

Table S1. List of the sequences of precursors of peptides and proteins identified by transcriptomic analysis of the *L. poonaensis* spider venom gland

(1) Neurotoxins

Name	Sequence	Similar peptide (Accession No., species)
m.59186	MSSGPSLSLSDTAHFRKSCLEIGEVCDGNANDCQCCRSNGFCHCSWIFNHCTCQVGDSSSKSYGVCLWKQKNCNPKPGMCTKPCTNRRRCKNRSRG	ω -ctenitoxin-Pn3a (P81790, <i>Phoneutria nigriventer</i>)
m.1192	MKTSTVFLGLCAIVVLMITADLSGADEMNSQDAPEERGYCAEKGIRCDIHCTGLKCKCNDSGYNCVCRKK	Purotoxin-1 (P86269, <i>Alopecosa marikovskyi</i>)
m.38262	MGRWIFAIFLGITLLTQVLLPSAYMATSDADTPAVDDYADVARLLYFARKRSCIKRGSSCDHRPNDCDNDSSCRCNLWGTNCRQCQRMGLFQKWGK	U8-agatoxin-Ao1a (Q5Y4U4, <i>Agelena orientalis</i>)
m.218293	MKYFLKPLVVTVLLLCYAVMTNAYVMRDSSLDYQEPNYEALRQYLLSTRNLNNIPNRRSCIRRGSSCDHRPSDCCFNSSCRCNLWGTNCRQCQAGLFQKWGK	U8-agatoxin-Ao1a (Q5Y4U4, <i>Agelena orientalis</i>)
m.9	MSPKVQALLFLVGLITFLVHAEELSEIEESERACAEHKSNCNWKPCCDKMSCHCSAAFTNCKCQKGVIRKIIDWIGGK	U16-lycotoxin-Ls1a (B6DD52, <i>Lycosa singoriensis</i>)
m.11889	MSPKMQVLLLTIWLFMFLAVHSHEELSESAESERSCANEYQSCDWYNRPCCDNISCVCSWIGTNCECKKGIIRTIRDWINGK	U16-lycotoxin-Ls1a (B6DD52, <i>Lycosa singoriensis</i>)
m.16586	MIRYVLISALLVVAVYSFTFEDENEDVFLLEEAKELDPEEERRIALPPGAVCNGHKSDCQCFGAKYKCSCPWLWRFRRSAKCHCKKGAWTAIKKRSCRNRYQWGS	U2-lycotoxin-Ls1a (B6DD29, <i>Lycosa singoriensis</i>)
m.30919	MKILFVLISILYSVHCFTSEEIVGSEHLANELEAVEDINSEQNVALESTREEERSCADMGQDCADDCCLNIARCNCWFGKYFCSCFTFGNYQTCQAKRGKCTRNRPPQSCPKSNINHKKG	U13-lycotoxin-Ls1c (B6DD20, <i>Lycosa singoriensis</i>)
m.8162	MKIIVIFGVLLVTLFSYSSAEMFDDFEQADEADELLSLIEEQTRAKECTPRFNDCTNDRHSCCRGELFKDVCTCFYPENGNGNEFCTCQPKHFKYIEKGTDKIKIGSKIKSWFG	U3-lycotoxin-Ls1a (B6DCQ5, <i>Lycosa singoriensis</i>)
m.6715	MSTFTQCKRKVIFNKLFSKQIPLIFPFYRAKACTPRFRDCSHDRHSCCRSSLFKDVCTCFYPENGDKKEVCSCQPKHLKYMekatDKIKYLIG	LSTX-D6 (B6DCU5, <i>Lycosa singoriensis</i>)
m.6722	MKVfVVVALLVTLISYSSSEGIEDLEADDFLSLMANEQPRAKACTPRFRDCSHDRHSCCRSSLFKDVCTCFYPENGDKKEVCSCQPKHLKYMekatDKIKYLIG	LSTX-D6 (B6DCU5, <i>Lycosa singoriensis</i>)
m.6716	MNFLKGNINTFRNDCIPKHHECTSNKHGCCRGKIFKYKCQCTTVVDQSGEQAERCFCGTATHHKAVELMAGFGKKLFG	U1-lycotoxin-Ls1ee (B6DCN6, <i>Lycosa singoriensis</i>)
m.103490	MANEQPRSDCIPKHHECTSNKHGCCRGKFFKYKCQCITVVDQSGEQAERCFCGTATHHKAVELMAGIGKKLFG	U1-lycotoxin-Ls1e (B6DCJ5, <i>Lycosa singoriensis</i>)
m.6709	MKVfVVVALLVTLISYSSSEGIEDLEADDFLSLMANEQPRNDCIPKHHECTSNKHGCCRGKIFKYKCQCTTVVDQSGEQAERCFCGTATHHKAVELMAGFGKKLFG	U1-lycotoxin-Ls1e (B6DCJ5, <i>Lycosa singoriensis</i>)
m.6148	MKYQILFGLVFLTLISYCSSEFEDAGLFMDEEMVEADDPNAIARKDDNENCIKHHECTSNRHGCCRGKLFKYKCQCVKIVNAQKEETERCACITPGLHKAVEFVLQLFKKAIA	U5-lycotoxin-Ls1a (B6DCV0, <i>Lycosa singoriensis</i>)
m.69253	MKVLVLTFLVFLTLFSYSSTEAIHEFDSNAEEDMLSVFACEQVRAKACSPRLHDCSDDRHSCCRGEKYKVICNCYDLEGEDKSEVSTREQPKSEKNIVKLD EKSKTVV	U4-lycotoxin-Ls1a (B6DCT6, <i>Lycosa singoriensis</i>)
m.157117	MKVLVIFSFLVFLTLFSYSSTEAIHEFDSNAEEDMLSVLASEQERAKACTPRLHDCSDERHSWCRGEMFKDVCYCFYPEGEDKTEVCSCQPKSHKYNEKVVDKTNTLVG	U4-lycotoxin-Ls1a (B6DCT6, <i>Lycosa singoriensis</i>)
m.190400	MKLLFFTGLFLLVVVNLIKAEAEANERAAICIRLERQCTKTPGNCCSGLKCECYQRFEGKGVAKGKRCWCIEKDVTYKNKK	U6-lycotoxin-Ls1d (B6DCV4, <i>Lycosa singoriensis</i>)
m.2157	MKILFFTLLSVASFIEVEAKSGKSCLTYAEVCTKNASGCCSDLRDCYIRYEEGVEKGEKCWCNYKDVYKKA	U7-lycotoxin-Ls1c (B6DCW9, <i>Lycosa singoriensis</i>)
m.2159	MKIVLFAVIALLTVSLIEIAQSKGVCLPYAAVCKTNASRCCSGLTCDCYLRFEFGVQKGEKCWCIIHKGVTYTKE	U7-lycotoxin-Ls1c (B6DCW9, <i>Lycosa singoriensis</i>)
m.10500	MKLIIFTGLVIFAIAIAEAEANERACIAEYGECLKAPGNCCSNLACDCYGRFKNGKEIGRNCFCLEKGVIYKREK	U8-lycotoxin-Ls1s (B6DCX9, <i>Lycosa singoriensis</i>)
m.10497	MKLIIFTVLVLSIVSLIKAEAEERACVAYQYGECLKEPGNCCSNLVCDCYGRFKNGKEIGRNCFCLEKGIIYKREK	U8-lycotoxin-Ls1s (B6DCX9, <i>Lycosa singoriensis</i>)
m.10498	MKLIIFTGLVIFAIAIAEAEANERACIAEYGECLKAPGNCCSNLACDCYGRFKNGKEIGRNCFCLEKGIIYKREK	U8-lycotoxin-Ls1s (B6DCX9, <i>Lycosa singoriensis</i>)
m.3722	MKLGIFLLFSLVVLAVASESIEENINDNLPEQQRACADLNEKCTEGDDCSCCGERGRCDCNWPGKPGCYCMRGGPFDLIAKKFKC	U12-lycotoxin-Ls1a (B6DD13, <i>Lycosa singoriensis</i>)

(2) Cytolytic linear peptides

Name	Sequence	Similar peptide (Accession No., Species)
m.2649	MTVNDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMSEMTMKKQESG	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2799	MSANDDEEARIWLTALKFLGKNLGKHFQKQSLKGRSEDISENLSADSFQSLEEVKTCMQMTMKKQESG	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2698	MSANDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMSECLQMTMNKQESG	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2695	MSANDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARIWLTALKFLGKNLGLKFIGKNLGKHFQKQSLKGRSEDMSECLQMTMNKQESG	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2781	MTKKKQESWLTALRIWLTALKFLGKNLGKHLAKQQLAKLGRSEDISENDDEEARIWLTALKFLGKNLGKHFQKQSLKGRSEDISENLSADDEEA RIWLTALKFIGKNLLVNSIKIFR	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2690	MSANDDEEARIWLTALKFLGKNLGKHRISQNSSLSLEEVKTSKTCQSQNNSFQSLEEVKIMSANDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSE DMTVNDDEEARIWLTALKFLGKNLGLKFIGKNLGKH	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2667	MKEIAAQTLGREESLSENEEEARGRLQAFQAKMKEIAAQTALGREENLFANEERVIWLPALKFLASHIAMEQLSKLGRNEQTPEEARIWLTALKFIGKNLG KHFAKQQLSKLGRNEQTPEEARIWLTALKQSLKGR	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2650	MKEIAAQTLGREESLSENEEEARGRLQAFQAKMKEIAAQTALGREENLFANEERVIWLPALKFLASHIAMEQLSKLGRNEQTPEEARIWLTALNKFIGKNL GKHFAKQQLSKLGRNEQTPEEARIWLTALKQSLKGR	LyeTx I (C0HJU9, <i>Lycosa erythrognatha</i>)
m.2660	MKEIAAQTLGREESLSENEEEARGRLQAFQAKMKEIAAQTALGREENLFANEERVIWLPALKFLASHIAMEQLSKLGRNEQTPEEARIWLTALNKFLG	M-lycotoxin-Ls3b (P0C2U7, <i>Lycosa erythrognatha</i>)
m.2706	MKEEIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENLFANEERVIWLPALKFLASHIAMEQLSKLGRNEQTPEEARIWLTALNNASEAL GREEIWGFCK	M-lycotoxin-Ls3b (P0C2U7, <i>Lycosa erythrognatha</i>)
m.2678	MKEIAAQTALGREENSVSANEDDEEARSKWKAFLAKMKEIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENLSENEEEARGRLQAFQAKM KEIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENSVSANEDDEEARSKWKAFLAKMKEIAAQTALGREENLSENEEEARGRLQAFQAKM KEIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENLSENEEEARGRLQAFQAKM	M-lycotoxin-Ls3b (P0C2U7, <i>Lycosa erythrognatha</i>)
m.2715	MSANDDEEARIWLTALKFIGKNLARIWLTALKFLGKNLGLKFIGKNLGKHFQKQSLKGRSEEARIWLTALKFIGKNLGKHLAKQQLSKLGRNEETPGSFSA DDELERAGLGKIGAFIKKAYAIYKAKAAGRNEQTPATVSANDDEEARKIKWFKAMKSIKYVAKKQQLKHLGGEN	M-lycotoxin-Hc2a (P61508, <i>Hogna carolinensis</i>)
m.2734	MSANDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARIWLTALKFIGK NLGKHLAKQQLSKLGRNEETPGSFSAADDELERAGLGKIGAFIKKAYAIYKAKAAGRNEQTPATVSANDDEEARKIKWFKAMKSIKYVAKKQQLKHLGGE N	M-lycotoxin-Hc2a (P61508, <i>Hogna carolinensis</i>)
m.2795	MSANDDEEARIWLTALKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARIWLTALKFLGKNLGLKFIGKNLGKHFQKQSLKGRSEDMTVNDDEEARI WLTALKFIGKNLGKHLAKQQLSKLGRNEETPGSFSAADDELERAGLGKIGAFIKKAYAIYKAKAAGRNEQTPATVSANDDEEARKIKWFKAMKSIKYVAKK QLKHLGGEN	M-lycotoxin-Hc2a (P61508, <i>Hogna carolinensis</i>)
m.2773	MKEIASLQMRMKREIAAQTALGREENLSENEEEARGRLQAFQAKMKEIAAQTALGREENSVSANEDDEEARSKWKAFLAKMKEIAAQTALGREENLSENEEE ERMVWLLPLKFLASHVAMEQLSKLGSKIATKLGRNEQIPVISANEDEEERMVWLLPLKFLASHVAMEQLSKLGSKIATKLGRNEETPVSFADDDGEERAG LGKIGALIKKAYAIYKAKAAGRNEQTPATVSANDDEEARKIKWFKAMKSIKYVAKKQQLKHLGGEN	M-lycotoxin-Hc2a (P61508, <i>Hogna carolinensis</i>)

(3) Protease inhibitor

Name	Sequence	Similar peptide (Accession No., species)
m.201956	MNFQFVLLCMTSVVVVQYAVAFKLIRSKRSTNVP SRCLQDPDSGMCLAYFLNYYNPSGECETFVYGGCQGNNDNFWTKDDCEAICKPKTNETEEINSL LLESLESLIEGKDVCEYP PETGECRALFIRYYDGEKCSFVYGGCDGNPNNFETEVECMERCGPKSEDESEENEV	U19-barytoxin-Tl1a (W4VSH9, <i>Trittame loki</i>)
m.221752	MKNISIFS VVLTLSFSLAVSFTYPRSRSSDDESSSRCLPPVTGLCRAYFLMYYHNATTNTCNRFVFGGCIGNGNKFWTGEECVEACGGTIDDTMPIQS FHYDYDFEDYDDPCDKPLVVGHCADIPRFYFDGKECTAFLYGGCGGNHNNFPTKEKCLEKCGYRILDEENEIENTE	U19-barytoxin-Tl1a (W4VSH9, <i>Trittame loki</i>)
m.248055	MEGNMLMVLLVASTIGLALS NPLVSRPNYDNIPQCLQPPASGMCLAYFPSYYYNPSKETCDTFIYGGCQGNANRFFSFDECMACGGFKQEPNDSFKLIL ENGEDQNPSASEQQVEDICSLSTEMGPCRAMMPRFYFNGDKCEEFIYGGCEGNANNFKTIEECQQRCGSTSSSEEVEADNSEETEKASEEAVAEAEASVE SAEESDSKAEN	U19-barytoxin-Tl1a (W4VSH9, <i>Trittame loki</i>)
m.250351	MKNEFLILFLIIGLFCPIYGILESDRLKRLIRIDLNNPLAKDVCDYPLDIGRCFGAKQRYFYNGDTCCEFTYKGCLGNANNFR TKEECMLKCAHKMEGGSGET EEEEHFSFSLFG	kappaPI-theraphotoxin-Hs1a (P0DJ77, <i>Cyriopagopus schmidt</i>)
m.41663	MDSKIIAVFLLLVLSTCVLSEKYCPTTRNPYCKMMNIRNNCKDSDCSSGYCCSEPCGNFCHAPSSIPGGKRVNPNASCKLGYVYR	U14-lycotoxin-Ls1b (B6DD37, <i>Lycosa singoriensis</i>)
m.1940	MNSKIFAVLLLLALSACALSEKYCPTPRNTSCKKQNI RNDCCKDSDCTSNAFCCAQPCGNFCIAPSDNPGGRRVDPNASCKLGYVY	U14-lycotoxin-Ls1b (B6DD37, <i>Lycosa singoriensis</i>)
m.41662	MPHVLCEFYINKRMVVS NHYIQLSEKELICKMNSKIFAVL FLLALLTCVLS DQYCPKSRLTPCKMMNIRIDCKDEDCTGGSWCCATPCGNFCKYPINRPGG QRAAGGENCKIGYVYLK	U15-lycotoxin-Ls1d (B6DD42, <i>Lycosa singoriensis</i>)
m.11922	MNSHILFVLLVGIATCVLAGDIELRINICSNELKANRKKCNENCKRLSFQDFGIKKEDRTTLFCFLHQIKPLR	U20-lycotoxin-Ls1c (B6DD62, <i>Lycosa singoriensis</i>)
m.240217	MKPTYLFICVISLVLSAGRSQFCPVREPIFCIRRDLCSSHNECSV GELCCEENCGNVCLAVPRRTSGIEYRNPNCINESL	U7-agatoxin-Ao1a (Q5Y4V9, <i>Agelena orientalis</i>)
m.11914	MNSHILFVLLVGIATCVLAGGFCPKSRHPHCNLSYKINDCCAQSDCRFGSVCCVEGCGNV CRAESDTPIGEKFVDGSECKLGHVFPKRWYEFW	U20-lycotoxin-Ls1a (B6DD60, <i>Lycosa singoriensis</i>)
m.204789	MMFKILLVAIFVLAESTERKTDCQEHREREAKSKASLPMRLIPECDENG DYKPLQCFKDSDFCACWDKQGNPVTQPSKTIKQCDCLVQKHEVEKKGLRGA FKPSCSEDGRYQKQCHGSTGFCWCAHPETGEKTSEETRGRPN C	U24-ctenitoxin-Pn1a (P84032, <i>Phoneutria nigriventer</i>)
m.217252	MWIFI FLLALAVPTIRSERKCGECVPEKQCPPSEEC LAGLVKDL CGCCYVCGRREGELCDGDFLPIPYRNRGYGPCGEHLECRPRTDLAPGDPPEAMCVC LKTETLCGSDGNTYDNECQLTEARYKQREQILKAMHRGPCRSAPKITSPPEEASNYTGGNIAMSC EATGWPIPVFEWRVDIGDGNTIPLPSDDPKVSVQS RGGPSKYEVT SWLQLLSIQPKDDATYWCIAKNDEGESSAAARVVVLD FRGSKTEDNGRINDL	IGFBP-rP1 (G4V4G1, <i>Cupiennius salei</i>)

(4) TCTP family

Name	Sequence	Similar peptide (Accession No., species)
m.7640	MIIFKDLITGDEMFTDSSKYKLIDECLYEVECRHVQRRQGGDIQLEGANPSQEEADEGTD ESVESGLDLVLNQRLVETGFTKN DYKNYLKTYTKSLQDKWKE MGKNDTEIAEAKSKITEAVKKVLPKLADMQFFMGESSNPDGLIALLEYRENPGGDETPIIMFFKHGLDEEKV	Translationally controlled tumor protein homolog (G3LU44, <i>Loxosceles intermedia</i>)
m.24068	MRIFKDIITGDEMFTDSSKYKLIDDCLYEVECRHVQRRRLGDVQLDGANPSQEEADEGTEEVVESGLDLVLNQRLVETVFSKN DYKGYLKLYTKSLQDKWKE MGKSDSEIADAKSKFTEAVKKILPKIGDLQFFMGESSDPDGLIALLEYRENE SGNETPIMMFFKHGLEEEKV	Translationally controlled tumor protein homolog (G3LU44, <i>Loxosceles intermedia</i>)

(5) Non-toxic peptide

Name	Sequence	Similar peptide (Accession No., species)
m.106956	MKCIIALTILATLVVAIQGKFCERSSDCGEGQCCTGSSFN RHQCQLSDNGRPCQRPN DYDSYKTGCPCKEGLICSVINYCQEP	U19-ctenitoxin-Pn1a (P83997, <i>Phoneutria nigriventer</i>)
m.7591	MRTMKCIISLTIVATLMCLVQGGDQSCGEVYCGEGQCCSGSFYARHCRDYSNDGEPCERPKNKYSYKTACPKCEGMFCNVINRCQKYE	U19-ctenitoxin-Pn1a (P83997, <i>Phoneutria nigriventer</i>)

(6) Peptidase

Name	Sequence	Similar protein (Accession No., species)
m.1011	MDTSVSPCDDFYQYACGRWSKHHELPSDRSYNTFEVLKDKLQAKLDLLEPVTDDDSNATIKAKNLYASCMNEEVIEELKEKPLVLLDDLGGWPVTS SNWTEENFDWVYLIATLQQYSNNILISQWVGPDGRNSSMHIIQIDQADLGLPSREYVYVQGTQQLDAYGRYMVEIAQLLGASPEKAEEMKEVLEFEIEIANF TIPREERRNYTAMYHKLTLAELQVRILPVNWTLFFNVAMPLELTDDDEIVYIAYTYVERMTDFLVNTPKRVVANYILWRFVYKFVSNLDKRFQAKQQEYYSAL YGTQSIIPRWKTKCTVYTNKIMGTAVGSLFVKTHFNERSKETAEEMIENIKTAFLELLEEVDMWDTETRSEARQKALLMTEKIGFPDYIMDPQELDKDYDGIEI KPDYRFDNVLLSLKQYSIREQMKLRTLVDRTQWVSSPAVNAFYTRPKNFITIPAGILQPPLYHQNYIRLSYGGIGVVIGHEITHGFDDKGRQFDHRGNLK QWWDSEALIKFQSKADCMIKQYGYMMTDINMKVNGINTQGENIADNGVGKQSKFAYKSWASRNSEEP LLPGLNLTHDQLFFLNYAQIWCGRSMRPEAAI NMIRTVHSPGKYRVIGALSNSKDFSEAYGCP LGSPMNPCKCHVW	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.15154	MVSKGGCLGWLKKRTNLEKTLSSLLLLTLLLMILIGITYQGKKTNSPENEEECWSTECIQTAGDILKKIEPEADSCGNFYEYACGTYTKNLGQTISVPKQ STDSVYFTLKRLMESKKNLDVRNLKDVRSFYDTCVKFGSHWQDLKETGDSLNNLMLDLGVGTWPIIDSLYDTSTFSRDKTFASLILLDVPVAFQMEIVPDQ QISGSLVKISPGSPRESGRSPDIRGDVHLRSSVLTSFLLGANAKITDVNDIIAADSSFAAIEQDKNIVCDDVLLSPQEAPSELKRLIPEIDWKIILSEIRNVGT LVRPF AVELHCKQKIRDYVVLNLDLTVRSEANYLGRWFFSKFVEHVPTFEKSQFGTDDVVRWRICLIELEKFSPTVLVDLLAKEIINKEVIAQTERISDSSL KAAKRLVSRTQWLTNNQRSRIQEKVSRFRTRYPFKRTAADGDSGKLKIPQVNVNNTAVIVRQQRKWVIQRFRLSHEADNVDWIESRVPFLTARSDSVL SDSVLYVYFDKIRTPYIQLKGSQWLNYYGGFGVTVAREISRLSSSVGGQGENTLLWNLWSNSSNTSKCLITSMAKRMGIHEEVLNALADEKLLQNLFLDQSA IEIAYETAKMTAGSSKSLPGLLELNDKMFFLSYAQTQCEADLQVQKSNIPPIQNRLNSVLQNFDSFNEVFSASSSHCQIWA	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.19936	MRRADSTLKARDRYEKHSLTKFRNETGICYSPSCISEASNLLKSINMSVDPSCSDFYSFACGNWIKNAYLVSTLESQFTKLTRIIHLRVKSILEDELEKEDNLPDH KMKTSDFYKACMDRDRHNEIGATEFLNDLKKFGGWPLIEEWDAAANFNWSNVMQLFKNGYISNMLFTVKLEIDAKNTRSIIAVMQPSLGLKNKLYYIIPD GQIATSYKKAIFEVAKHLHPNANLVKKTSMDAIEKAFALESKIADLKEVNMRYPDQFYNIMTLEELNFAFKIPWRNLLKHLPPETILTNEERILVTVPSMIKG LNKILEEMSTEQGRILSNYMFYRTAFFAASNLTETYNLIKGFINTDSVANNQLWEICVKDTMDLFLPLTSSYVAKYLNKNTKELLEVMFDDIKNALVEDIK NAAWLDTETKNYALFKVKKMKAIAIYKKEIMKDENLNSFYKEVNVTDNHFSSNVKQLIAARQQRNMQGLHKKRDRFRWTDVNNLLTANAYYQPSNIIIPV GVLHDTIFAERPNIYNYGSLGMIVGHELTHAFDSIGSLYDADGSYRMWWKESWKKFEERVVKCYKEQYDKFYLSEADSNVNGTLTLGENIADNGGLQTA YYAYNLLLKRLGSEKSLPGLPYTERQMFWISFANVWCWKQTEESIQGYMIYSVHSPSGLSLNSNMKEFSEDFNCKLNSTMNPKSKCLLWK	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.9580	MAGNLAVAFRNVTAQKCAWWNRRSPCEKFLFILCILLSTCAVLIIVNITEKRLVAEDIVSGICHSEECIKAAARILERLDTSTKPCDDFYHFACGNFLHRHT VPDDHYLRSTMQTMQDDLYVTLKRIEHPQSSNDSEAIKVKKLYTSCMNTSSIEDGSVKVLQDILLTNWGIGEWPIPIPRWNKTVDMEWRLAMLHIHEVKPF FSTFVAPDDRNSVYLLHINAGGFLLNPQYFLNTSDPDYVRYVL SYKNLIFETVRLLGQESDAKKDIEEMLEFEVEFANISQDDPFD SINETSQD DDFVFN KINVSVLEDMIPEIKWNVLIEYIFDYIGLSTEKIDISFVHCEKYLRLHALLNRTPPKTAIANYLTWRVFMKYPYLDIHFRLRYDYFRREVVPVRAEERTFFARW KECVHIATEGFGMALASLYVKDEFNEEMENEIKFLISSLKEAFIKSIHKQTLWDHDTKVLCEEKVSAMGNKIGFPYILDPFLQDADYVGLDVTEDHFLDNILK INRYETKDL SKITRTVDKERDWFVQPLVNVNAYYEGSGNTVIFPVGILRRPIFTRPRPKYLYNGMLGVIIGHEITHGFDNNGRKYDKAGNFTQWWTDEIVEK FKEQVSCYIEQYSQLPIDMVGQNVNGNQTLDNDCDNSGLAQAYRAYRHYVSKYGEPEPRLPGISYSNTQVFFLQY AQLWCEILSKEANERFIKDSHSPGKY RANIPLMNSPEFSSAFNCPTGSPMNPVKKCLRLWA	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.19952	MFTSQYMNDFEKSRLYPERGPGKTFPVTTPLERTLIIIAIVVLIGIGLSIGIVSLKKARDRYEKHSLTKFRNETGICYSPSCISEASNLLKSINMSVDPSCSDFYS FACGNWIKNAYLVSTLESQFTKLTRIIHLRVKSILEDELEKEDNLPDHKMKTSDFYKACMDRDRHNEIGATEFLNDLKKFGGWPLIEEWDAAANFNWSNVMQ LFKNGYISNMLFTVKLEIDAKNTRSIIAVMQPSLGLKNKLYYIIPDQIATSYKKAIFEVAKHLHPNANLVKKTSMDAIEKAFALESKIADLKEVNMRYPDQFY NIMTLEELNFAFKIPWRNLLKHLPPETILTNEERILVTVPSMIKGLNKILEEMSTEQGRILSNYMFYRTAFFAASNLTETYNLIKGFINTDSVANNQLWEIC VKDTMDLFLPLTSSYVAKYLNKNTKELLEVMFDDIKNALVEDIKNAAWLDTETKNYALFKVKKMKAIAIYKKEIMKDENLNSFYKEVNVTDNHFSSNVKQLIA ARQQRNMQGLHKKRDRFRWTDVNNLLTANAYYQPSNIIIPVGVLDHTIFAERPNIYNYGSLGMIVGHELTHAFDSIGSLYDADGSYRMWWKESWKK FEERVVKCYKEQYDKFYLSEADSNVNGTLTLGENIADNGGLQTAYYAYNLLLKRLGSEKSLPGLPYTERQMFWISFANVWCWKQTEESIQGYMIYSVHSPS RFRIIGLSLNSNMKEFSEDFNCKLNSTMNPKSKCLLWK	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.60402	MHNKGGDEKTDPKENDKCMENNEHDKDSEVNQKSSKLDALRGRAKQLASNKYHLIIVLLCVLLFILFLIVILAVQLGTYACEVNECRTADCLRAASFVL DRSEPEDACDDFWAYSCKNWSIQNPVPANKGSYSVTDELQDKIYNRIRHLIDLIRHVDSSSIEMKVKTFYDSCRNMHNIERRFPDDIKRAIYDIGGWSLIE YARPLQWDRMEVLSDLHSVYGIPVFFQVVEPDDLDPQRNIKILPGGLGLPNRDYYFRPHDDTYVKAYKTFMIDTVKEMGVGLSKANQFADEVFNYEKRI AEITPSTEELRSPNLYVVKTIKDLDIPPSVIQWTKFLQAYFKDSADPETEIGVLSENYFLDISRIISSTADSVLNNYYMWRFHTFVPFSSSRFRLVANYFKQT FTLHRAWGEISQHYSSLTGKVRQEAREWEHCLGTLSSGLSTALASLYVRHHFQDGSGLDALEMVNYIHREFLHVLSDVDWMDSQTKERAKEKAQNMDATYI GYPNELLEEWKVSEIYDGLHLNSSSYFENIRILRKWATDYVL SKLRKPNVKGDWKKRSAAAVNAFYNSIENSIEFFAGILQG VFFSKDRPNYLNFGAIGFVI GHEITHGFDGRGRQFDKDGNNINWWEPETDSTFRERAQCIIDQYGNYSVDEVGLQVNGINTQGENIADNGGIKEAFRAYLQWIRDHGAEDYLPGIKYSPT QLFWISAANVWCGKYRPEVLKLRIMTGSHPAPYRVIGPLANTPEFAAEFGCPLGSPMNPVKKCTVW	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)
m.28887	MAVTVTQSQLTSGRDRFRNPPWWNRRSLERILCGVAGICLLMCTAMAVALAVVGYHYQVMKTGNGVNEAGLPSKTDKLVSLYNAIYPPKEIGICLTP GCVKAAATILNNINEKVEPCENFYEFACGGWLQKQLIPDDRSSSVSFSLLQDDLDQLLRSMVETGIKDTDPQYIQNLKSMYESCMTTHIEMMGNEP LLRV VKELGGWPAVEGDKWNSTNFDWMEALFALRKVGF GHNIFLSVSGIPDIRNNTRHIVDLQASLGMPDRNLYLLKGVEDPLVSAYYQLMVD SAVLLGANKTK AQEEMKSALLFEIAIANFSVPREERRNISRLYNKMTVDDLK LAPDLNWDKYFNKLLMDKISRSEEIVIVPDYVQNLEKMLSTDKRVIANYLMWRVVGGQAF PTLHRAWGEISQHYSSLTGKVRQEAREWEHCLGTLSSGLSTALASLYVRHHFQDGSGLDALEMVNYIHREFLHVLSDVDWMDSQTKERAKEKAQNMDATYI GYPNELLEEWKVSEIYDGLHLNSSSYFENIRILRKWATDYVL SKLRKPNVKGDWKKRSAAAVNAFYNSIENSIEFFAGILQG VFFSKDRPNYLNFGAIGFVI GHEITHGFDGRGRQFDKDGNNINWWEPETDSTFRERAQCIIDQYGNYSVDEVGLQVNGINTQGENIADNGGIKEAFRAYLQWIRDHGAEDYLPGIKYSPT QLFWISAANVWCGKYRPEVLKLRIMTGSHPAPYRVIGPLANTPEFAAEFGCPLGSPMNPVKKCTVW	Neprilysin-1 (W4VS99, <i>Trittame loki</i>)

m.43613	MFIDDEMPRYKRTDFEEEEETSSMASMAVDAPMNPPSSQGVQVRYSPGRRRNIWERASPLEKILVVCVLVLVLLVIILSAVLNSYSSSGTVKVHITAKNGSS SGNNATEYCVTPACVTVAAILNAMDQTVDPCTDFYQYSCGGWIRSNPLPDDKSIWGTGKGLWQENQIVMKNVLEDDSFKLTSEAERKARIYYMSCLDKN ETVDKLGAKPIIDLLSKIGGWNISGDFNISQWNFQRTLELLHNQYNRGGLFSWGVGEDERNSSRNILQLDQGGGLPTRDYYLNKSKDDEVLVAYLNYMTK VGVLLGGEENATRAQMEDVIEFETKANITIPADERRDEELYHKKTNLNLRDLAPVLDWASYFNSAFRINREITPAQELVVYAPEFIHKMSELVTQYLSSN EGKVVISNYLGWSLVQSLTSCLSKPFREASKILRKALVGSEGGESPWRYCVSDTNEVIGFALGAMFVREVFGDSKPMAMENMINEIRDAFKENLPLLKWM DPETRLAKEKADAITDMIGFPEFILDPKQLDKKYEGRMDFSEDEYFNNNIEVQGQFALLSNMRKLDKPTNRSEWKMTPTTVNAYYTPTKNQIVFPAGILQAPF YDPNYPKSLNFGAMGVVMGHELTHAFDDQGREYDKYGNLHQWVNKSTIESFRERTQCIVDQYSSYEVNGESLNGKQVLGENIADNGGLKAAFHAYQD WVKSHPIELPLPAVPLSNNQLFFIGFAQVWCSTSTPEAMHLQILNDPHSPAIFRVVGTLSNSVDFAREFKCPPKSAMNPENKCEVW	Nepriylisin-1 (W4VS99, <i>Trittame loki</i>)
m.252247	MYDYDIALQMERAPEYNEYVVRPICLPPELPPKELPDDSPLYKPKSSAWATGWGHDAKISRNDRVIPRTTENLKELYLPQSKERCIESTRSNGVNISFFTDRMFC AGDGGSGGNDTCQGDSSGGPLMQAQTNAEGYIYWTQVGIVSWGICQGMPTNYGYTYTLQRFVPWVEETIENALGAVGM	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.77294	MIFHVSILVTAISLLFGIKYPVFMTHGVFNISHDLALARLNAPVLMNPHVQVVCPLQLNEELQAGERCATGWGATRGSKSENVLKQAEHPIQDETKCYNEY QKFESETMICSGRLEPLHLGLCHGDSGGPLVCKKDGKWHVYGVASFITDTNFISGLCGLANKPTVFNKISAKVEWIKSIISNNN	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.183905	MSSGEIVCSGTIINKRFVMTSAACVTTSSKIPKKNPNEISVVLGLSNRNGGDSQSRFGVKAIYVHPGYRTLNYDNDIALLELEKPMVYSRYIRPICLPTDSSNLY KPQSPGLGLGWGSTSPWGNAGTLKRNSLKEIKVTIQHPDACKEYLGEKYARYFTNLVFCAAEESPALCSGDSGGPVMQSEMREDGHRIRWQVGIVSFG MGCNPNSMGFYTYVYKFLPWIQDIADNSN	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.183910	MAAVFYVKDSVTKDDIVCSGTIINKRFVMTSAACVTTSSKIPKKNPNEISVVLGLSNRNGGDSQSRFGVKAIYVHPGYRTLNYDNDIALLELEKPMVYSRYIRPI CLPTDSSNLYKPQSPGLGLGWGSTSPWGNAGTLKRNSLKEIKVTIQHPDACKEYLGEKYARYFTNLVFCAAEESPALCSGDSGGPVMQSEMREDGHRIRW RQVGIVSFGMGCGPNNSMGFYTYVYKFLPWIQDIADNSN	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.61171	MFTAICILWSLQLIQGSPLDLSLEDTRPLCPCGDYASSVNTRVVGGHAVPKHEFPYASNLLFRPFEEYSSRQASQKLSPFCCGGTLITDRHILTAACHLKDRD PEDLAVDVGDYSLRELKDRQVNVNRNVTKFPEYRKDSFHTDIGIIELEHPVFRQGMRTALLPNEGLKLKPGTTVSVYGWGRLSYYGGHPDVLNTVDLPV VRNEECQHEFISRIEPSMICAGGQEGKDACIGDSGSLIVRLDNEFVLCGVVSFGRKCALPHVPGVYTRVSSYTDWILDQTRSASCRPCVYDE	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.71477	MFADSKRPRFCMLHRNTTLNSYFLLSILFTLGCVAKGGRPKTVKNCGIVDVPQARIIGGIWAQHGDPWMVSVHEYYRGFDHVCGGTIINEHWILTAACHID YPTKPRKYEIVVGLHRLSKKDRKVSCKHKISKVIVHEEYDKETFLNDIALLRTEKPINFRASRGYVNGICLPVTDKDPKGWAIVTGWGHTLEGGDNDSDVLKEV KVPIVPRELCNEAYDDDDPDIEENIFDTQLCAGAPNRDSCQNDSSGGLIQRSKNGVHTLIGVVSYSYSGCGDRHFGVYTKVASYMDWMYKNMKD	Venom peptide isomerase (Q9TXD8, <i>Agelenopsis aperta</i>)
m.4971	MQLVFAAFLLLLTGYTSGKLSTVKDCGKATVPQARIVDGEVSKRGKYPWMVSVQQWDGDKLRPICGGAILNENWIVTAACHCFDQPVKNSDYEVYVGLFSI TKTNEPPVRKHVKSKIIHEDYKDTGFANDIALIKTATPIDIKGSKGYVNAICMPSGITNPAGDAIVIGWGTIYDDGPLSAELREAVVPIVPWKKCKEIYGNINS FEYVQVTPFVMCAGGTGKDSCQGDSSGGLFQFDKNGVATLLGTVANGGDCGNGRYPGMYMKASAYKSWMDRVTT	Putative PQM protease precursor (AUI10826.1, <i>Geolycosa vultuosa</i>)
m.4960	MQLVFAAFLLLLTGYTSGKLSTVKDCGKATVPQARIVDGEVSKRGKYPWMVSVQQWDGDKLRPICGGAILNENWIVTAACHCFDQPVKNSDYEVYVGLFSI TKTNEPPVRKHVKSKIIHEDYKDTGFANDIALIKTATPIDIKGSKGYVNAICMPSGITNPAGDAIVIGWGTIYDDGPLSAELREAVVPIVPWKKCKEIYGNINS FEYVQVTPFVMCAGGNGKDSCQYDSSGGLFQFDKNGVATLLGTVANGGDCGNGRYPGMYMKASAYKSWMDRVTT	Putative PQM protease precursor (AUI10826.1, <i>Geolycosa vultuosa</i>)

(7) Metalloprotease

Name	Sequence	Similar protein (Accession No., species)
m.136344	MKVINWNIFVMNLLAEDPMVTEGFFEGDIDTENSFQMLNGISDDNLRWPNNAIVYYAIEENLHHIKPLIQKAMQHIESKTCIGFVERTNEADYVWIHIGKCSA QWGRRGQKQRLSLGHTGCHTLGVVVHMLHAIGFQHEHSRSDRDDYITIFLENVRPGQEHNFKEKLEPSENRLLTQFDTSSILLYGSTTFARPNTYSMLLKD GSVMVEVYKNSMTNLDAEKVNKLYQCT	Astacin-like metalloprotease toxin (A0FKN6, <i>Loxosceles intermedia</i>)
m.44881	MVAALVILLSIGCSLVTSKAYLGDLP IQNPDLFGGDILGIEDAEDRNAIVDKRQIWPGGVVPYEQDPGLKATVFRLTLEGAFDQYKKSTCIKFVPRTEKDYI RLFPGEGCYSHVGRGTGGQQPVSLGQGCWGMGTIVHELGHAI GFYHEQNRSDRDDWLIYWENVKEGMEDQFFKLKPDQNLTPFDYDSIMLYGSYTF S KDRKKLKT MVGKNNEFLQE VISKYRLSKSDIQRI NTLYNCKM	Astacin-like metalloprotease toxin (A0FKN6, <i>Loxosceles intermedia</i>)
m.35058	MAPFFYFTCVVLWLGSSSATEDFLGDLP MQNPDLFQGDILGVEDPEDRNAIVDKRQIWPGGIVPYVLDPGITKTVSPAILTNAMWLYKRDT CIRFVPRTNEA NYIRIFPGQGCYSHVGLTHVGAQPVSLGQGC GYMGTVIHEL AHALGFYHEQNRSDRDDWLT IYWDNIKEGMADQFMKLKPDQNLTPFDYDSIMLYGS YTF SKEYGKLKTMEGKGMFLKD VIRKYFMSKSDIQRIKALYKCP S	Astacin-like metalloprotease toxin (A0FKN6, <i>Loxosceles intermedia</i>)
m.220610	MFALAALSLFLVITTLGSRPEKDGPNVHPEYLDHLLDTEQYELFAKVMNIPDASLVRPKEGERSENPMFNKDLEMGDIVAFGLPKEESRQGINFDRYPGS KWQNGELHFYIKLNDFTESQLQTIYDAIDSWNRVRCLRLIDLRET VRKISDYVYVFGNGCWSYLGRI GGEEQGLSLQPNGCVWKGTVLHEFNHAAAGFAH EQNRLDRDDFIEMLWGNIPDDWKSQYEKTNPRDYGLQCSYDYYSIMHYGIKAPGTNKDAFRVKQDGIDQNKIGRST EFTKIDIEKINKLYC	Astacin-like metalloprotease toxin (A0FKN6, <i>Loxosceles intermedia</i>)

(8) Acetylcholinesterase

Name	Sequence	Similar protein (Accession No., species)
m.101805	MRRD TLLFCLLYLSYLLPCRSLLSRRVTTTPSGRVEGTVQSHNGVSVNAFLGIPYARPPVGDLRFKAPRT PAPWEGTLSAKEMRSGCVQFTRNPF PWRD VPPGLSEDCLYLN VWAPSTLLNTINRRTVMFVYGGAF LFGSSSRVDFYDGHVLA VEGDVVVVT VNYRLGPF GFLYAGNEDAPGNMGLLDLVEALKWVRG NIASFGGDPNSITLFGQSAGGIAIGMFCVSPLTRGLFKRVMQSGSPTNLGGEDNNLDAKMSQRLAEAVGCAEDENSLADDPETVVECLRNVD AFELARTF SALGGNGSRLVYPRFGDELL PQNPRKAI AKGDFGAVDVLIGSNGD GALIITDSMTEVFGFFGEKDPQINRTFGTSIIK RQFQDFVAPCSVVKQLGGVQDD DFDGIRQQVFMATGDYERTCPATYFAESFAKKGVKAYYYFFTHRPSKSPFAPWMLASHFDETPFVFGYPLRYTRNYTIRERLLSRRMIQAWATAFAKTGTPI GGVWPQYSRENPRYQILDVNSLGTGMGPRQNNCDFFRPF FGF	Acetylcholinesterase-1 (W4VSJ0, <i>Trittame loki</i>)
m.126349	MRLFLLLSIITLASCDRTVTTTNGPVKGISLSPKKVVAFLGIPYAEPPVGPLRF AKPIPKSFSEEVYLANEFPPSCVQASLGDFYFAPDPKGKMS EDCLYLNV WVPEGGSDTKPIMLFIHGGA FMVGSSNMKVYDGANLSEHGDVIVA AINRYRLGTLGFFSGFVEDAAGNMA MYDQVMAIQWIKNNAKHFGGDPDNIVLFGQ SAGGFSTSLHISPLSKGLFKRAILQSGTVVSPLFKSNDVLQMTSQYLASFLGCTDENNSLNKNPQSVIDCMKALPTEKIIQADGILLKSGGMMFPRIGDSFL PENSVD SYKNGDFK DTEILLGVT SNEGSLFLVFHMTD TLGSGFGQKIEVQDFNETS AMQYFKRISQHNSKGM PSEIVQEYFDRVKKDPGYTYLQATS DLMG DIIITCGAVFQADYYSLRDNPVYFYVFDYRPDSTPLAEWGMVAHFDEM QYVFGNPLHQEFTEYEKEFSGDIMDMWVAFAKTGNPNIPGGVKWPRYSYQD PKYLVLSKRDRVAVKPDNN SCEKWRKV FETEIKEDTLKKLKKPA	Acetylcholinesterase-1 (W4VSJ0, <i>Trittame loki</i>)
m.229987	MRLVCLLLLFGCTLAFDYE GYGCDNPNYIRDAGPLVRTSSGSLFGKYVKVFDTKVAAFLGIPYASPPVSEKRFLKPTPLERWDGVLDATVKPPPCMQYSSR NFSWIPKSTPSEDCLYLN VWTPAKCCCTG SERLPVMVWIYGGGFYSGSTDMDVYDGSTMVSYSKAI VVSINRYVGIFGFLSSGSDEAPGNVGLLDQNLAL KWIKNIGYFGGDPERITIMGESAGAMSVSLH MVSPMSRNL FQAAILQSATAYQPQMVDNKAMS YIKANTFAK VIGCLQGNSSIESDPEVMECLKAKSSWE LARAEDVFTSKLPQYFLPTYGDEFLPTSPFKAFNEGHLAPVDILIGNNRDEV TIFLNYMVPDIFRLDSEPQLNLEAAKQIIHGLFQT VPRPSATEIFDHYFQNV SEGDSSEIVKTIAHAFGDYVFYCPVALFAEKARNAYVYVWSHR SIRDQNP EWLGVPHFYEVFPVFGVPIQD TFFTYPEDGRFSADLIKKWTTFAEHGHPLG DRNPDDWPPYSAENPMAYELNPRQRGLLSFPRADACEFWRPYIVPKTC	Acetylcholinesterase-1 (W4VSJ0, <i>Trittame loki</i>)
m.130212	MKFLFIQSCFTVVTFRLLFAPVFG EESNFGQQNSRYFAEPEFKYYTTQNFRYSYTEFDHAAHDERCGPIYESKPTHKITPLGIVRGRQVFLCDRPGIPLRQR PQQIGKYIHSVQVFLGIPYAEPPVRRRNEENLQFKEPLEKQKFIDIDASSYKPAC PQHKKYFSKGQGINTTSEDCLYLNIFSPVQEDSDSLLNGYPVMYIHD GNWDHGS GALFPGHMLAASQKV VVVTFN YRLGPLGFLATGDSNSPGNYGMLDQVAAINWVYQYIKAFDGDGDPDKITVFGSGVGGAS AALLALSRLTKRKIK RVIAQNGSPVADWAAISDPRFMQNTTEIVGEG LGCSQQDTAHLVECVGTRLN EIKILEIKPRIGWLPWGPVVDNFTRRSLDQFLHESPEDMLEKGIDFRKD FAFMTGVNRDQ GASIFLEDVITYRDL DITSQVFDKIRSFMKM YNYSVNAEGIFDAIKFMYKPLDSYNETLLREAYIHLLTD RYYVAPMEKIVHLMVKNKVPT YAYVLYNTLQGYSTILKDFISPEVDYLLLSGAPFMDPKYYPAYLNLKNAKWTEADRNMSQAMMEAWANFARDGEPTKTRLFNTIMWEKVEENYLR YLNFN ATNTSSEMIYKYRERESRFWNFFLPFFIDREPPTLAP TLEPGVAELRLLTSALWGSV FVAVLLIVITLVCCSLYCRVRRYDSY	Acetylcholinesterase-1 (W4VSJ0, <i>Trittame loki</i>)
m.130210	MKFLFIQSCFTVVTFRLLFAPVFG EESNFGQQNSRYFAEPEFKYYTTQNFRYSYTEFDHAAHDERCGPIYESKPTHKITPLGIVRGRQVFLCDRPGIPLRQR PQQIGKYIHSVQVFLGIPYAEPPVRRRNEENLQFKEPLEKQKFIDIDASSYKPAC PQHKKYFSKGQGINTTSEDCLYLNIFSPVQEDSDSLLNGYPVMYIHD GNWDHGS GALFPGHMLAASQKV VVVTFN YRLGPLGFLATGDSNSPGNYGMLDQVAAINWVYQYIKAFDGDGDPDKITVFGSGVGGAS AALLALSRLTKRKIK RVIAQNGSPVADWAAISDPRFMQNTTEIVGEG LGCSQQDTAHLVECVGTRLN EIKILEIKPRIGWLPWGPVVDNFTRRSLDQFLHESPEDMLEKGIDFRKD FAFMTGVNRDQ GASIFLEDVITYRDL DITSQVFDKIRSFMKM YNYSVNAEGIFDAIKFMYKPLDSYNETLLREAYIHLLTD RYYVAPMEKIVHLMVKNKVPT YAYVLYNTLQGYSTILKDFISPEVDYLLLSGAPFMDPKYYPAYLNLKNAKWTEADRNMSQAMMEAWANFARDGEPTKTRLFNTIMWEKVEENYLR YLNFN ATNTSSEMIYKYRERESRFWNFFLPFFIDREPPTLAP TLEPGVAELRLLTSALWGSV FVAVLLIVITLVCCSLYCRVRSYKRPPDDLDSREVIVNHSATQQD TAV	Acetylcholinesterase-1 (W4VSJ0, <i>Trittame loki</i>)

(9) Cysteine-rich secretory protein

Name	Sequence	Similar protein (Accession No., species)
m.230427	MHIFSLFLSITILVTYAVAQNTTECPFLFRYSSTHSYCKTDNPKCNILRSFINEEEKNTIVRVHNSYRSRLAIGEEQNLPTAGDMLQMVWDELA AVAQKHA QQCLFEHDCANCRRVQNFGVGQNLAIQVFNSPSPNSNWP SAIKSWYDEIAYFSSNAIDPFIAPPEPTYGHFSQMFWASSWRIGCGYVLYQDRNMYQ KLYVCNYGPAGNTVSQSMYKVGSPCSACPLNSCCDKTCGAKAEYSGLCKITDNKAPKYKPVVPYIFYCDFNNQSDCQSYVTGVNKWL VYNTLSGSFLSIIL KGGEESMTFQNKIKPSTSAFCFVVMYRKGPNEDGKEEASTATETFSGSGFEFQQNLPTFNGDVKKQFSQFSMTLSWNMETEIKITFAVPAGKPDQFFEI QSIYATEGLCKQ	CRISP/Allergen/PR-1 (W4VS53, <i>Trittame loki</i>)
m.45429	MSAPLGIPSMFLALCALLCVL VAVQSAYCPDPYKRYSKDHSYCVGVCCSCAKYRRGVSPWLKQELVRLHNNLRSKVAGGKSYGVDHLPRATNMLEMVW DDELA EVAQRWSDK CERKSDCEDCRRVGRFGVGQIIFDFDGKMEGEDIENEFSSRFQGLQSFQKEQVERFTAGTNPKTAQMLWAKTWIRIGCGFLDFNY PGNGRRYTQIVCNYPNGNVEGEEVYKGGSVCSACPANTCCGDSCKKYNLKANYHGLCKVIDENLPPEGNVPHKKTGNEVFYCGFNDESDCSHSEGV DRWIRNVTTGGTWLNTYLGNYGHTVLKFNQPIISKSGKLCLAIKTRSGPMEAGQPYRYQLSGGLEEEGKFSTSFVFPADDNVKHKFHTDYFQPSEFPKN RGAKLTL SFQVSGEGPKTYLEIDSIVALEKDCPKKTITEGTGTFITSP	Venom allergen 5 (A9QQ26, <i>Lycosa singoriensis</i>)

(10) Techylectin-like protein

Name	Sequence	Similar protein (Accession No., species)
m.72849	MSFSSNISDEAQASIVVTLN NARNLLDDAKKYATMKTLSAAENVVYRPMDCAEVREKNPLARSGVHKI WPHSRVNGSVEVYCDMEDDGGSWTVIQR RGDFDSESDYFFKEWQFYKVGFGDRMKDFWLGN DVIFALTNQRLN	Techylectin-like protein (P85031, <i>Phoneutria nigriventer</i>)
m.257368	MIFALTNQRLNEVKFTLTDWESNTTYATYDEFWIDDEDHKYTAHVSGYKGTAGDSFYNTNGMPFTTKDQDNDKYEKNCAVQSRGAWWYGRCHMSNLN GMYLKG FHESNADGVNWYSLRGHHYSFKD TVIKIRPKGFQKNQCGTTSL	Techylectin-like protein (P85031, <i>Phoneutria nigriventer</i>)
m.72846	MLSRLLVWVNLMGVMYLGIYADDPQFISPLSRNITDQTQSSIVVTLN NARNLLED AKKYASIKTRCYAAENVYGRPMDCAEVKEKNPLANSGVHKIWLHS RAVNDAVEVYCDMEDDGGSWTVIQR RGDFDSGKDYFYKDWQFYKKGFGDRMKDFWLGN DVIFALTNQRLN	Techylectin-like protein (P85031, <i>Phoneutria nigriventer</i>)
m.72851	MLSRLLVWVNLMGVMYLGIYADDPQFISPLSRNITDQTQSSIVVTLN NARNLLED AKKYASIKTRCYAAENVYGRPMDCAEVKEKNPLANSGVHKIWLHS RAVNDAVEVYCDMEDDGGSWTVIQR RGDFDSGKDYFYKDWQFYKKGFGDRMKDFWLGD SFSAVNGLPFTTKDQDNDKYEKNCAVQYTGAWWY GSC HLSNLNGKYLKRVHKSHADSVNWHGFRGHNYS LKDTVIKIRPKDFQKNLSGITPL	Techylectin-like protein (P85031, <i>Phoneutria nigriventer</i>)
m.265263	MINHWVPVMGILLFCTDCGAADSTCGE KVSLEYHDAADLIAKAYHFPSRLHCENLSRNAVDCSEWLEKGYKKNGVYTVWPQSRVVDGKPLEVYCDIET DGGGWT LIQRRGSF GRAVDYFYKDWKSYKEGFGDTEKEFWLGN DNIFALTNQGLYSARFDMKDIDNETRYAHYDKFWIDDEYNKYTLHIADYRGDAGDS LVEHHNHQKFSAKGEDNDNQKDENCVEKYRGGW WYNSCHESNLHGLNLKGKHESFANGINWKS WKGYDDSLQSTEIKIRPRNFKLPHSSLNNTPM	Techylectin-like protein (P85031, <i>Phoneutria nigriventer</i>)