRLLAGZRLNTGQS
Motif5	NNPIWATGTNV
Motif6	MASSPSSPTJLLLAL
Motif7	FGSTAVVVAKRNRKAHFGVEQNIIEVTTN
Motif8	TLFSLL

