>MANUAL2 Putative Blo t 1.02 Manual Entry [Blomia tropicalis]
MKFLLVAALCALVAIGSCKPTREEIKTFEQFKKVFGKVYRNAEEEARREHHFKEQLKWVE
EHNGIDGVEYAINEYSDMSEQEFSFHLSGGGLNFTYMKMEAAKEPLINTYGSLPQNFDWR
QKARLTRIRQQGACGSCWAFAAAGVAESLYSIQKQQSIGLSEQELVDCTYNRYDPSYQCN
GCGSGYSTEAFKYMIRTGLVEERNYPYNMRTQWCDPDVEGQRYHVSGYQQLRYHSSDEDV
MYTIQQHGPVVIYMHGSNNYFRNLGNGVLRGVAYNDAYTDHAVILVGWGTVQGVDYWIIR
NSWGTGWGNGGYGYVERGHNSLGINNYVTYATL
>MANUAL3 Allergen Gal d 6; vitellogenin I, partial [Gallus gallus]
PEIASQIAQEDQSTCEVSKGDFKTFDRMSFTCSFNKSCNVVVAQDCTEHPKFIITTRKVD
HQSLSREVHINTSSANITICPAADSSLLVTCNKESVLSDSGVSEYEKDNIKIYKNGKTVI
VEAPIHGLKNVNFDGEILKVTVASWMRGKTCGVCGNNDREKHNELLMPNHKLAHSCSAFV
HSWVLLEETCSGGCKLQRRYVKLNRNPTIDGEESTCYSVDPVLKCMKDCTPIEKTSVKVG
FHCFPKATAVSLLEWQRSSDKKSASEDVVESVDADIDCTCTGDCS
>FG438715.1 Allergen Act d 9; profilin [Actinidia deliciosa]
MSWQTYVDDHLMCEIEGNYLTSAAIIGQDGSIWAQSASFPQFKPEEITAIMNDFSEPGTL
APTGLYLGGTKYMVIQGEAGAVIRGKKGPGGVTVKKTNQALIIGIYDEP
>CAA32835.1 Allergen Bos d 5; beta-lactoglobulin [Bos taurus]
MKCLLLALALTCGAQALIVTQTMKGLDIQKVAGTWYSLAMAASDISLLDAQSAPLRVYVE
ELKPTPEGDLEILLQKWENDECAQKKIIAEKTKIPAVFKIDALNENKVLVLDTDYKKYLL
VCMENSAEPEQSLVCQCLVRTPEVDDEALEKFDKALKALPMHIRLSFNPTQLEEQCHI
>CAA68720.1 Allergen Can f 5; arginine esterase [Canis familiaris]
MWFLALCLAMSLGWTGAEPHFQPRIIGGRECLKNSQPWQVAVYHNGEFACGGVLVNPEWV
LTAAHCANSNCEVWLGRHNLSESEDEGQLVQVRKSFIHPLYKTKVPRAVIRPGEDRSHDL
MLLHLEEPAKITKAVRVMDLPKKEPPLGSTCYVSGWGSTDPETIFHPGSLQCVDLKLLSN
NQCAKVYTQKVTKFMLCAGVLEGKKDTCKGDSGGPLICDGELVGITSWGATPCGKPQMPS
LYTRVMPHLMWIKDTMKANT
>CAA26038.1 Allergen Api m 4; melittin [Apis mellifera]
MKFLVNVALVFMVVYISYIYAAPEPEPAPEPEAEADAEADPEAGIGAVLKVLTTGLPALI
SWIKRKRQQG
>CAA35692.1 Allergen Der p 5; unknown [Dermatophagoides pteronyssinus]
LFLENKDPKPLKKISIMKFIIAFFVATLAVMTVSGEDKKHDYQNEFDFLLMERIHEQIKK
GELALFYLQEQINHFEEKPTKEMKDKIVAEMDTIIAMIDGVRGVLDRLMQRKDLDIFEQY
NLEMAKKSGDILERDLKKEEARVKKIEV
>CAA34486.1 Allergen Act d 1; cysteine protease (actinidin) [Actinidia deliciosa]
MGLPKSFVSMSLLFFSTLLILSLAFNAKNLTQRTNDEVKAMYESWLIKYGKSYNSLGEWE
RRFEIFKETLRFIDEHNADTNRSYKVGLNQFADLTDEEFRSTYLGFTSGSNKTKVSNRYE
PRFGQVLPSYVDWRSAGAVVDIKSQGECGGCWAFSAIATVEGINKIVTGVLISLSEQELI
DCGRTQNTRGCNGGYITDGFQFIINNGGINTEENYPYTAQDGECNLDLQNEKYVTIDTYE
NVPYNNEWALQTAVTYQPVSVALDAAGDAFKHYSSGIFTGPCGTAIDHAVTIVGYGTEGG
IDYWIVKNSWDTTWGEEGYMRILRNVGGAGTCGIATMPSYPVKYNNQNHPKPYSSLINPP
AFSMSKDGPVGVDDGQRYSA
>CAA46782.1 Allergen Bra r 1; 2S ablumin [Brassica rapa]
MANKLFLVSATLALFFLLTNASVYRTGSEFDEHDATNPAGPFRIPKCRKEFQQAQHLKAC
QQWLHKQAMQSGSGPSWTLDGEFDFEEDMENTQGPQQEPPLLQQCCNELHQEEPLCVCPT
LKGASKAVKQQVRQQGQQQQMQQVISRIYQTSTHLPRVCNIRQVSICPFQKTMPGPSY
>CAA33887.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA35691.1 Putative Beta-conglycinin, alpha subunit-like [Glycine max]
MMRARFPLLLLGLVFLASVSVSFGIAYWEKENPKHNKCLQSCNSERDSYRNQACHARCNL
LKVEKEECEEGEIPRPRPRPQHPEREPQQPGEKEEDEDEQPRPIPFPRPQPRQEEEHEQR

EEQEWPRKEEKRGEKGSEEEDEDEDEEQDERQFPFPRPPHQKEERNEEEDEDEEQQRESE
ESEDSELRRHKNKNPFLFGSNRFETLFKNQYGRIRVLQRFNQRSPQLQNLRDYRILEFNS
KPNTLLLPNHADADYLIVILNGTAILSLVNNDDRDSYRLQSGDALRVPSGTTYYVVNPDN
NENLRLITLAIPVNKPGRFESFFLSSTEAQQSYLQGFSRNILEASYDTKFEEINKVLFSR
EEGQQQGEQRLQESVIVEISKEQIRALSKRAKSSSRKTISSEDKPFNLRSRDPIYSNKLG
KFFEITPEKNPQLRDLDIFLSIVDMNEGALLLPHFNSKAIVILVINEGDANIELVGLKEQ
QQEQQQEEQPLEVRKYRAELSEQDIFVIPAGYPVVVNATSNLNFFAIGINAENNQRNFLA
GSQDNVISQIPSQVQELAFPGSAQAVEKLLKNQRESYFVDAQPKKKEEGNKGRKGPLSSI
LRAFY
>CAA26575.1 Putative Glycinin A2B1a subunit-like [Glycine max]
MAKLVLSLCFLLFSGCFALREQAQQNECQIQKLNALKPGNRIESEGGFIETWNPNNKPFQ
CAGVALSRCTLNRNALRRPSYTNGPQEIYIQQGNGIFGMIFPGCPSTYQEPQESQQRGRS
QRPQDRHQKVHRFREGDLIAVPTGVAWWMYNNEDTPVVAVSIIDTNSLENQLDQMPRRFY
LAGNQEQEFLKYQQQQQGGSQSQKGKQQEEENEGSNILSGFAPEFLKEAFGVNMQIVRNL
QGENEEEDSGAIVTVKGGLRVTAPAMRKPQQEEDDDDEEEQPQCVETDKGCQRQSKRSRN
GIDETICTMRLRQNIGQNSSPDIYNPQAGSITTATSLDFPALWLLKLSAQYGSLRKNAMF
VPHYTLNANSIIYALNGRALVQVVNCNGERVFDGELQEGGVLIVPQNFAVAAKSQSDNFE
YVSFKTNDRPSIGNLAGANSLLNALPEEVIQHTFNLKSQQARQVKNNNPFSFLVPPQESQ
RRAVA
>CAA26723.1 Putative Glycinin-like [Glycine max]
MAKLVFSLCFLLFSGCCFAFSSREQPQQNECQIQKLNALKPGNRIESEGGLIETWNPNNK
PFQCAGVALSRCTLNRNALRRPSYTNGPQEIYIQQGKGIFGMIYPGCSSTFEEPQQPQQR
GQSSRPQDRHQKIYNSREGDLIAVPTGVAWWMYNNEDTPVVAVSIIDTNSLENQLDQMPR
RFYLAGNQEQEFLKYQQEQGGHQSQKGKHQQEEENEGGSILSGFTLEFLEHAFSVDKQIA
KNLQGENEGEDKGAIVTVKGGLSVIKPPTDEQQQRPQEEEEEEEDEKPQCKGKDKHCQRP
RGSQSKSRRNGIDETICTMRLRHNIGQTSSPDIYNPQAGSVTTATSLDFPALSWLRLSAG
FGSLRKNAMFVPHYNLNANSIIYALNGRALIQVVNCNGERVFDGELQEGRVLIVPQNFVV
AARSQSDNFEYVSFKTNDTPMIGTLAGANSLLNALPEEVIQHTFNLKSQQARQIKNNNPF
KFLVPPQESQKRAVA
>CAA33217.1 Allergen Gly m 6; glycinin/11S globulin [Glycine max]
MAKLVLSLCFLLFSGCCFAFSFREQPQQNECQIQRLNALKPDNRIESEGGFIETWNPNNK
PFQCAGVALSRCTLNRNALRRPSYTNAPQEIYIQQGSGIFGMIFPGCPSTFEEPQQKGQS
SRPQDRHQKIYHFREGDLIAVPTGFAYWMYNNEDTPVVAVSLIDTNSFQNQLDQMPRRFY
LAGNQEQEFLQYQPQKQQGGTQSQKGKRQQEEENEGGSILSGFAPEFLEHAFVVDRQIVR
KLQGENEEEEKGAIVTVKGGLSVISPPTEEQQQRPEEEEKPDCDEKDKHCQSQSRNGIDE
TICTMRLRHNIGQTSSPDIFNPQAGSITTATSLDFPALSWLKLSAQFGSLRKNAMFVPHY
NLNANSIIYALNGRALVQVVNCNGERVFDGELQEGQVLIVPQNFAVAARSQSDNFEYVSF
KTNDRPSIGNLAGANSLLNALPEEVIQQTFNLRRQQARQVKNNNPFSFLVPPKESQRRVV
A
>CAA37044.1 Putative glycinin [Glycine max]
MGKPFTLSLSSLCLLLLSSACFAISSSKLNECQLNNLNALEPDHRVEFEGGLIQTWNSQH
PELKCAGVTVSKLTLNRNGLHLPSYSPYPRMIIIAQGKGALQCKPGCPETFEEPQEQSNR
RGSRSQKQQLQDSHQKIRHFNEGDVLVIPPGVPYWTYNTGDEPVVAISLLDTSNFNNQLD
QTPRVFYLAGNPDIEYPETMQQQQQQKSHGGRKQGQHQQEEEEEGGSVLSGFSKHFLAQS
FNTNEDIAEKLQSPDDERKQIVTVEGGLSVISPKWQEQQDEDEDEDEDDEDEQIPSHPPR
RPSHGKREQDEDEDEDEDKPRPSRPSQGKREQDQDQDEDEDEDEDQPRKSREWRSKKTQP
RRPRQEEPRERGCETRNGVEENICTLKLHENIARPSRADFYNPKAGRISTLNSLTLPALR
QFQLSAQYVVLYKNGIYSPHWNLNANSVIYVTRGQGKVRVVNCQGNAVFDGELRRGQLLV
VPQNFVVAEQAGEQGFEYIVFKTHHNAVTSYLKDVFRAIPSEVLAHSYNLRQSQVSELKY
EGNWGPLVNPESQQGSPRVKVA
>CAA42646.1 Allergen Gly m 4; pathogenesis-related protein/PR 10/ Bet v
1- llike protein [Glycine max]
MGVFTFEDEINSPVAPATLYKALVTDADNVIPKALDSFKSVENVEGNGGPGTIKKITFLE
DGETKFVLHKIESIDEANLGYSYSVVGGAALPDTAEKITFDSKLVAGPNGGSAGKLTVKY

ETKGDAEPNQDELKTGKAKADALFKAIEAYLLAHPDYN
>CAA45777.1 Putative trypsin inhibitor subtype A [Glycine max]
MKSTIFFALFLFCAFTTSYLPSAIADFVLDNEGNPLENGGTYYILSDITAFGGIRAAPTG
NERCPLTVVQSRNELDKGIGTIISSPYRIRFIAEGHPLSLKFDSFAVIMLCVGIPTEWSV
VEDLPEGPAVKIGENKDAMDGWFRLERVSDDEFNNYKLVFCPQQAEDDKCGDIGISIDHD
DGTRRLVVSKNKPLVVQFQKLDKESLAKKNHGLSRSE
>CAA45778.1 Putative trypsin inhibitor subtype B [Glycine max]
MKSTIFFALFLFCAFTTSYLPSAIADFVLDNEGNPLDSGGTYYILSDITAFGGIRAAPTG
NERCPLTVVQSRNELDKGIGTIISSPFRIRFIAEGNPLRLKFDSFAVIMLCVGIPTEWSV
VEDLPEGPAVKIGENKDAVDGWFRIERVSDDEFNNYKLVFCTQQAEDDKCGDIGISIDHD
DGTRRLVVSKNKPLVVQFQKVDKESLAKKNHGLSRSE
>CAA39880.1 Allergen Hev b 1; rubber elongation factor [Hevea brasiliensis]
MAEDEDNQQGQGEGLKYLGFVQDAATYAVTTFSNVYLFAKDKSGPLQPGVDIIEGPVKNV
AVPLYNRFSYIPNGALKFVDSTVVASVTIIDRSLPPIVKDASIQVVSAIRAAPEAARSLA
SSLPGQTKILAKVFYGEN
>CAA41956.1 Allergen alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]
MASKSSITPLLLAAVLASVFAAAAATGQYCYAGMGLPSNPLEGCREYVAQQTCGVTIAGS
PVSSEPGDTPKDRCCQELDEAPQHCRCRVRYFIGRRSHPDWRVLKDLPGCPKEPQRDFAK
VLVTPGQCNVLTVHNAPYCLGLDI
>CAA45085.1 Allergen Hor v 15; alpha-amylase, partial [Hordeum vulgare subsp. vulgare]
PTSVAVDQGSMVSNSPGEWCWPGMGYPVYPFPRCRALVKSQCAGGQVVESIQKDCCRQIA
AIGDEWCICGALGSMRGSMYKELGVALADDKATVAEVFPGCRTEVMDRAVASLPAVCNQY
IPNTNGTDGVCYWLSYYQPPRQMSSR
>CAA46705.1 Allergen CMe [Hordeum vulgare subsp. vulgare]
MAFKYQLLLSAAVMLAILVATATSFGDSCAPGDALPHNPLRACRTYVVSQICHQGPRLLT
SDMKRRCCDELSAIPAYCRCEALRIIMQGVVTWQGAFEGAYFKDSPNCPRERQTSYAANL
VTPQECNLGTIHGSAYCPELQPGYGVVL
>CAA42832.1 Putative LTP 1 [Hordeum vulgare]
MARAQVLLMAAALVLMLTAAPRAAVALNCGQVDSKMKPCLTYVQGGPGPSGECCNGVRDL
HNQAQSSGDRQTVCNCLKGIARGIHNLNLNNAASIPSKCNVNVPYTISPDIDCSRFTERR
SVKLVLSSSIHVEL
>CAA38097.1 Allergen Ric c 1; 2S albumin [Ricinus communis]
MAKLIPTIALVSVLLFIIANASFAYRTTITTIEIDESKGEREGSSSQQCRQEVQRKDLSS
CERYLRQSSSRRSPGEEVLRMPGDENQQQESQQLQQCCNQVKQVRDECQCEAIKYIAEDQ
IQQGQLHGEESERVAQRAGEIVSSCGVRCMRQTRTNPSQQGCRGQIQEQQNLRQCQEYIK
QQVSGQGPRRSDNQERSLRGCCDHLKQMQSQCRCEGLRQAIEQQQSQGQLQGQDVFEAFR
TAANLPSMCGVSPTECRF
>CAA31575.1 Allergen patatin B2 (AA 1 - 386) [Solanum tuberosum]
MATTKSFLILFFMILATTSSTCAKLEEMVTVLSIDGGGIKGIIPAIILEFLEGQLQEVDN
NKDARLADYFDVIGGTSTGGLLTAMITTPNENNRPFAAAKDIVPFYFEHGPHIFNYSGSI
LGPMYDGKYLLQVLQEKLGETRVHQALTEVAISSFDIKTNKPVIFTKSNLAKSPELDAKM
YDICYSTAAAPIYFPPHHFVTHTSNGARYEFNLVDGAVATVGDPALLSLSVATRLAQEDP
AFSSIKSLDYKQMLLLSLGTGTNSEFDKTYTAEEAAKWGPLRWMLAIQQMTNAASSYMTD
YYISTVFQARHSQNNYLRVQENALNGTTTEMDDASEANMELLVQVGETLLKKPVSKDSPE
TYEEALKRFAKLLSDRKKLRANKASH
>CAA27571.1 Allergen patatin [Solanum tuberosum]
MATTNSFTILIFMILATTSSTFATLGEMVTVLSIDGGGIKGIIPATILEFLEGQLQEVDN
NTDARLADYFDVIGGTSTGGLLTAMITTPNETNRPFAAAKDIVPFYFEHGPKIFQSSGSI
FGPKYDGKYLMQVLQEKLGETRVHQALTEVAISSFDIKTNKPVIFTKSNLAKSPELDAKM
YDICYSTAAAPTFFPPHYFATNTSNGDKYEFNLVDGAVATVDDPALLSISVATKLAQVDP
KFASIKSLNYKQMLLLSLGTGTTSEFDKTYTAEETAKWGTARWMLVIQKMTSAASSYMTD

YYLSTAFQALDSQNNYLRVQENALTGTTTELDDASEANMQLLVQVGEDLLKKSVSKDNPE
TYEEALKRFAKLLSDRKKLRANKASY
>CAA27588.1 Allergen patatin [Solanum tuberosum]
MATTKSFLILFFMILATTSSTCATLGEMVTVLSIDGGGIKGIIPAIILEFLEGQLQEVDN
NKDARLADYFDVIGGTSTGGLLTAMITTPNENNRPFAAAKDIVPFYFEHGPHIFNYSGSI
FGPRYDGKYLLQVLQEKLGETRVHQALTEVAISSFDIKTNKPVIFTKSNLAESPQLDAKM
YDICYSTAAAPIYFPPHHFVTHTSNGATYEFNLVDGAVATVGDPALLSLSVATRLAQDDP
AFSSIKSLDYKQMLLLSLGTGTNSEFDKTYTAEEAAKWGPLRWMLAIQQMTNAASSYMTD
YYISTVFQARHSQNNYLRVQENALTGTTTEMDDASEANMELLVQVGETLLKKPVSKDSPE
TYEEALKRFAKLLSDRKKLRANKASH
>CAA35238.1 Allergen Alpha/beta gliadin-like protein product [Triticum aestivum]
MKTFLILALLAIVATTARIAVRVPVPQLQPQNPSQQQPQEQVPLVQQQQFPGQQQPFPPQ
QPYPQPQPFPSQQPYLQLQPFPQPQLPYPQPQLPYPQPQLPYPQPQPFRPQQPYPQSQPQ
YSQPQQPISQQQQQQQQQQQKQQQQQQQQILQQILQQQLIPCRDVVLQQHSIAYGSSQV
LQQSTYQLVQQLCCQQLWQIPEQSRCQAIHNVVHAIILHQQQQQQQQQQQQPLSQVSFQQ
PQQQYPSGQGSFQPSQQNPQAQGSVQPQQLPQFEEIRNLALETLPAMCNVYIPPYCTIAP
VGIFGTN
>CAA35598.1 Allergen Alpha amylase inhibitor-like protein product [Triticum aestivum]
MASKSSISPLLLATVLVSVFAAATATGPYCYAGMGLPINPLEGCREYVAQQTCGISISGS
AVSTEPGNTPRDRCCKELYDASQHCRCEAVRYFIGRRSDPNSSVLKDLPGCPREPQRDFA
KVLVTSGHCNVMTVHNAPYCLGLDI
>CAA42453.1 Allergen Tri a 40; alpha amylase inhibitor [Triticum aestivum]
MASKSNYNLLFTALLVFIFAAVAAVGNEDCTPWTSTLITPLPSCRNYVEEQACRIEMPGP
PYLAKQECCEQLANIPQQCRCQALRYFMGPKSRPDQSGLMELPGCPREVQMNFVPILVTP
GYCNLTTVHNTPYCLGMEESQWS
>CAA35597.1 Allergen Tri a 30; alpha amylase inhibitor [Triticum aestivum]
MACKSSCSLLLLAAVLLSVLAAASASGSCVPGVAFRTNLLPHCRDYVLQQTCGTFTPGSK
LPEWMTSASIYSPGKPYLAKLYCCQELAEISQQCRCEALRYFIALPVPSQPVDPRSGNVG
ESGLIDLPGCPREMQWDFVRLLVAPGQCNLATIHNVRYCPAVEQPLWI
>CAA43331.1 Allergen high molecular weight glutenin subunit 1Ax1 [Triticum aestivum]
MTKRLVLFAAVVVALVALTAAEGEASGQLQCERELQEHSLKACRQVVDQQLRDVSPECQP
VGGGPVARQYEQQVVVPPKGGSFYPGETTPPQQLQQSILWGIPALLRRYYLSVTSPQQVS
YYPGQASSQRPGQGQQPGQGQQEYYLTSPQQSGQWQQPGQGQAGYYPTSPQQSGQEQPGY
YPTSPWQPEQLQQPTQGQQRQQPGQGQQLRQGQQGQQSGQGQPRYYPTSSQQPGQLQQLA
QGQQGQQPERGQQGQQSGQGQQLGQGQQGQQPGQKQQSGQGQQGYYPISPQQLGQGQQSG
QGQLGYYPTSPQQSGQGQSGYYPTSAQQPGQLQQSTQEQQLGQEQQDQQSGQGRQGQQSG
QRQQDQQSGQGQQPGQRQPGYYSTSPQQLGQGQPRYYPTSPQQPGQEQQPRQLQQPEQGQ
QGQQPEQGQQGQQPGQGEQGQQPGQGQQGQQPGQGQPGYYPTSPQQSGQGQPGYYPTSPQ
QSGQLQQPAQGQQPGQEQQGQQPGQGQQGQQPGQGQQPGQGQPGYYPTSPQQSGQEQQLE
QWQQSGQGQPGHYPTSPLQPGQGQPGYYPTSPQQIGQGQQPGQLQQPTQGQQGQQPGQGQ
QGQQPGQGQQGQQPGQGQQPGQGQPGYYPTSLQQSGQGQQPGQWQQPGQGLPGYYPTSSL
QPEQGQQGYYPTSQQQPGQGPQPGQWQQSGQGQQGYYPTSPQQSGQGQQPGQWLQPGQWL
QSGYYLTSPQQLGQGQQPRQWLQPRQGQQGYYPTSPQQSGQGQQLGQGQQGYYPTSPQQS
GQGQQGYDSPYHVSAEHQAASLKVAKAQQLAAQLPAMCRLEGGDALLASQ
>CAA31396.1 Allergen high molecular weight glutenin subunit 10 [Triticum aestivum]
MAKRLVLFAAVVIALVALTTAEGEASRQLQCERELQESSLEACRQVVDQQLAGRLPWSTG
LQMRCCQQLRDVSAKCRSVAVSQVARQYEQTVVPPKGGSFYPGETTPLQQLQQGIFWGTS
SQTVQGYYPGVTSPRQGSYYPGQASPQQPGQGQQPGKWQEPGQGQQWYYPTSLQQPGQGQ

QIGKGQQGYYPTSLQQPGQGQQGYYPTSLQHTGQRQQPVQGQQPEQGQQPGQWQQGYYPT
SPQQLGQGQQPRQWQQSGQGQQGHYPTSLQQPGQGQQGHYLASQQQPGQGQQGHYPASQQ
QPGQGQQGHYPASQQQPGQGQQGHYPASQQEPGQGQQGQIPASQQQPGQGQQGHYPASLQ
QPGQGQQGHYPTSLQQLGQGQQTGQPGQKQQPGQGQQTGQGQQPEQEQQPGQGQQGYYPT
SLQQPGQGQQQGQGQQGYYPTSLQQPGQGQQGHYPASLQQPGQGQPGQRQQPGQGQHPEQ
GKQPGQGQQGYYPTSPQQPGQGQQLGQGQQGYYPTSPQQPGQGQQPGQGQQGHCPTSPQQ
SGQAQQPGQGQQIGQVQQPGQGQQGYYPTSVQQPGQGQQSGQGQQSGQGHQPGQGQQSGQ
EQQGYDSPYHVSAEQQAASPMVAKAQQPATQLPTVCRMEGGDALSASQ
>CAA25593.1 Allergen Alpha/beta gliadin-like protein product [Triticum aestivum]
MKTFLILVLLAIVATTATTAVRFPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQPFPPQ
QPYPQPQPFPSQLPYLQLQPFPQPQLPYSQPQPFRPQQPYPQPQPQYSQPQQPISQQQQQ
QQQQQQQQQQQQQILQQILQQQLIPCMDVVLQQHNIAHGRSQVLQQSTYQLLQELCCQHL
WQIPEQSQCQAILKVVHAIILHQQQKQQQQPSSQVSFQQPLQQYPLGQGSFRPSQQNPQA
QGSVQPQQLPQFEEIRNLALQTLPAMCNVYIPPYCTIAPFGIFGTN
>CAA26383.1 Allergen Gliadin-like protein product [Triticum aestivum]
MKTFLILALLAIVATTATTAVRVPVPQPQPQNPSQPQPQGQVPLVQQQQFPGQQQQFPPQ
QPYPQPQPFPSQQPYLQLQPFPQPQPFPPQLPYPQPPPFSPQQPYPQPQPQYPQPQQPIS
QQQAQQQQQQQQQQQQQQQQQILQQILQQQLIPCRDVVLQQHNIAHARSQVLQQSTYQP
LQQLCCQQLWQIPEQSRCQAIHNVVHAIILHQQQRQQQPSSQVSLQQPQQQYPSGQGFFQ
PSQQNPQAQGSVQPQQLPQFEEIRNLALQTLPRMCNVYIPPYCSTTIAPFGIFGTN
>CAA26384.1 Allergen Gliadin-like protein product [Triticum aestivum]
MKTFLILVLLAIVATTATTAVRFPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQPFPPQ
QPYPQPQPFPSQLPYLQLQPFPQPQLPYSQPQQFRPQQPYPQPQPQYSQPQQPISQQQQQ
QQQQQQQQQQQQQILQQILQQQLIPCMDVVLQQHNIAHGRSQVLQQSTYQLLQELCCQHL
WQIPEQSQCQAIHNVVHAIILHQQQKQQQQPSSQVSFQQPLQQYPLGQGSFRPSQQNPQA
QGSVQPQQLPQFEEIRNLALQTLPAMCNVYIPPYCTIAPFGIFGTN
>CAA26385.1 Allergen Gliadin-like protein product [Triticum aestivum]
MKTFLILALVATTATTAVRVPVPQLQPKNPSQQQPQEQVPLVQQQQFPGQQQQFPPQQPY
PQPQPFPSQQPYLQLQPFPQPQPFLPQLPYPQPQSFPPQQPYPQQRPMYLQPQQPISQQQ
AQQQQQQQQQQQQQQQQQILQQILQQQLIPCRDVVLQQHNIAHASSQVLQQSTYQLLQQL
CCQQLLQIPEQSRCQAIHNVVHAIIMHQQEQQQQLQQQQQQQLQQQQQQQQQQQQPSSQV
SFQQPQQQYPSSQGSFQPSQQNPQAQGSVQPQQLPQFAEIRNLALQTLPAMCNVYIPPHC
STTIAPFGIFGTN
>CAA31685.1 Putative LMW glutenin-like protein product [Triticum aestivum]
MKTFLVFALLAVAATSAIAQMETRCIPGLERPWQQQPLPPQQTFPQQPLFSQQQQQQLFP
QQPSFSQQQPPFWQQQPPFSQQQPILPQQPPFSQQQQLVLPQQPPFSQQQQPVLPPQQSP
FPQQQQQHQQLVQQQIPVVQPSILQQLNPCKVFLQQQCSPVAMPQRLARSQMLQQSSCHV
MQQQCCQQLPQIPQQSRYEAIRAIIYSIILQEQQQVQGSIQSQQQQPQQLGQCVSQPQQQ
SQQQLGQQPQQQQLAQGTFLQPHQIAQLEVMTSIALRILPTMCSVNVPLYRTTTSVPFGV
GTGVGAY
>CAA26847.1 Allergen HMW glutenin-like protein product [Triticum aestivum]
MAKRLVLFAAVVIALVALTTAEGEASRQLQCERELQESSLEACRQVVDQQLAGRLPWSTG
LQMRCCQQLRDVSAKCRSVAVSQVARQYEQTVVPPKGGSFYPGETTPLQQLQQGIFWGTS
SQTVQGYYPSVTSPRQGSYYPGQASPQQPGQGQQPGKWQEPGQGQQWYYPTSLQQPGQGQ
QIGKGKQGYYPTSLQQPGQGQQIGQGQQGYYPTSPQHTGQRQQPVQGQQIGQGQQPEQGQ
QPGQWQQGYYPTSPQQLGQGQQPGQWQQSGQGQQGHYPTSLQQPGQGQQGHYLASQQQPA
QGQQGHYPASQQQPGQGQQGHYPASQQQPGQGQQGHYPASQQEPGQGQQGQIPASQQQPG
QGQQGHYPASLQQPGQQGHYPTSLQQLGQGQQIGQPGQKQQPGQGQQTGQGQQPEQEQQP
GQGQQGYYPTSLQQPGQGQQQGQGQQGYYPTSLQQPGQGQQGHYPASLQQPGQGQGQPGQ
RQQPGQGQHPEQGQQPGQGQQGYYPTSPQQPGQGQQLGQGQQGYYPTSPQQPGQGQQPGQ
GQQGHCPMSPQQTGQAQQLGQGQQIGQVQQPGQGQQGYYPTSLQQPGQGQQSGQGQQSGQ

GHQPGQGQQSGQEKQGYDSPYHVSAEQQAASPMVAKAQQPATQLPTVCRMEGGDALSASQ
>CAA30570.1 Putative LMW glutenin-like protein product [Triticum aestivum]
MKTFLVFALLALAAASAVAQISQQQQAPPFSQQQQPPFSQQQQPPFSQQQQSPFSQQQQQ
PPFAQQQQPPFSQQPPISQQQQPPFSQQQQPQFSQQQQPPYSQQQQPPYSQQQQPPFSQQ
QQPPFSQQQQQPPFTQQQQQQQQQQPFTQQQQPPFSQQPPISQQQQPPFLQQQRPPFSRQ
QQIPVIHPSVLQQLNPCKVFLQQQCIPVAMQRCLARSQMLQQSICHVMQQQCCQQLRQIP
EQSRHESIRAIIYSIILQQQQQQQQQQQQQQGQSIIQYQQQQPQQLGQCVSQPLQQLQQQ
LGQQPQQQQLAHQIAQLEVMTSIALRTLPTMCNVNVPLYETTTSVPLGVGIGVGVY
>CAA24934.1 Allergen HMW glutenin-like protein product [Triticum aestivum]
LVSVEHQAARLKVAKAQQLAAQLPAMCRLEGGDALSASQ
>CAA34709.1 Putative precursor (AA -24 to 119) [Triticum turgidum subsp. durum]
MASKSNCVLLLAAVLVSIFAAVAAIGNEDCTPWMSTLITPLPSCRDYVEQQACRIETPGS
PYLAKQQCCGELANIPQQCRCQALRYFMGPKSRPDQSGLMELPGCPREVQMDFVRILVTP
GYCNLTTVHNTPYCLAMEESQWS
>CAA39099.1 Allergen CM2 protein [Triticum turgidum subsp. durum]
MASKSSITHLLLAAVLVSVFAAAAATGPYCYPGMGLPSNPLEGCREYVAQQTCGVGIVGS
PVSTEPGNTPRDRCCKELYDASQHCRCEAVRYFIGRTSDPNSGVLKDLPGCPREPQRDFA
KVLVTPGHCNVMTVHNTPYCLGLDI
>CAA36063.1 Putative glutenin-like protein product [Triticum turgidum subsp. durum]
MKTFLVFALLAVVATSTIAQMETSCIPGLERPWQEQPLPPQHTLFPQQQPFPQQQQPPFS
QQQPSFLQQQPILPQLPFSQQQQPVLPQQSPFSQQQLVLPPQQQYQQVLQQQIPIVQPSV
LQQLNPCKVFLQQQCNPVAMPQRLARSQMLQQSSCHVMQQQCCQQLPQIPEQSRYDVIRA
ITYSIILQEQQQGFVQAQQQQPQQLGQGVSQSQQQSQQQLGQCSFQQPQQQLGQQPQQQQ
VLQGTFLQPHQIAHLEVMTSIALRTLPTMCSVNVPLYSSTTSVPFSVGTGVGAYL
>CAA44473.1 Putative LMW glutenin [Triticum turgidum subsp. durum]
MKTFLVFALLAVVATSAIAQMDTSCIPGLERPWQQQPLPPQQTFPQQPPFSQQQQQQPFP
QQPSFSQQQPILPQGPPFPQQTQPVLPQQSPFSQQQQLILPPQQQQQLPQQQISIVQPSV
LQQLNPCKVFLQQQCSPVAIPQRLARSQMWQQSSCHVMQQQCCQQLSQIPEQSRYDAIRA
ITYSIILQEQQQGQSQQQQPQQSGQGVSQSQQQSQQQLGQCSFQQPQQQLGQQPQQQQVQ
QGTFLQPHQIAHLEVMTSIALRTLPTMCSVNVPLYSSTTSVPFGV
>CAA43361.1 Allergen HMW glutenin subunit 1By9 [Triticum aestivum]
MAKRLVLFATVVITLVALTAAEGEASRQLQCERELQESSLEACRQVVDQQLAGRLPWSTG
LQMRCCQQLRDVSAKCRPVAVSQVVRQYEQTVVPPKGGSFYPGETTPLQQLQQVIFWGTS
SQTVQGYYPSVSSPQQGPYYPGQASPQQPGQGQQPGKWQELGQGQQGYYPTSLHQSGQGQ
QGYYPSSLQQPGQGQQIGQGQQGYYPTSLQQPGQGQQIGQGQQGYYPTSPQHPGQRQQPG
QGQQIGQGQQLGQGRQIGQGQQSGQGQQGYYPTSPQQLGQGQQPGQWQQSGQGQQGYYPT
SQQQPGQGQQGQYPASQQQPGQGQQGQYPASQQQPGQGQQGQYPASQQQPGQGQQGHYLA
SQQQPGQGQQRHYPASLQQPGQGQQGHYTASLQQPGQGQQGHYPASLQQVGQGQQIGQLG
QRQQPGQGQQTRQGQQLEQGQQPGQGQQTRQGQQLEQGQQPGQGQQGYYPTSPQQSGQGQ
QPGQSQQPGQGQQGYYSSSLQQPGQGLQGHYPASLQQPGQGHPGQRQQPGQGQQPEQGQQ
PGQGQQGYYPTSPQQPGQGKQLGQGQQGYYPTSPQQPGQGQQPGQGQQGHCPTSPQQTGQ
AQQPGQGQQIGQVQQPGQGQQGYYPISLQQSGQGQQSGQGQQSGQGHQLGQGQQSGQEQQ
GYDNPYHVNTEQQTASPKVAKVQQPATQLPIMCRMEGGDALSASQ
>CAA50325.1 Allergen Cor a 1; pathogenesis-related protein /PR-10 /Bet v 1- like protein [Corylus avellana]
MGVFNYEAETTSVIPAARLFKSYVLDGDKLIPKVAPQAITSVENVEGNGGPGTIKNITFG
EGSRYKYVKERVDEVDNTNFTYSYTVIEGDVLGDKLEKVCHELKIVAAPGGGSILKISSK
FHAKGDHEINAEEIKGAKEMAEKLLRAVETYLLAHSAEYN
>CAA50326.1 Allergen Cor a 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Corylus avellana]

MGVFNYEVETPSVISAARLFKSYVLDGDKLIPKVAPQAITSVENVGGNGGPGTIKNITFG
EGSRYKYVKERVDEVDNTNFKYSYTVIEGDVLGDKLEKVCSELKIVAAPGGGSTLKISSK
FHAKGDHEINAEEMKGAKEMAEKLLRAVETYLLAHSAEYN
>CAA50327.1 Allergen Cor a 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Corylus avellana]
MGVFNYEVETPSVIPAARLFKSYVLDGDKLIPKVAPQAITSVENVEGNGGPGTIKNITFG
EGSRYKYVKERVDEVDNTNFTYSYTVIEGDVLGDKLEKVCHELKIVAAPGGGSILKISSK
FHAKGDHEINAEEMKGAKEMAEKLLRAVETYLLAHSAEYN
>CAA50328.1 Allergen Cor a 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Corylus avellana]
MGVFNYEVETPSVIPAARLFKSYVLDGDKLIPKVAPQAITSVENVEGNGGPGTIKNITFG
EGSRYKYVKERVDEVDNTNFKYSYTVIEGDVLGDKLEKVCSELKIVAAPGGGSILKISSK
FHAKGDHEINAEEMKGAKEMAEKLLRAVETYLLAHSAEYN
>CAA23681.1 Allergen Ovalbumin-like protein [Gallus gallus]
MGSIAAASMEFCFDVFKELKVHHANENIFYCPIAIMSALAMVYLGAKDSTRTQINKVVRF
DKLPGFGDSIEAQCGTSVNVHSSLRDILNQITKPNDVYSFSLASRLYAEERYPILPEYFQ
CVKELYRGGLEPINFQTAADQARELINSWVESQTN
>CAA23711.1 Allergen Gal d 4; lysozyme [Gallus gallus]
MRSLLILVLCFLPLAALGKVFGRCELAAAMKRHGLDNYRGYSLGNWVCVAKFESNFNTQA
TNRNTDGSTDYGILQINSRWWCNDGRTPGSRNLCNIPCSALLSSDITASVNCAKKIVSDG
NGMSAWVAWRNRCKGTDVQAWIRGCRL
>CAA43098.1 Allergen Gal d 5; serum albumin [Gallus gallus]
MKWVTLISFIFLFSSATSRNLQRFARDAEHKSEIAHRYNDLKEETFKAVAMITFAQYLQR
CSYEGLSKLVKDVVDLAQKCVANEDAPECSKPLPSIILDEICQVEKLRDSYGAMADCCSK
ADPERNECFLSFKVSQPDFVQPYQRPASDVICQEYQDNRVSFLGHFIYSVARRHPFLYAP
AILSFAVDFEHALQSCCKESDVGACLDTKEIVMREKAKGVSVKQQYFCGILKQFGDRVFQ
ARQLIYLSQKYPKAPFSEVSKFVHDSIGVHKECCEGDMVECMDDMARMMSNLCSQQDVFS
GKIKDCCEKPIVERSQCIMEAEFDEKPADLPSLVEKYIEDKEVCKSFEAGHDAFMAEFVY
EYSRRHPEFSIQLIMRIAKGYESLLEKCCKTDNPAECYANAQEQLNQHIKETQDVVKTNC
DLLHDHGEADFLKSILIRYTKKMPQVPTDLLLETGKKMTTIGTKCCQLGEDRRMACSEGY
LSIVIHDTCRKQETTPINDNVSQCCSQLYANRRPCFTAMGVDTKYVPPPFNPDMFSFDEK
LCSAPAEEREVGQMKLLINLIKRKPQMTEEQIKTIADGFTAMVDKCCKQSDINTCFGEEG
ANLIVQSRATLGIGA
>P23110.1 Putative Albumin-8 precursor (Methionine-rich 2S protein) (SFA8) [Helianthus annuus]
MARFSIVFAAAGVLLLVAMAPVSEASTTTIITTIIEENPYGRGRTESGCYQQMEEAEMLN
HCGMYLMKNLGERSQVSPRMREEDHKQLCCMQLKNLDEKCMCPAIMMMLNEPMWIRMRDQ
VMSMAHNLPIECNLMSQPCQM
>P04403.2 Allergen Ber e 1; 2S albumin, conglutin [Bertholletia excelsa]
MAKISVAAAALLVLMALGHATAFRATVTTTVVEEENQEECREQMQRQQMLSHCRMYMRQQ
MEESPYQTMPRRGMEPHMSECCEQLEGMDESCRCEGLRMMMMRMQQEEMQPRGEQMRRMM
RLAENIPSRCNLSPMRCPMGGSIAGF
>P27759.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLLQPVRSAEDLQEILPVNETRRLTTSGAYNIIDGCWRGKADW
AENRKALADCAQGFGKGTVGGKDGDIYTVTSELDDDVANPKEGTLRFGAAQNRPLWIIFE
RDMVIRLDKEMVVNSDKTIDGRGAKVEIINAGFTLNGVKNVIIHNINMHDVKVNPGGLIK
SNDGPAAPRAGSDGDAISISGSSQIWIDHCSLSKSVDGLVDAKLGTTRLTVSNSLFTQHQ
FVLLFGAGDENIEDRGMLATVAFNTFTDNVDQRMPRCRHGFFQVVNNNYDKWGSYAIGGS
ASPTILSQGNRFCAPDERSKKNVLGRHGEAAAESMKWNWRTNKDVLENGAIFVASGVDPV
LTPEQSAGMIPAEPGESALSLTSSAGVLSCQPGAPC
>P27760.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLLQPVRSAEDVEEFLPSANETRRSLKACEAHNIIDKCWRCKA
DWANNRQALADCAQGFAKGTYGGKHGDVYTVTSDKDDDVANPKEGTLRFAAAQNRPLWII
FKRNMVIHLNQELVVNSDKTIDGRGVKVNIVNAGLTLMNVKNIIIHNINIHDIKVCPGGM

IKSNDGPPILRQQSDGDAINVAGSSQIWIDHCSLSKASDGLLDITLGSSHVTVSNCKFTQ
HQFVLLLGADDTHYQDKGMLATVAFNMFTDHVDQRMPRCRFGFFQVVNNNYDRWGTYAIG
GSSAPTILSQGNRFFAPDDIIKKNVLARTGTGNAESMSWNWRTDRDLLENGAIFLPSGSD
PVLTPEQKAGMIPAEPGEAVLRLTSSAGVLSCHQGAPC
>P27761.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEALNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNINIHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQIKKNVLARTGTGAAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVFSCHPGAPC
>P28744.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLLQPVRSAEDLQQILPSANETRSLTTCGTYNIIDGCWRGKAD
WAENRKALADCAQGFAKGTIGGKDGDIYTVTSELDDDVANPKEGTLRFGAAQNRPLWIIF
ARDMVIRLDRELAINNDKTIDGRGAKVEIINAGFAIYNVKNIIIHNIIMHDIVVNPGGLI
KSHDGPPVPRKGSDGDAIGISGGSQIWIDHCSLSKAVDGLIDAKHGSTHFTVSNCLFTQH
QYLLLFWDFDERGMLCTVAFNKFTDNVDQRMPNLRHGFVQVVNNNYERWGSYALGGSAGP
TILSQGNRFLASDIKKEVVGRYGESAMSESINWNWRSYMDVFENGAIFVPSGVDPVLTPE
QNAGMIPAEPGEAVLRLTSSAGVLSCQPGAPC
>P27762.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLVQAGRLGEEVDILPSPNDTRRSLQGCEAHNIIDKCWRCKPD
WAENRQALGNCAQGFGKATHGGKWGDIYMVTSDQDDDVVNPKEGTLRFGATQDRPLWIIF
QRDMIIYLQQEMVVTSDKTIDGRGAKVELVYGGITLMNVKNVIIHNIDIHDVRVLPGGRI
KSNGGPAIPRHQSDGDAIHVTGSSDIWIDHCTLSKSFDGLVDVNWGSTGVTISNCKFTHH
EKAVLLGASDTHFQDLKMHVTLAYNIFTNTVHERMPRCRFGFFQIVNNFYDRWDKYAIGG
SSNPTILSQGNKFVAPDFIYKKNVCLRTGAQEPEWMTWNWRTQNDVLENGAIFVASGSDP
VLTAEQNAGMMQAEPGDMVPQLTMNAGVLTCSPGAPC
>P22284.1 Putative Pollen allergen KBG 31 precursor (Pollen allergen Poa
p 9) (Poa p IX) [Poa pratensis]
MDKANGAYKTALKAASAVAPAEKFPVFQATFDKNLKEGLSGPDAVGFAKKLDAFIQTSYL
STKAAEPKEKFDLFVLSLTEVLRFMAGAVKAPPASKFPAKPAPKVAAYTPAAPAGAAPKA
TTDEQKLIEKINVGFKAAVAAAAGVPAASKYKTFVATFGAASNKAFAEALSTEPKGAAVA
SSKAVLTSKLDAAYKLAYKSAEGATPEAKYDAYVATLSEALRIIAGTLEVHGVKPAAEEV
KAIPAGELQVIDKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYQSYKFIP
ALEAAVKQSYAATVATAPAVKYTVFETALKKAITAMSQAQKAAKPAAAVTGTATSAVGAA
TGAATAAAGGYKV
>P22285.1 Putative Pollen allergen KBG 41 precursor (Pollen allergen Poa
p 9) (Poa p IX) [Poa pratensis]
MAVHQYTVALFLAVALVAGPAASYAADVGYGAPATLATPATPAAPAAGYTPAAPAGAAPK
ATTDEQKLIEKINAGFKAAVAAAAGVPAVDKYKTFVATFGTASNKAFAEALSTEPKGAAA
ASSNAVLTSKLDAAYKLAYKSAEGATPEAKYDAYVATLSEALRIIAGTLEVHAVKPAGEE
VKAIPAGELQVIDKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYQSYKFI
PALEAAVKQSYAATVATAPAVKYTVFETALKKAITAMSQAQKAAKPAAAVTATATGAVGA
ATGAVGAATGAATAAAGGYKTGAATPTAGGYKV
>P22286.1 Putative Pollen allergen KBG 60 precursor (Pollen allergen Poa
p 9) (Poa p IX) [Poa pratensis]
MAVQKYTVALFLVALVVGPAASYAADLSYGAPATPAAPAAGYTPAAPAGAAPKATTDEQK
MIEKINVGFKAAVAAAGGVPAANKYKTFVATFGAASNKAFAEALSTEPKGAAVDSSKAAL
TSKLDAAYKLAYKSAEGATPEAKYDDYVATLSEALRIIAGTLEVHGVKPAAEEVKATPAG
ELQVIDKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYQSYKFIPALEAAV
KQSYAATVATAPAVKYTVFETALKKAITAMSQAQKAAKPAAAATGTATAAVGAATGAATA
AAGGYKV

>P02878.1 Allergen Amb a 5; unknown function [Ambrosia artemisiifolia var. elatior]
LVPCAWAGNVCGEKRAYCCSDPGRYCPWQVVCYESSEICSKKCGK
>P10414.2 Allergen Amb t 5; unknown function [Ambrosia trifida]
MKNIFMLTLFILIITSTIKAIGSTNEVDEIKQEDDGLCYEGTNCGKVGKYCCSPIGKYCV
CYDSKAICNKNCT
>P20723.1 Putative RecName: Full=Enterotoxin type D; AltName: Full=SED; Flags: Precursor [Staphylococcus aureus]
MKKFNILIALLFFTSLVISPLNVKANENIDSVKEKELHKKSELSSTALNNMKHSYADKNP
IIGENKSTGDQFLENTLLYKKFFTDLINFEDLLINFNSKEMAQHFKSKNVDVYPIRYSIN
CYGGEIDRTACTYGGVTPHEGNKLKERKKIPINLWINGVQKEVSLDKVQTDKKNVTVQEL
DAQARRYLQKDLKLYNNDTLGGKIQRGKIEFDSSDGSKVSYDLFDVKGDFPEKQLRIYSD
NKTLSTEHLHIDIYLYEK
>P02229.2 Allergen Chi t 1; hemoglobin CTT-III precursor [Chironomus thummi thummi]
MKFLILALCFAAASALSADQISTVQASFDKVKGDPVGILYAVFKADPSIMAKFTQFAGKD
LESIKGTAPFEIHANRIVGFFSKIIGELPNIEADVNTFVASHKPRGVTHDQLNNFRAGFV
SYMKAHTDFAGAEAAWGATLDTFFGMIFSKM
>P02230.1 Allergen Chi t 1; hemoglobin CTT-IV [Chironomus thummi thummi]
MKLLILALCFAAASALTADQISTVQSSFAGVKGDAVGILYAVFKADPSIQAKFTQFAGKD
LDSIKGSADFSAHANKIVGFFSKIIGDLPNIDGDVTTFVASHTPRGVTHDQLNNFRAGFV
SYMKAHTDFAGAEAAWGATLDAFFGMVFAKM
>P02227.1 Allergen Chi t 3; hemoglobin CTT-VIII [Chironomus thummi thummi]
AVTPMSADQLALFKSSWNTVKHNEVDILYAVFKANPDIQAKFPQFAGKDLDSIKDSADFA
VHSGRIVGFFSEVIGLIGNPENRPALKTLIDGLASSHKARGIEKAQFEEFRASLVDYLSH
HLDWNDTMKSTWDLALNNMFFYILHALEVAQ
>P12548.1 Allergen Chi t 3; hemoglobin CTT VII B3 [Chironomus thummi thummi]
MKFFAVLALCIVGAIASPLTADEASLVQSSWKAVSHNEVDILAAVFAAYPDIQAKFPQFA
GKDLASIKDTGAFATHATRIVSFLSEVIALSGNESNASAVNSLVSKLGDDHKARGVSAAQ
FGEFRTALVAYLSNHVSWGDNVAAAWNKALDNTYAIVVPRL
>P12549.1 Allergen Chi t 3; hemoglobin CTT VII B6 [Chironomus thummi thummi]
MKFFAVLALCIVGAIASPLTADEASLVQSSWKAVSHNEVEILAAVFAAYPDIQNKFSQFA
GKDLASIKDTGAFATHATRIVSFLSEVIALSGNDSNAAAVNSLVSKLGDDHKARGVSAAQ
FGEFRTALVAYLQANVSWGDNVAAAWNKALDNTFAIVVPRL
>P12550.1 Allergen Chi t 3; hemoglobin CTT VII 7B7 [Chironomus thummi thummi]
MKFFAVLALCVVGAIASPLSADEAAIVKSSWDQVKHNEVDILAAVFAAYPDIQAKFPQFA
GKDLASIKDTAAFATHATRIVSFFTEVISLSGNQANLSAVYALVSKLGVDHKARGISAAQ
FGEFRTALVSYLQAHVSWGDNVAAAWNHALDNTYAVALKSLE
>P02231.1 Allergen Chi t 4; hemoglobin CTT IIIA [Chironomus thummi thummi]
VATPAMPSMTDAQVAAVKGDWEKIKGSGVEILYFFLNKFPGNFPMFKKLGNDLAAAKGTA
EFKDQADKIIAFLQGVIEKLGSDMGGAKALLNQLGTSHKAMGITKDQFDQFRQALTELLG
NLGFGGNIGAWNATVDLMFHVIFNALDGTPV
>P02228.1 Allergen Chi t 9; hemoglobin CTT X [Chironomus thummi thummi]
DPEWHTLDAHEVEQVQATWKAVSHDEVEILYTVFKAHPDIMAKFPKFAGKDLEAIKDTAD
FAVHASRIIGFFGEYVTLLGSSGNQAAIRTLLHDLGVFHKTRGITKAQFGEFRETMTAYL
KGHNKWNADISHSWDDAFDKAFSVIFEVLES
>P25974.1 Allergen Gly m 5; beta conglycinin/ 7S globulin [Glycine max]
MMRVRFPLLVLLGTVFLASVCVSLKVREDENNPFYFRSSNSFQTLFENQNVRIRLLQRFN
KRSPQLENLRDYRIVQFQSKPNTILLPHHADADFLLFVLSGRAILTLVNNDDRDSYNLHP

GDAQRIPAGTTYYLVNPHDHQNLKIIKLAIPVNKPGRYDDFFLSSTQAQQSYLQGFSHNI
LETSFHSEFEEINRVLFGEEEEQRQQEGVIVELSKEQIRQLSRRAKSSSRKTISSEDEPF
NLRSRNPIYSNNFGKFFEITPEKNPQLRDLDIFLSSVDINEGALLLPHFNSKAIVILVIN
EGDANIELVGIKEQQQKQKQEEEPLEVQRYRAELSEDDVFVIPAAYPFVVNATSNLNFLA
FGINAENNQRNFLAGEKDNVVRQIERQVQELAFPGSAQDVERLLKKQRESYFVDAQPQQK
EEGSKGRKGPFPSILGALY
>P24337.1 Allergen Gly m 1; lipid transfer protein (LTP) type 1 [Glycine max]
ALITRPSCPDLSICLNILGGSLGTVDDCCALIGGLGDIEAIVCLCIQLRALGILNLNRNL
QLILNSCGRSYPSNATCPRT
>P16348.1 Allergen Sola t 2; aspartic protease inhibitor [Solanum tuberosum]
ESPLPKPVLDTNGKELNPNSSYRIISIGRGALGGDVYLGKSPNSDAPCPDGVFRYNSDVG
PSGTPVRFIPLSGGIFEDQLLNIQFNIATVKLCVSYTIWKVGNLNAYFRTMLLETGGTIG
QADSSYFKIVKLSNFGYNLLYCPITPPFLCPFCRDDNFCAKVGVVIQNGKRRLALVNENP
LDVLFQEV
>P01005.1 Allergen Gal d 1; ovomucoid [Gallus gallus]
MAMAGVFVLFSFVLCGFLPDAAFGAEVDCSRFPNATDKEGKDVLVCNKDLRPICGTDGVT
YTNDCLLCAYSIEFGTNISKEHDGECKETVPMNCSSYANTTSEDGKVMVLCNRAFNPVCG
TDGVTYDNECLLCAHKVEQGASVDKRHDGGCRKELAAVSVDCSEYPKPDCTAEDRPLCGS
DNKTYGNKCNFCNAVVESNGTLTLSHFGKC
>P02754.3 Allergen Bos d 5; beta-lactoglobulin [Bos taurus]
MKCLLLALALTCGAQALIVTQTMKGLDIQKVAGTWYSLAMAASDISLLDAQSAPLRVYVE
ELKPTPEGDLEILLQKWENGECAQKKIIAEKTKIPAVFKIDALNENKVLVLDTDYKKYLL
FCMENSAEPEQSLACQCLVRTPEVDDEALEKFDKALKALPMHIRLSFNPTQLEEQCHI
>P14946.2 Allergen Lol p 1; beta-expansin [Lolium perenne]
MASSSSVLLVVALFAVFLGSAHGIAKVPPGPNITAEYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKNVDKAPFNGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEAVTVTITDDNE
EPIAPYHFDLSGHAFGSMAKKGEEQNVRSAGELELQFRRVKCKYPDDTKPTFHVEKASNP
NYLAILVKYVDGDGDVVAVDIKEKGKDKWIELKESWGAVWRIDTPDKLTGPFTVRYTTEG
GTKSEFEDVIPEGWKADTSYSAK
>P14947.1 Allergen Lol p 2; expansin [Lolium perenne]
AAPVEFTVEKGSDEKNLALSIKYNKEGDSMAEVELKEHGSNEWLALKKNGDGVWEIKSDK
PLKGPFNFRFVSEKGMRNVFDDVVPADFKVGTTYKPE
>P14948.1 Allergen Lol p 3; expansin [Lolium perenne]
TKVDLTVEKGSDAKTLVLNIKYTRPGDTLAEVELRQHGSEEWEPMTKKGNLWEVKSAKPL
TGPMNFRFLSKGGMKNVFDEVIPTAFTVGKTYTPEYN
>P00698.1 Allergen Gal d 4; lysozyme [Gallus gallus]
MRSLLILVLCFLPLAALGKVFGRCELAAAMKRHGLDNYRGYSLGNWVCAAKFESNFNTQA
TNRNTDGSTDYGILQINSRWWCNDGRTPGSRNLCNIPCSALLSSDITASVNCAKKIVSDG
NGMNAWVAWRNRCKGTDVQAWIRGCRL
>P01502.1 Putative Melittin [Apis dorsata]
GIGAILKVLSTGLPALISWIKRKRQE
>P16312.1 Allergen Der m 1; cysteine protease / partial [Dermatophagoides microceras]
TQACRINSGNVPSELDLRSLRTVTPIRMQG
>P02761.1 Allergen Rat n 1; lipocalin, major urinary protein [Rattus norvegicus]
MKLLLLLLCLGLTLVCGHAEEASSTRGNLDVAKLNGDWFSIVVASNKREKIEENGSMRVF
MQHIDVLENSLGFKFRIKENGECRELYLVAYKTPEDGEYFVEYDGGNTFTILKTDYDRYV
MFHLINFKNGETFQLMVLYGRTKDLSSDIKEKFAKLCEAHGITRDNIIDLTKTDRCLQAR
G
>P12547.2 Allergen Asp o 13; alkaline serine protease [Aspergillus oryzae]

MQSIKRTLLLLGAILPAVLGAPVQETRRAAEKLPGKYIVTFKPGIDEAKIQEHTTWATNI
HQRSLERRGATGGDLPVGIERNYKINKFAAYAGSFDDATIEEIRKNEDVAYVEEDQIYYL
DGLTTQKSAPWGLGSISHKGQQSTDYIYDTSAGEGTYAYVVDSGVNVDHEEFEGRASKAY
NAAGGQHVDSIGHGTHVSGTIAGKTYGIAKKASILSVKVFQGESSSTSVILDGFNWAAND
IVSKKRTSKAAINMSLGGGYSKAFNDAVENAFEQGVLSVVAAGNENSDAGQTSPASAPDA
ITVAAIQKSNNRASFSNFGKVVDVFAPGQDILSAWIGSSSATNTISGTSMATPHIVGLSL
YLAALENLDGPAAVTKRIKELATKDVVKDVKGSPNLLAYNGNA
>P01012.2 Allergen Gal d 2; ovalbumin [Gallus gallus]
MGSIGAASMEFCFDVFKELKVHHANENIFYCPIAIMSALAMVYLGAKDSTRTQINKVVRF
DKLPGFGDSIEAQCGTSVNVHSSLRDILNQITKPNDVYSFSLASRLYAEERYPILPEYLQ
CVKELYRGGLEPINFQTAADQARELINSWVESQTNGIIRNVLQPSSVDSQTAMVLVNAIV
FKGLWEKAFKDEDTQAMPFRVTEQESKPVQMMYQIGLFRVASMASEKMKILELPFASGTM
SMLVLLPDEVSGLEQLESIINFEKLTEWTSSNVMEERKIKVYLPRMKMEEKYNLTSVLMA
MGITDVFSSSANLSGISSAESLKISQAVHAAHAEINEAGREVVGSAEAGVDAASVSEEFR
ADHPFLFCIKHIATNAVLFFGRCVSP
>P22895.1 Putative P34 probable thiol protease precursor [Glycine max]
MGFLVLLLFSLLGLSSSSSISTHRSILDLDLTKFTTQKQVSSLFQLWKSEHGRVYHNHEE
EAKRLEIFKNNSNYIRDMNANRKSPHSHRLGLNKFADITPQEFSKKYLQAPKDVSQQIKM
ANKKMKKEQYSCDHPPASWDWRKKGVITQVKYQGGCGRGWAFSATGAIEAAHAIATGDLV
SLSEQELVDCVEESEGSYNGWQYQSFEWVLEHGGIATDDDYPYRAKEGRCKANKIQDKVT
IDGYETLIMSDESTESETEQAFLSAILEQPISVSIDAKDFHLYTGGIYDGENCTSPYGIN
HFVLLVGYGSADGVDYWIAKNSWGFDWGEDGYIWIQRNTGNLLGVCGMNYFASYPTKEES
ETLVSARVKGHRRVDHSPL
>P00784.1 Allergen Papain precursor (Papaya proteinase I) (PPI) (Allergen
Car p 1) [Carica papaya]
MAMIPSISKLLFVAICLFVYMGLSFGDFSIVGYSQNDLTSTERLIQLFESWMLKHNKIYK
NIDEKIYRFEIFKDNLKYIDETNKKNNSYWLGLNVFADMSNDEFKEKYTGSIAGNYTTTE
LSYEEVLNDGDVNIPEYVDWRQKGAVTPVKNQGSCGSCWAFSAVVTIEGIIKIRTGNLNE
YSEQELLDCDRRSYGCNGGYPWSALQLVAQYGIHYRNTYPYEGVQRYCRSREKGPYAAKT
DGVRQVQPYNEGALLYSIANQPVSVVLEAAGKDFQLYRGGIFVGPCGNKVDHAVAAVGYG
PNYILIKNSWGTGWGENGYIRIKRGTGNSYGVCGLYTSSFYPVKN
>P02622.1 Allergen Gad c 1; parvalbumin [Gadus callarias]
AFKGILSNADIKAAEAACFKEGSFDEDGFYAKVGLDAFSADELKKLFKIADEDKEGFIEE
DELKLFLIAFAADLRALTDAETKAFLKAGDSDGDGKIGVDEFGALVDKWGAKG
>P02620.1 Putative RecName: Full=Parvalbumin beta [Merluccius merluccius]
AFAGILADADITAALAACKAEGSFKHGEFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVEEFAAMVKG
>P05946.1 Allergen Pon l 4; sarcoplasmic calcium-binding protein
[Pontastacus leptodactylus]
AYSWDNRVKYVVRYMYDIDNNGFLDKNDFECLALRNTLIEGRGEFNEAAYANNQKIMSNL
WNEIAELADFNKDGEVTIDEFKKAVQNVCVGKAFATFPAAFKVFIANQFKTVDVNGDGLV
GVDEYRLDCISRSAFANIKEIDDAYNKLATDADKKAGGISLARYQELYAQFISNPDESAN
AVYLFGPLKEVQ
>P00780.1 Allergen RecName: Full=Subtilisin Carlsberg; Flags: Precursor
[Bacillus licheniformis]
MMRKKSFWLGMLTAFMLVFTMAFSDSASAAQPAKNVEKDYIVGFKSGVKTASVKKDIIKE
SGGKVDKQFRIINAAKAKLDKEALKEVKNDPDVAYVEEDHVAHALAQTVPYGIPLIKADK
VQAQGFKGANVKVAVLDTGIQASHPDLNVVGGASFVAGEAYNTDGNGHGTHVAGTVAALD
NTTGVLGVAPSVSLYAVKVLNSSGSGTYSGIVSGIEWATTNGMDVINMSLGGPSGSTAMK
QAVDNAYARGVVVVAAAGNSGSSGNTNTIGYPAKYDSVIAVGAVDSNSNRASFSSVGAEL
EVMAPGAGVYSTYPTSTYATLNGTSMASPHVAGAAALILSKHPNLSASQVRNRLSSTATY
LGSSFYYGKGLINVEAAAQ
>P27357.1 Putative RecName: Full=Thaumatin-like protein PWIR2; Flags:
Precursor [Triticum aestivum]

MATSPVLFLLLAVFAAGASAATFNIKNNCGFTIWPAGIPVGGGFALGSGQTSSINVPAGT
QAGRIWARTGCSFNGGSGSCQTGDCGGQLSCSLSGRPPATLAEYTIGGGSTQDFYDISVI
DGFNLAMDFSCSTGDALQCRDPSCPPPQAYQHPNDVATHACSGNNNYQITFCP
>P06886.1 Allergen RecName: Full=Toxic shock syndrome toxin-1;
Short=TSST-1; Flags: Precursor [Staphylococcus aureus]
MNKKLLMNFFIVSPLLLATTATDFTPVPLSSNQIIKTAKASTNDNIKDLLDWYSSGSDTF
TNSEVLDNSLGSMRIKNTDGSISLIIFPSPYYSPAFTKGEKVDLNTKRTKKSQHTSEGTY
IHFQISGVTNTEKLPTPIELPLKVKVHGKDSPLKYGPKFDKKQLAISTLDFEIRHQLTQI
HGLYRSSDKTGGYWKITMNDGSTYQSDLSKKFEYNTEKPPINIDEIKTIEAEIN
>AAA28301.1 Allergen Dol m 5; unknown function, antigen 5 [Dolichovespula
maculata]
MEIGGLVYLILIITIINLSFGETNNYCKIKCRKGIHTLCKFGTSMKPNCGRNVVKAYGLT
NDEKNEILKRHNDFRQNVAKGLETRGKPGPQPPAKNMNVLVWNDELAKIAQTWANQCDFN
HDDCRNTAKYQVGQNIAISSTTATQFDRPSKLIKQWEDEVTEFNYKVGLQNSNFRKVGHY
TQMVWGKTKEIGCGSIKYIEDNWYTHYLVCNYGPGGNDFNQPIYERK
>AAA28303.1 Allergen Dol a 5; unknown/antigen 5 [Dolichovespula arenaria]
NNYCKICPKGTHTLCKYGTSMKPNCGGKIVKSYGVTNDEKNEIVKRHNEFRQKVAQGLET
RGNPGPQPPAKNMNLLVWNDELAKIAQTWANQCNFGHDQCRNTAKYPVGQNVAIASTTGN
SYQTMSYLIKMWEDEVKDYNPHKDLMHNNFSKVGHYTQMVWGKTKEIGCGSVKYIENKWH
THYLVCNYGPAGNYMNQPVYERK
>AAA29793.1 Allergen Pol a 5; unknown function, antigen 5 [Polistes
annularis]
SSQGVDYCKIKCPSGIHTVCQYGESTKPSKNCAGKVIKSVGPTEEEKKLIVSEHNRFRQK
VAQGLETRGNPGPQPAASDMNDLVWNDELAHIAQVWASQCQFLVHDKCRNTAKYPVGQNI
AYAGGSNLPDVVSLIKLWENEVKDFNYNTGITKQNFAKIGHYTQMVWGKTKEIGCGSLKY
MENNMQNHYLICNYGPAGNYLGQLPYTKK
>AAA30333.1 Allergen Ves v 5; unknown function, antigen 5 [Vespula
vulgaris]
MEISGLVYLIIIVTIIDLPYGKANNYCKIKCLKGGVHTACKYGSLKPNCGNKVVVSYGLT
KQEKQDILKEHNDFRQKIARGLETRGNPGPQPPAKNMKNLVWNDELAYVAQVWANQCQYG
HDTCRDVAKYQVGQNVALTGSTAAKYDDPVKLVKMWEDEVKDYNPKKKFSGNDFLKTGHY
TQMVWANTKEVGCGSIKYIQEKWHKHYLVCNYGPSGNFMNEELYQTK
>AAA51411.1 Allergen Bos d 6; serum albumin [Bos taurus]
MKWVTFISLLLLFSSAYSRGVFRRDTHKSEIAHRFKDLGEEHFKGLVLIAFSQYLQQCPF
DEHVKLVNELTEFAKTCVADESHAGCEKSLHTLFGDELCKVASLRETYGDMADCCEKQEP
ERNECFLSHKDDSPDLPKLKPDPNTLCDEFKADEKKFWGKYLYEIARRHPYFYAPELLYY
ANKYNGVFQECCQAEDKGACLLPKIETMREKVLASSARQRLRCASIQKFGERALKAWSVA
RLSQKFPKAEFVEVTKLVTDLTKVHKECCHGDLLECADDRADLAKYICDNQDTISSKLKE
CCDKPLLEKSHCIAEVEKDAIPENLPPLTADFAEDKDVCKNYQEAKDAFLGSFLYEYSRR
HPEYAVSVLLRLAKEYEATLEECCAKDDPHACYSTVFDKLKHLVDEPQNLIKQNCDQFEK
LGEYGFQNALIVRYTRKVPQVSTPTLVEVSRSLGKVGTRCCTKPESERMPCTEDYLSLIL
NRLCVLHEKTPVSEKVTKCCTESLVNRRPCFSALTPDETYVPKAFDEKLFTFHADICTLP
DTEKQIKKQTALVELLKHKPKATEEQLKTVMENFVAFVDKCCAADDKEACFAVEGPKLVV
STQTALA
>AAA62707.1 Allergen alpha-s1-casein [Bos taurus]
PQLEIVPNSAEERLHSMKEGIHAQQKEPMIGVNQELAYFYPELFRQFYQLDAYPSGAWYY
VPLGTQYTDAPSFSDIPNPIGLENSEKTTMPLW
>AAA30413.1 Allergen beta-lactoglobulin [Bos taurus]
NSAEPXQSLVCECL
>AAA30429.1 Allergen alpha-S1-casein [Bos taurus]
MKLLILTCLVAVALARPKHPIKHQGLPQEVLNENLLRFFVALFPEVFGKEKVNELSKDIG
SESTEDQAMEDIKQMEAESISSSEEIVPNSVEQKHIQKEDVPSERYLGYLEQLLRLKKYK
VPQLEIVPNSAEERLHSMKEGIDAQQKEPMIGVNQELAYFYPELFRQFYQLDAYPSGAWY
YVPLGTQYTDAPSFSDIPNPIGSENSEKTTISLW

>AAA30430.1 Allergen beta-casein precursor [Bos taurus]
MKVLILACLVALALARELEELNVPGEIVESLSSSEESITRINKKIEKFQSEEQQQTEDEL
QDKIHPFAQTQSLVYPFPGPIPNSLPQNIPPLTQTPVVVPPFLQPEVLGVSKVKEAMAPK
HKEMPFPKYPVEPFTESQSLTLTDVENLHLPPLLLQSWMHQPHQPLPPTVMFPPQSVLSL
SQSKVLPVPQKAVPYPQRDMPIQAFLLYQQPVLGPVRGPFPIIV
>AAA30431.1 Allergen Bos d 11; beta casein [Bos taurus]
MKVLILACLVALALARELEELNVPGEIVESLSSSEESITRINKKIEKFQSEEQQQTEDEL
QDKIHPFAQTQSLVYPFPGPIHNSLPQNIPPLTQTPVVVPPFLQPEVMGVSKVKEAMAPK
HKEMPFPKYPVEPFTESQSLTLTDVENLHLPLPLLQSWMHQPHQPLPPTVMFPPQSVLSL
SQSKVLPVPQKAVPYPQRDMPIQAFLLYQEPVLGPVRGPFPIIV
>AAA30433.1 Allergen kappa-casein precursor [Bos taurus]
MMKSFFLVVTILALTLPFLGAQEQNQEQPIRCEKDERFFSDKIAKYIPIQYVLSRYPSYG
LNYYQQKPVALINNQFLPYPYYAKPAAVRSPAQILQWQVLSNTVPAKSCQAQPTTMARHP
HPHLSFMAIPPKKNQDKTEIPTINTIASGEPTSTPTIEAVESTVATLEASPEVTESPPEI
NTVQVTSTAV
>AAA30478.1 Allergen alpha-s1-casein [Bos taurus]
LSKDIGSESTEDQAMEDIKQMEAESISSSEEIVPNSVEQKQIQKEDVPSERYLGYLEQLL
RLKKYKVPQLEIVPNS
>AAA30615.1 Allergen Bos d 4; alpha-lactalbumin [Bos taurus]
MMSFVSLLLVGILFHATQAEQLTKCEVFRELKDLKGYGGVSLPEWVCTTFHTSGYDTQAI
VQNNDSTEYGLFQINNKIWCKDDQNPHSSNICNISCDKFLDDDLTDDIMCVKKILDKVGI
NYWLAHKALCSEKLDQWLCEKL
>AAC41616.1 Allergen Fel d 1; uteroglobin [Felis catus]
MRGALLVLALLVTQALGVKMAETCPIFYDVFFAVANGNELLLDLSLTKVNATEPERTAMK
KIQDCYVENGLISRVLDGLVMTTISSSKDCMGEAVQNTVEDLKLNTLGR
>AAC37318.1 Allergen Fel d 1; uteroglobin [Felis catus]
MKGARVLVLLWAALLLIWGGNCEICPAVKRDVDLFLTGTPDEYVEQVAQYKALPVVLENA
RILKNCVDAKMTEEDKENALSLLDKIYTSPLC
>AAA32629.1 Allergen actinidin [Actinidia deliciosa]
MGLPKSFVSMSLLFFSTLLILSLAFNAKNLTQRTNDEVKAMYESWLIKYGKSYNSLGEWE
RRFEIFKETLRFIDEHNADTNRSYKVGLNQFADLTDEEFRSTYLGFTSGSNKTKVSNRYE
PRVGQVLPSYVDWRSAGAVVDIKSQGECGGCWAFSAIATVEGINKIVTGVLISLSEQELI
DCGRTQNTRGCNGGYITDGFQFIINNGGINTEENYPYTAQDGECNVELQNEKYVTIDTYE
NVPYNNEWALQTAVTYQPVSVALDAAGDAFKQYSSGIFTGPCGTAIDHAVTIVGYGTEGG
IDYWIVKNSWDTTWGEEGYMRILRNVGGAGTCGIATMPSYPVKYNNQNYPEPYSSLINPP
AFSMSKDGPVGVEDGQRYSA
>AAA32669.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEALNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNINIHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQIKKNVLARTGTGAAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVFSCRPGAPC
>AAA32708.1 Allergen Asp o 21; TAKA-amylase A [Aspergillus oryzae]
MMVAWWSLFLYGLQVAAPALAATPADWRSQSIYFLLTDRFARTDGSTTATCNTADQKYCG
GTWQGIIDKLDYIQGMGFTAIWITPVTAQLPQTTAYGDAYHGYWQQDIYSLNENYGTADD
LKALSSALHERGMYLMVDVVANHMGYDGAGSSVDYSVFKPFSSQDYFHPFCLIQNYEDQT
QVEDCWLGDNTVSLPDLDTTKDVVKNEWYDWVGSLVSNYSIDGLRIDTVKHVQKDFWPGY
NKAAGVYCIGEVLDGDPAYTCPYQNVMDGVLNYPIYYPLLNAFKSTSGSMHDLYNMINTV
KSDCPDSTLLGTFVENHDNPRFASYTNDIALAKNVAAFIILNDGIPIIYAGQEQHYAGGN
DPANREATWASGYPTDSELYKLIASANAIRNYAISKDTGFVTYKNWPIYKDDTTIAMRKG
TDGSQIVTILSNKGASGDSYTLSLSGAGYTAGQQLTEVIGCTTVTVGSDGNVPVPMAGGL
PRVLYPTEKLAGSKICSSS

>AAA16522.1 Allergen Bet v 2; profilin [Betula pendula]
MSWQTYVDEHLMCDIDGQASNSLASAIVGHDGSVWAQSSSFPQFKPQEITGIMKDFEEPG
HLAPTGLHLGGIKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLIDQGL
>AAA32970.1 Putative amylase/protease inhibitor [Hordeum vulgare]
MARAQVLLMAAALVLMLTAAPRAAVALNCGQVDSKMKPCLTYVQGGPGPSGECCNGVRDL
HNQAQSSGDRQTVCNCLKGIARGIHNLNLNNAASIPSKCNVNVPYTISPDIDCSRIY
>AAA63278.1 Allergen Lol p 1; beta expansin [Lolium perenne]
ALFAVFLGSAHGIAKVPPGPNITAEYGDKWLDAKSTWYGKPTGAGPKDNGGACGYKDVDK
APFNGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEAVTVTITDDNEEPIAPYHFDLS
GHAFGSMAKKGEEQNVRSAGELELQFRRVKCKYPDDTKPTFHVEKGSNPNYLAILVKYVD
GDGDVVAVDIKEKGKDKWIELKESWGAVWRIDTPDKLTGPFTVRYTTEGGTKSEVEDVIP
EGWKADTSYSAK
>AAA63279.1 Allergen Lol p 1; beta expansin [Lolium perenne]
MASSSSVLLVVALFAVFLGSAHGIAKVPPGPNITAEYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKNVDKAPFNGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEAVTVTITDDNE
EPIAPYHFDLSGHAFGSMAKKGEEQNVRSAGELELQFRRVKCKYPDDTKPTFHVEKASNP
NYLAILVKYVDGDGDVVAVDIKEKGKDKWTELKESWGAVWRIDTPDKLTGPFTVRYTTEG
GTKSEFEDVIPEGWKADTSYSAK
>AAA33493.1 Allergen Zea m 14; lipid transfer protein (LTP) type 1 [Zea mays]
MARTQQLAVVATAVVALVLLAAATSEAAISCGQVASAIAPCISYARGQGSGPSAGCCSGV
RSLNNAARTTADRRAACNCLKNAAAGVSGLNAGNAASIPSKCGVSIPYTISTSTDCSRVN
>AAA33494.1 Allergen Zea m 14; lipid transfer protein (LTP) type 1 [Zea mays]
SCGQVASAIAPCISYARGQGSGPSAGCCSGVRSLNNAARTTADRRAACNCLKNAAAGVSG
LNAGNAASIPSKCGVSIPYTISTSTDCSRYSRRMHASAD
>AAA33819.1 Allergen patatin [Solanum tuberosum]
MATTKSFLILFFMILATTSSTCAKLEEMVTVLSIDGGGIKGIIPAIILEFLEGQLQEVDN
NKDARLADYFDVIGGTSTGGLLTAMITTPNENNRPFAAAKDIVPFYFEHGPHIFNYSGSI
IGPMYDGKYLLQVLQEKLGETRVHQALTEVAISSFDIKTNKPVIFTKSNLAKSPELDAKM
YDICYSTAAAPIYFPPHYFITHTSNGDIYEFNLVDGGVATVGDPALLSLSVATRLAQEDP
AFSSIKSLDYKQMLLLSLGTGTNSEFDKTYTAQEAAKWGPLRWMLAIQQMTNAASSYMTD
YYISTVFQARHSQNNYLRVQENALTGTTTEMDDASEANMELLVQVGETLLKKPVSKDSPE
TYEEALKRFAKLLSDRKKLRANKASY
>AAA33947.1 Putative beta-conglycinin-alpha subunit [Glycine max]
SKRAKSSSRKTISSEDKPFNLGSRDPIYSKKLGKFFEITPEKNPQLRDLDIFLSIVDMNE
GALLLPHFNSKAIVILVINEGDANIELVGLKEQQQEQQQEEQPLEVRKYRAELSEQDIFV
IPAGYPVVVNATSNLNFFAIGINAENNQRNFLAGSQDNVISQIPSQVQELAFPGSAQAVE
KLLKNQRESYFVDAQPNEKEEGNKGRKGPLSSILRAFY
>AAB01374.1 Putative beta-conglycinin storage protein [Glycine max]
MMRARFPLLLLGVVFLASVSVSFGIAYWEKQNPSHNKCLRSCNSEKDSYRNQACHARCNL
LKVEEEEECEEGQIPRPRPQHPERERQQHGEKEEDEGEQPRPFPFPRPRQPHQEEEHEQK
EEHEWHRKEEKHGGKGSEEEQDEREHPRPHQPHQKEEEKHEWQHKQEKHQGKESEEEEED
QDEDEEQDKESQESEGSESQREPRRHKNKNPFHFNSKRFQTLFKNQYGHVRVLQRFNKRS
QQLQNLRDYRILEFNSKPNTLLLPHHADADYLIVILNGTAILTLVNNDDRDSYNLQSGDA
LRVPAGTTFYVVNPDNDENLRMIAGTTFYVVNPDNDENLRMITLAIPVNKPGRFESFFLS
STQAQQSYLQGFSKNILEASYDTKFEEINKVLFGREEGQQQGEERLQESVIVEISKKQIR
ELSKHAKSSSRKTISSEDKPFNLGSRDPIYSNKLGKLFEITQRNPQLRDLDVFLSVVDMN
EGALFLPHFNSKAIVVLVINEGEANIELVGIKEQQQRQQQEEQPLEVRKYRAELSEQDIF
VIPAGYPVMVNATSDLNFFAFGINAENNQRNFLAGSKDNVISQIPSQVQELAFPRSAKDI
ENLIKSQSESYFVDAQPQQKEEGNKGRKGPLSSILRAFY
>AAA33964.1 Allergen Gly m 6; 11S globulin, glycinin, cupin [Glycine max]
MGKPFFTLSLSSLCLLLLSSACFAITSSKFNECQLNNLNALEPDHRVESEGGLIETWNSQ

HPELQCAGVTVSKRTLNRNGSHLPSYLPYPQMIIVVQGKGAIGFAFPGCPETFEKPQQQS
SRRGSRSQQQLQDSHQKIRHFNEGDVLVIPLGVPYWTYNTGDEPVVAISPLDTSNFNNQL
DQNPRVFYLAGNPDIEHPETMQQQQQQKSHGGRKQGQHRQQEEEGGSVLSGFSKHFLAQS
FNTNEDTAEKLRSPDDERKQIVTVEGGLSVISPKWQEQEDEDEDEDEEYGRTPSYPPRRP
SHGKHEDDEDEDEEEDQPRPDHPPQRPSRPEQQEPRGRGCQTRNGVEENICTMKLHENIA
RPSRADFYNPKAGRISTLNSLTLPALRQFGLSAQYVVLYRNGIYSPDWNLNANSVTMTRG
KGRVRVVNCQGNAVFDGELRRGQLLVVPQNPAVAEQGGEQGLEYVVFKTHHNAVSSYIKD
VFRVIPSEVLSNSYNLGQSQVRQLKYQGNSGPLVNP
>AAA33965.1 Putative glycinin precursor [Glycine max]
QEDEDEDEDEEYEQTPSYPPRRPSHGKHEDDEDEDEEEHQPRPDHPPQRPSRPEQQEPRG
RGCQTRNGVEENICTMKLHENIARPSRADFYNPKAGRISTLNSLTLPALRQFGLSAQYLV
LYRNGIYSPHWNLNANSVIYVTRGKGRVRVVNCQGNPVFDGDLTRGQLLLVPQNFVVADQ
GGKQGLEYVVFKTQHNAVSSYIKDLFRAIPSEVLSNSYNLGQSQVRQLKYQGNSGPLLNP
>AAA33966.1 Allergen Gly m 6; glycinin/11S globulin [Glycine max]
MAKLVFSLCFLLFSGCCFAFSSREQPQQNECQIQKLNALKPDNRIESEGGLIETWNPNNK
PFQCAGVALSRCTLNRNALRRPSYTNGPQEIYIQQGKGIFGMIYPGCPSTFEEPQQPQQR
GQSSRPQDRHQKIYNFREGDLIAVPTGVAWWMYNNEDTPVVAVSIIDTNSLENQLDQMPR
RFYLAGNQEQEFLKYQQEQGGHQSQKGKHQQEEENEGGSILSGFTLEFLEHAFSVDKQIA
KNLQGENEGEDKGAIVTVKGGLSVIKPPTDEQQQRPQEEEEEEEDEKPQCKGKDKHCQRP
RGSQSKSRRNGIDETICTMRLRHNIGQTSSPDIYNPQAGSVTTATSLDFPALSWLRLSAE
FGSLRKNAMFVPHYNLNANSIIYALNGRALIQVVNCNGERVFDGELQEGRVLIVPQNFVV
AARSQSDNFEYVSFKTNDTPMIGTLAGANSLLNALPEEVIQHTFNLKSQQARQIKNNNPF
KFLVPPQESQKRAVA
>AAA34272.1 Allergen gamma gliadin precursor [Triticum aestivum]
MKTLLILTILAMATTIATANMQVDPSGQVQWPQQQPFPQPQQPFCQQPQRTIPQPHQTFH
HQPQQTFPQPQQTYPHQPQQQFPQTQQPQQPFPQPQQTFPQQPQLPFPQQPQQPFPQPQQ
PQQPFPQSQQPQQPFPQPQQQFPQPQQPQQSFPQQQQPAIQSFLQQQMNPCKNFLLQQCN
HVSLVSSLVSIILPRSDCQVMQQQCCQQLAQIPQQLQCAAIHSVAHSIIMQQEQQQGVPI
LRPLFQLAQGLGIIQPQQPAQLEGIRSLVLKTLPTMCNVYVPPDCSTINVPYANIDAGIG
GQ
>AAA34274.1 Allergen gamma-gliadin B precursor [Triticum aestivum]
MKTLLILTILAMAITIATANMQADPSGQVQWPQQQPFLQPHQPFSQQPQQIFPQPQQTFP
HQPQQQFPQPQQPQQQFLQPRQPFPQQPQQPYPQQPQQPFPQTQQPQQPFPQSKQPQQPF
PQPQQPQQSFPQQQPSLIQQSLQQQLNPCKNFLLQQCKPVSLVSSLWSIILPPSDCQVMR
QQCCQQLAQIPQQLQCAAIHSVVHSIIMQQEQQEQLQGVQILVPLSQQQQVGQGILVQGQ
GIIQPQQPAQLEVIRSLVLQTLPTMCNVYVPPYCSTIRAPFASIVASIGGQ
>AAA34275.1 Allergen alpha-type gliadin precursor protein [Triticum
aestivum]
MKTFLILALLAIVATTATTAVRVPVPQLQPQNPSQQQPQEQVPLVQQQQFPGQQQQFPPQ
QPYPQPQPFPSQQPYLQLQPFPQPQPFPPLPYPQPQSFPPQQPYPQQQPQYLQPQQPISQ
QQAQQQQQQQQQQQQQQILQQILQQQLIPCRDVVLQQHNIAHASSQVLQQSTYQLLQQL
CCQQLLQIPEQSQCQAIHNVAHAIIMHQQQQQQQEQKQQLQQQQQQQQQLQQQQQQQQQ
PSSQVSFQQPQQQYPSSQVSFQPSQLNPQAQGSVQPQQLPQFAEIRNLALQTLPAMCNVY
IPPHCSTTIAPFGISGTN
>AAA34276.1 Allergen pre-alpha-/beta-gliadin A-II [Triticum aestivum]
MKTFPILALLAIVATTATTAVRVPVPQLQLQNPSQQQPQEQVPLVQEQQFQGQQQPFPPQ
QPYPQPQPFPSQQPYLQLQPFPQPQLPYPQPQPFRPQQPYPQPQPQYSQPQQPISQQQQQ
QQQQQQQQQQILQQILQQQLIPCRDVVLQQHNIAHGSSQVLQESTYQLVQQLCCQQLWQI
PEQSRCQAIHNVVHAIILHQQHHHHQQQQQQQQQQPLSQVSFQQPQQQYPSGQGFFQPSQ
QNPQAQGSFQPQQLPQFEEIRNLALQTLPAMCNVYIPPYCTIAPFGIFGTN
>AAA34279.1 Allergen alpha/beta-gliadin precursor [Triticum aestivum]
MKTFLILALVATTATTAVRVPVPQLQPKNPSQQQPQEQVPLVQQQQFPGQQQQFPPQQPY
PQPQPFPSQQPYLQLQPFPQPQPFLPQLPYPQPQSFPPQQPYPQQRPKYLQPQQPISQQQ
AQQQQQQQQQQQQQQQQQILQQILQQQLIPCRDVVLQQHNIAHASSQVLQQSTYQLLQQL

CCQQLLQIPEQSRCQAIHNVVHAIIMHQQEQQQQLQQQQQQQLQQQQQQQQQQQQPSSQV
SFQQPQQQYPSSQGSFQPSQQNPQAQGSVQPQQLPQFAEIRNLALQTLPAMCNVYIPPHC
STTIAPFGIFGTN
>AAA34280.1 Allergen alpha/beta-gliadin precursor [Triticum aestivum]
MKTFLILVLLAIVATTATTAVRFPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQPFPPQ
QPYPQPQPFPSQLPYLQLQPFPQPQLPYSQPQPFRPQQPYPQPQPQYSQPQQPISQQQQQ
QQQQQQQQQQQQQILQQILQQQLIPCMDVVLQQHNIAHGRSQVLQQSTYQLLQELCCQHL
WQIPEQSQCQAIHNVVHAIILHQQQKQQQQPSSQVSFQQPLQQYPLGQGSFRPSQQNPQA
QGSVQPQQLPQFEEIRNLALQTLPAMCNVYIPPYCTIAPFGIFGTN
>AAA34281.1 Allergen pre-alpha-/beta-gliadin A-I [Triticum aestivum]
MKTFLILALLAIVATTATTAVRVPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQPFPPQ
QPYPQPQPFPSQQPYLQLQPFLQPQLPYSQPQPFRPQQPYPQPQPQYSQPQQPISQQQQQ
QQQQQQQQQQQQQQIIQQILQQQLIPCMDVVLQQHNIVHGKSQVLQQSTYQLLQELCCQH
LWQIPEQSQCQAIHNVVHAIILHQQQKQQQQPSSQVSFQQPLQQYPLGQGSFRPSQQNPQ
AQGSVQPQQLPQFEEIRNLARK
>AAA34282.1 Allergen pre-alpha-/beta-gliadin A-IV [Triticum aestivum]
MKTFLILALRAIVATTATIAVRVPVPQLQPQNPSQQQPQKQVPLVQQQQFPGQQQPFPPQ
QPYPQQQPFPSQQPYMQLQPFPQPQLPYPQPQLPYPQPQPFRPQQSYPQPQPQYSQPQQP
ISQQQQQQQQQQQQQQILQQILQQQLIPCRDVVLQQHSIAHGSSQVLQQSTYQLVQQFC
CQQLWQIPEQSRCQAIHNVVHAIILHQQQQQQQQQQQQQQPLSQVCFQQSQQQYPSGQG
SFQPSQQNPQAQGSVQPQQLPQFEEIRNLALETLPAMCNVYIPPYCTIAPVGIFGTN
>AAA34283.1 Allergen pre-alpha-/beta-gliadin A-III [Triticum aestivum]
MKTFLILALLAIVATTATSAVRVPVPQLQPQNPSQQQPQEQVPLMQQQQQFPGQQEQFPP
QQPYPHQQPFPSQQPYPQPQPFPPQLPYPQTQPFPPQQPYPQPQPQYPQPQQPISQQQAQ
QQQQQQQTLQQILQQQLIPCRDVVLQQHNIAHASSQVLQQSSYQQLQQLCCQQLFQIPEQ
SRCQAIHNVVHAIILHHHQQQQQQPSSQVSYQQPQEQYPSGQVSFQSSQQNPQAQGSVQP
QQLPQFQEIRNLALQTLPAMCNVYIPPYCSTTIAPFGIFGTN
>AAA34284.1 Allergen alpha-type gliadin [Triticum aestivum]
PQPQPQYSQPQQPISQQQQQQQQQQQQQQQEQQILQQILQQQLIPCMDVVLQQHNIAHGR
SQVLQQSTYQLLQELCCQHLWQIPEQSQCQAIHNVVHAIILHQQQQKQQQQPSSQFSFQQ
PLQQYPLGQGSFRPSQQNPQAQGSVQPQQLPQFEIRNLALQTLPAMCNVYIPPYCTIAPF
GIFGTN
>AAA34285.1 Putative pre-gamma-gliadin B-I [Triticum aestivum]
MKTFLVFALIAVVATSAIAQMETSCISGLERPWQQQPLPPQQSFSQQPPFSQQQQQPLPQ
QPSFSQQQPPFSQQQPILSQQPPFSQQQQPVLPQQSPFSQQQQLVLPPQQQQQQLVQQQI
PIVQPSVLQQLNPCKVFLQQQCSPVAMPQRLARSQMWQQSSCHVMQQQCCQQLQQIPEQS
RYEAIRAIIYSIILQEQQQGFVQPQQQQPQQSGQGVSQSQQQSQQQLGQCSFQQPQQQLG
QQPQQQQQQQVLQGTFLQPHQIAHLEAVTSIALRTLPTMCSVNVPLYSATTSVPFGVGTG
VGAY
>AAA34286.1 Putative gamma-gliadin [Triticum aestivum]
TITRTFPIPTISSNNNHHFRSNSNHHFHSNNNQFYRNNNSPGHNNPLNNNNSPNNNSPSN
HHNNSPNNNFQYHTHPSNHKNLPHTNNIQQQQPPFSQQQQPPFSQQQQPVLPQQSPFSQQ
QQLVLPPQQQQQQLVQQQIPIVQPSVLQQLNPCKVFLQQQCSPVAMPQRLARSQMWQQSS
CHVMQQQCCQQLQQIPEQSRYEAIRAIIYSIILQEQQQGFVQPQQQQPQQSGQGVSQSQQ
QSQQQLGQCSFQQPQQQLGQQPQQQQQQQVLQGTFLQPHQIAHLEAVTSIALRTLPTMCS
VNVPLYSATTSVPFGVGTGVGAY
>AAA34287.1 Putative gamma gliadin B-III [Triticum aestivum]
PQQPFPLQPQQSFLWQSQQPFLQQPQQPSPQPQQVVQIISPATPTTIPSAGKPTSAPFPQ
QQQQHQQLAQQQIPVVQPSILQQLNPCKVFLQQQCSPVAMPQRLARSQMLQQSSCHVMQQ
QCCQQLPQIPQQSRYQAIRAIIYSIILQEQQQVQGSIQSQQQQPQQLGQCVSQPQQQSQQ
QLGQQPQQQQLAQGTFLQPHQIAQLEVMTSIALRILPTMCSVNVPLYRTTTSVPFGVGTG
VGAY
>AAA34288.1 Allergen gamma-gliadin [Triticum aestivum]
MKTLLILTILAMAITIGTANMQVDPSSQVQWPQQQPVPQPHQPFSQQPQQTFPQPQQTFP

HQPQQQFPQPQQPQQQFLQPQQPFPQQPQQPYPQQPQQPFPQTQQPQQLFPQSQQPQQQF
SQPQQQFPQPQQPQQSFPQQQPPFIQPSLQQQVNPCKNFLLQQCKPVSLVSSLWSMIWPQ
SDCQVMRQQCCQQLAQIPQQLQCAAIHTIIHSIIMQQEQQEQQQGMHILLPLYQQQQVGQ
GTLVQGQGIIQ
>AAA34289.1 Allergen gamma-gliadin [Triticum aestivum]
MKTLLILTILAMAITIGTANIQVDPSGQVQWLQQQLVPQLQQPLSQQPQQTFPQPQQTFP
HQPQQQVPQPQQPQQPFLQPQQPFPQQPQQPFPQTQQPQQPFPQQPQQPFPQTQQPQQPF
PQQPQQPFPQTQQPQQPFPQLQQPQQPFPQPQQQLPQPQQPQQSFPQQQRPFIQPSLQQQ
LNPCKNILLQQSKPASLVSSLWSIIWPQSDCQVMRQQCCQQLAQIPQQLQCAAIHSVVHS
IIMQQQQQQQQQQGIDIFLPLSQHEQVGQGSLVQGQGIIQPQQPAQLEAIRSLVLQTLPS
MCNVYVPPECSIMRAPFASIVAGIGGQ
>AAA34290.1 Allergen gliadin [Triticum urartu]
MKTFLILALLAIVATTATTAVRVPVPQPQPQNPSQPQPQRQVPLVQQQQFPGQQQQFPPQ
QPYPQPQPFPSQQPYLQLQPFPQPQPFPPQLPYPQPPPFSPQQPYPQPQPQYPQPQQPIS
QQQAQQQQQQQQQQQQQQQQQILPQILQQQLIPCRDVVLQQHNIAHARSQVLQQSTYQP
LQQLCCQQLWQIPEQSRCQAIHNVVHAIILHQQQQQQQPSSQVSLQQPQQQYPSGQGFFQ
PSQQNPQAQGSVQPQQLPQFEEIRNLALQTLPRMCNVYIPPYCSTTTAPFGIFGTN
>AAB02788.1 Allergen HMW glutenin subunit Ax2 [Triticum aestivum]
MTKRLVLFAAVVVALVALTAAEGEASGQLQCERELQEHSLKACRQVVDQQLRDVSPECQP
VGGGPVARQYEQQVVVPPKGGSFYPGETTPPQQLQQSILWGIPALLRRYYLSVTSPQQVS
YYPGQASSQRPGQGQQEYYLTSPQQSGQWQQPGQGQSGYYPTSPQQSGQKQPGYYPTSPW
QPEQLQQPTQGQQRQQPGQGQQLRQGQQGQQSGQGQPRYYPTSSQQPGQLQQLAQGQQGQ
QPERGQQGQQSGQGQQLGQGQQGQQPGQKQQSGQGQQGYYPISPQQLGQGQQSGQGQLGY
YPTSPQQSGQGQSGYYPTSAQQPGQLQQSTQEQQLGQEQQDQQSGQGRQGQQSGQRQQDQ
QSGQGQQPGQRQPGYYSTSPQQLGQGQPRYYPTSPQQPGQEQQPRQLQQPEQGQQGQQPE
QGQQGQQQRQGEQGQQPGQGQQGQQPGQGQPGYYPTSPQQSGQGQPGYYPTSPQQSGQLQ
QPAQGQQPGQEQQGQQPGQGQQPGQGQPGYYPTSPQQSGQEQQLEQWQQSGQGQPGHYPT
SPLQPGQGQPGYYPTSPQQIGQGQQPGQLQQPTQGQQGQQPGQGQQGQQPGEGQQGQQPG
QGQQPGQGQPGYYPTSLQQSGQGQQPGQWQQPGQGQPGYYPTSSLQPEQGQQGYYPTSQQ
QPGQGPQPGQWQQSGQGQQGYYPTSPQQSGQGQQPGQWLQPGQWLQSGYYLTSPQQLGQG
QQPRQWLQPRQGQQGYYPTSPQQSGQGQQLGQGQQGYYPTSPQQSGQGQQGYDSPYHVSA
EHQAASLKVAKAQQLAAQLPAMCRLEGGDALLASQ
>AAA39768.1 Allergen Mus m 1; lipocalin / mouse urinary protein /
prealbumin [Mus musculus domesticus]
MKMLLLLCLGLTLVCVHAEEASSTGRNFNVEKINGEWHTIILASDKREKIEDNGNFRLFL
EQIHVLEKSLVLKFHTVRDEECSELSMVADKTEKAGEYSVTYDGFNTFTIPKTDYDNFLM
AHLINEKDGETFQLMGLYGREPDLSSDIKERFAKLCEEHGILRENIIDLSNANRCLQARE
>AAA41198.1 Allergen Rat n 1; lipocalin / alpha 2u globulin / major
urinary protein [Rattus norvegicus]
LLLLCLGLTLVCGHAEEASSTSGNLDVAKLNGDWFSIVVASNKREKIEENGSMRVFMQHI
DVLENSLGFKFRIKENGECRELYLVAYKTPEDGEYFVEYDGGNTFTILKTDYDRYVMFHL
INFKNGETFQLMVLYGRTKDLSSDIKEKFAKLCEAHGITRDNIIDLTKTDRCLQARG
>AAA48944.1 Allergen lysozyme protein [Gallus gallus]
MNAWVAWRNSCKGTDVQAWIRGCR
>BAA01239.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
SLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDANQNTKTAK
IEIKASLDGLEIDVPGIDTNACHFVKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKLI
GDNGVLACAIATHGKIRD
>BAA01240.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKASLDGLEIDVPGIDTNACHFMKCPLVKGQQYDIKYTWNVPKIAPKSEN
VVVTVKLIGDNGVLACAIATHGKIRD

>BAA01241.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides farinae]
SLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDANQNTKTAK
IEIKASLDGLEIDVPGIDTNACHFMKCPLVKGQQYDAKYTWNVPKIAPKSENVVVTVKLV
GDNGVLACAIATHAKIRD
>BAA01998.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVFSALLLIIVSVLAATTRMADHHKDQVVYSLGERCQPGMGYPMYSLPRCRAVVK
RQCVGTRSPGAVDEQLAQDCCRELAAVDDSWCRCSALNHMVGGIYRELGATDVGHPMAEV
FPGCRRGDLERAAASLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>BAA01996.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVFSVLLLAVVSVLAATATMAEYHHQDQVVYTRARCQPGMGYPMYSLPRCRALVK
RQCRGSAAAAEQVRRDCCRQLAAVDDSWCRCEAISHMLGGIYRELGAPDVGHPMSEVFRG
CRRGDLERAAASLPAFCNVDIPNGGGGVCYWLARSGY
>BAA00154.1 Allergen Gly m 6; glycinin/11S globulin [Glycine max]
MAKLVLSLCFLLFSGCFALREQAQQNECQIQKLNALKPDNRIESEGGFIETWNPNNKPFQ
CAGVALSRCTLNRNALRRPSYTNGPQEIYIQQGNGIFGMIFPGCPSTYQEPQESQQRGRS
QRPQDRHQKVHRFREGDLIAVPTGVAWWMYNNEDTPVVAVSIIDTNSLENQLDQMPRRFY
LAGNQEQEFLKYQQQQQGGSQSQKGKQQEEENEGSNILSGFAPEFLKEAFGVNMQIVRNL
QGENEEEDSGAIVTVKGGLRVTAPAMRKPQQEEDDDEEEQPQCVETDKGCQRQSKRSRN
GIDETICTMRLRQNIGQNSSPDIYNPQAGSITTATSLDFPALWLLKLSAQYGSLRKNAMF
VPHYTLNANSIIYALNGRALVQVVNCNGERVFDGELQEGGVLIVPQNFAVAAKSQSDNFE
YVSFKTNDRPSIGNLAGANSLLNALPEEVIQHTFNLKSQQARQVKNNNPFSFLVPPQESQ
RRAVA
>P30575.1 Allergen Enolase 1 (2-phosphoglycerate dehydratase) (2-phospho-D-glycerate hydro-lyase) [Candida albicans]
MSYATKIHARYVYDSRGNPTVEVDFTTDKGLFRSIVPSGASTGVHEALELRDGDKSKWLG
KGVLKAVANVNDIIAPALIKAKIDVVDQAKIDEFLLSLDGTPNKSKLGANAILGVSLAAA
NAAAAAQGIPLYKHIANISNAKKGKFVLPVPFQNVLNGGSHAGGALAFQEFMIAPTGVST
FSEALRIGSEVYHNLKSLTKKKYGQSAGNVGDEGGVAPDIKTPKEALDLIMDAIDKAGYK
GKVGIAMDVASSEFYKDGKYDLDFKNPESDPSKWLSGPQLADLYEQLISEYPIVSIEDPF
AEDDWDAWVHFFERVGDKIQIVGDDLTVTNPTRIKTAIEKKAANALLLKVNQIGTLTESI
QAANDSYAAGWGVMVSHRSGETEDTFIADLSVGLRSGQIKTGAPARSERLAKLNQILRIE
EELGSEAIYAGKDFQKASQL
>AAB22817.1 Putative peanut agglutinin precursor; prePNA [Arachis hypogaea]
MKPFCVFLTFFLLLAASSKKVDSAETVSFNFNSFSEGNPAINFQGDVTVLSNGNIQLTNL
NKVNSVGRVLYAMPVRIWSSATGNVASFLTSFSFEMKDIKDYDPADGIIFFIAPEDTQIP
AGSIGGGTLGVSDTKGAGHFVGVEFDTYSNSEYNDPPTDHVGIDVNSVDSVKTVPWNSVS
GAVVKVTVIYDSSTKTLSVAVTNDNGDITTIAQVVDLKAKLPERVKFGFSASGSLGGRQI
HLIRSWSFTSTLITTTRRSIDNNEKKIMNMASA
>AAB23464.1 Putative Kunitz trypsin inhibitor; KTi [Glycine max]
MKSTIFFLFLFCAFTTSYLPSAIADFVLDNEGNPLENGGTYYILSDITAFGGIRAAPTGN
ERCPLTVVQSRNELDKGIGTIISSPYRIRFIAEGHPLSLKFDSFAVIMLCVGIPTEWSVV
EDLPEGPAVKIGENKDAMDGWFRLERVSDDEFNNYKLVFCPQQAEDDKCGDIGISIDHDD
GTRRLVVSKNKPLVVQFQKLDKESLAKKNHGLSRSE
>AAB23482.1 Putative Kunitz trypsin inhibitor KTi1 [Glycine max]
MKSTIFFALFLVCAFTISYLPSATAQFVLDTDDDPLQNGGTYYMLPVMRGKGGGIEVDST
GKEICPLTVVQSPNELDKGIGLVFTSPLHALFIAERYPLSIKFGSFAVITLCAGMPTEWA
IVEREGLQAVKLAARDTVDGWFNIERVSREYNDYKLVFCPQQAEDNKCEDIGIQIDDDGI
RRLVLSKNKPLVVQFQKFRSSTA
>AAB23483.1 Putative Kunitz trypsin inhibitor KTi2 [Glycine max]
MKSTIFFALFLVCAFTISYLPSATAQFVLDTDDDPLQNGGTYYMLPVMRGKSGGIEGNST
GKEICPLTVVQSPNKHNKGIGLVFKSPLHALFIAERYPLSIKFDSFAVIPLCGVMPTKWA
IVEREGLQAVTLAARDTVDGWFNIERVSREYNDYYKLVFCPQEAEDNKCEDIGIQIDNDG

IRRLVLSKNKPLVVEFQKFRSSTA
>AAB24432.1 Allergen Aln g 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Alnus glutinosa]
MGVFNYEAETPSVIPAARLFKAFILDGDKLLPKVAPEAVSSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDRVNFKYSFSVIEGGAVGDALEKVCNEIKIVAAPDGGSILKISNK
FHTKGDHEINAEQIKIEKEKAVGLLKAVESYLLAHSDAYN
>P29600.1 Putative RecName: Full=Subtilisin Savinase; AltName: Full=Alkaline protease [Bacillus lentus]
AQSVPWGISRVQAPAAHNRGLTGSGVKVAVLDTGISTHPDLNIRGGASFVPGEPSTQDGN
GHGTHVAGTIAALNNSIGVLGVAPSAELYAVKVLGASGSGSVSSIAQGLEWAGNNGMHVA
NLSLGSPSPSATLEQAVNSATSRGVLVVAASGNSGAGSISYPARYANAMAVGATDQNNNR
ASFSQYGAGLDIVAPGVNVQSTYPGSTYASLNGTSMATPHVAGAAALVKQKNPSWSNVQI
RNHLKNTATSLGSTNLYGSGLVNAEAATR
>CAA47341.1 Allergen Dol m 1; phospholipase A1 [Dolichovespula maculata]
RLIMFVGDPSSSNELDRFSVCPFSNDTVKMIFLTRENRKHDFYTLDTMNRHNEFKKSIIK
RPVVFITHGFTSSATEKNFVAMSEALMHTGDFLIIMVDWRMAACTDEYPGLKYMFYKAAV
GNTRLVGNFIAMIAKKLVEQYKVPMTNIRLVGHSLGAHISGFAGKRVQELKLGKFSEIIG
LDPAGPSFKKNDCSERICETDAHYVQILHTSSNLGTERTLGTVDFYINNGSNQPGCRYII
GETCSHTRAVKYFTECIRRECCLIGVPQSKNPQPVSKCTRNECVCVGLNAKKYPKRGSFY
VPVEAEAPYCNNNGKII
>AAA32702.1 Putative serine protease [Aspergillus niger]
MKGILGLSLLPLLTAASPVFVDSIHNEAAPILSATNAKEVPDSYIVVFKKHVTSELASAH
HSWVQDIHDSQSERTELKKRSLFGLGDEVYLGLKNTFDIAGSLIGYSGHFHEDVIEQVRR
HPDVDYIERDSEVHTMEGATEKNAPWGLARISHRDSLTFGNFNKYLYASEGGEGVDAYTI
DTGINVDHVDFEGRATWGKTIPTNDEDLDGNGHGTHCSGTMAGKKYGVAKKANLYAVKVL
RSSGSGTMSDVVSGVEYAVQAHIKKAKDAKNGKVKGFKGSVANMSLGGGKSKTLEDAVNA
GVEAGLHFAVAAGNDNADACNYSPAAAEKAITVGASTLADERAYFSNYGECTDIFAPGLN
ILSTWIGSNYATNIISGTSMASPHIAGLLAYFVSLQPSSDSAFAVEELTPAKLKKDIIAI
ATEGALTDIPSNTPNVSHAAVGIYKRNELTQKFSSLPGTVVVPRTTPTSLAAVATRSPLP
RTASRTVLRVSFTRPKSCSPRSLVPSTARSRMPSSHRSELVLSRRRSEDLVFF
>CAA29664.1 Allergen alpha-lactalbumin [Bos taurus]
MMSFVSLLLVGILFHATQAEQLTKCEVFRELKDLKGYGGVSLPEWVCTAFHTSGYDTQAI
VQNNDSTEYGLFQINNKIWCKDDQNPHSSNICNISCDKFLDDDLTDDIMCVKKILDKVGI
NYWLAHKALCSEKLDQWLCEKL
>CAA26953.1 Allergen Mus m 1; lipocalin / mouse urinary protein / prealbumin [Mus musculus]
MKMLLLLCLGLTLVCVHAEEASSTGRNFNVEKINGEWHTIILASDKREKIEDNGNFRLFL
EQIHVLENSLVLKFHTVRDEECSELSMVADKTEKAGEYSVTYDGFNTFTIPKTDYDNFLM
AHLINEKDGETFQLMGLYGREPDLMSDIKERFAQLCEEHGILRENIIDLSNANRCLQARE
>AAB25850.1 Allergen isoallergen {N-terminal} [Betula sp.]
GVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAITSVENIYERYGXG
>AAB25851.1 Allergen isoallergen {N-terminal} [Betula sp.]
SVFNYETETTSVIPAAFLFKAFILDGDKLFPKVAPQXQSIVXNXYRVYXPK
>CAA49760.1 Allergen Myr p 1; pilosulin [Myrmecia pilosula]
MKLSCLLLTLTIIFVLTIVHAPNVEAKDLADPESEAVGFADAFGEADAVGEADPNAGLGS
VFGRLARILGRVIPKVAKKLGPKVAKVLPKVMKEAIPMAVEMAKSQEEQQPQ
>CAA51718.1 Allergen Zea m 12; profilin [Zea mays]
MSWQTYVDEHLMCEIEGHHLTSAAIVGHDGATWAQSTAFPEFKPEEMAAIMKDFDEPGHL
APTGLILGGTKYMVIQGEPGAVIRGKKGSGGITVKKTGQSLIIGIYDEPMTPGQCNLVVE
RLGDYLLEQGM
>CAA51719.1 Allergen Zea m 12; profilin [Zea mays]
MSDRAKMSWQAYVDEHLMCEIEGHHLAAAAIVGHDGAAWAQSTAFPEFKTEDMANIMKDF
DEPGHLAPTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVVGIYDEPMTPGQ
CNMVVERLGDYLLEQGM

>CAA51720.1 Allergen Zea m 12; profilin [Zea mays]
MSWQTYVDEHLMCEIEGHHLSSAAIVGHDGAVWAQSTAFPQFKPEEMTNIIKDFDEPGFL
APIGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVIGIYDEPMTPGQCNMVVE
RLGDYLVEQGL
>A45786 Allergen major pollen allergen Bet v I - European white birch (fragment) [Betula pendula]
GVFNYEAETTSVIPAAWLWKXFILDGDNLFPKVAPQAXTSVENIYERGGWG
>B45786 Allergen major pollen allergen Bet v II - European white birch (fragment) [Betula pendula]
SVFNYETETTSVIPAAMLFKAFILDGDKLFPKVAPQXQSIVXNXYRVYXPK
>E37396 Putative pollen allergen Agr a I - bent grass (fragment) [Agrostis alba]
YTTEGGTKAEAEDVIPEGWKADTSYE
>G37396 Putative pollen allergen Ant o I - sweet vernal grass (fragment) [Anthoxanthum odoratum]
YTTEGGKKVEAEDVIPEGWKADTSYE
>C37396 Putative pollen allergen Fes e I type A - reed fescue (fragment) [Schedonorus arundinaceus]
YTTEGGTKSEAEDVIPE
>D37396 Putative pollen allergen Fes e I type B - reed fescue (fragment) [Schedonorus arundinaceus]
YTTEGGTKSEVEDVIPEGWK
>F37396 Putative pollen allergen Poa p I - Kentucky bluegrass (fragment) [Poa pratensis]
YTTEGGTKAEAEDVIPEGWKVDTSYE
>AAA16792.1 Allergen Hev b 10; superoxide dismutase [Hevea brasiliensis]
MALRSLVTRKNLPSAFKAATGLGQLRGLQTFSLPDLPYDYGALEPAISGEIMQLHHQKHH
QTYITNYNKALEQLNDAIEKGDSAAVVKLQSAIKFNGGGHVNHSIFWKNLAPVREGGGEL
PHGSLGWAIDADFGSLEKLIQLMNAEGAALQGSGWVWLALDKELKKLVVETTANQDPLVT
KGPTLVPLLGIDVWEHAYYLQYKNVRPDYLKNIWKVMNWKYASEVYAKECPSS
>AAA28296.1 Allergen major house dust allergen [Dermatophagoides pteronyssinus]
MSAEAFEHLKTQFDLNAETNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFSGVAA
TESAYLAHRNQSLDLAEQELVDCASQHGCHGDTIPR
>CAA44345.1 Allergen fel d I chain 2 precursor [Felis catus]
MRGALLVLALLVTQALGVKMAETCPIFYDVFFAVANGNELLLDLSLTKVNATEPERTAMK
KIQDCYVENGLISRVLDGLVMIAINEYCMGEAVQNTVEDLKLNTLGR
>CAA52753.1 Allergen Phl p 5; unknown function [Phleum pratense]
MAVHQYTVALFLAVALVAGPAASYAADLGYGPATPAAPAAGYTPATPAAPAEAAPAGKAT
TEEQKLIEKINAGFKAALAAAAGVQPADKYRTFVATFGAASNKAFAEGLSGEPKGAAESS
SKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVK
VIPAGELQVIEKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYESYKFIPA
LEAAVKQAYAATVATAPEVKYTVFETALKKAITAMSEAQKAAKPAAAATATATAAVGAAT
GAATAATGGYKV
>CAA52194.1 Allergen Equ c 3; serum albumin [Equus caballus]
MKWVTFVSLLFLFSSAYSRGVLRRDTHKSEIAHRFNDLGEKHFKGLVLVAFSQYLQQCPF
EDHVKLVNEVTEFAKKCAADESAENCDKSLHTLFGDKLCTVATLRATYGELADCCEKQEP
ERNECFLTHKDDHPNLPKLKPEPDAQCAAFQEDPDKFLGKYLYEVARRHPYFYGPELLFH
AEEYKADFTECCPADDKLACLIPKLDALKERILLSSAKERLKCSSFQNFGERAVKAWSVA
RLSQKFPKADFAEVSKIVTDLTKVHKECCHGDLLECADDRADLAKYICEHQDSISGKLKA
CCDKPLLQKSHCIAEVKEDDLPSDLPALAADFAEDKEICKHYKDAKDVFLGTFLYEYSRR
HPDYSVSLLLRIAKTYEATLEKCCAEADPPACYRTVFDQFTPLVEEPKSLVKKNCDLFEE
VGEYDFQNALIVRYTKKAPQVSTPTLVEIGRTLGKVGSRCCKLPESERLPCSENHLALAL
NRLCVLHEKTPVSEKITKCCTDSLAERRPCFSALELDEGYVPKEFKAETFTFHADICTLP

EDEKQIKKQSALAELVKHKPKATKEQLKTVLGNFSAFVAKCCGREDKEACFAEEGPKLVA
SSQLALA
>CAA47366.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
GVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQVISSVENVGGNGGPGTIKNITFAE
GIPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSKF
HAKGYHEVNAEKMKGAKEMAEKLLRAVESYLLAHTAEYN
>CAA47357.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
GVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFAE
GSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSKF
HAKGYHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>CAA47367.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
GVFNYEAETTSVIPAARLFKAFILDGNKLIPKVSPQAVSSVENVEGNGGPGTIKKITFSE
GSPVKYVKERVEEIDHTNFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSKF
HAKGYHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>AAB27594.1 Putative DF5=allergen {N-terminal} [Dermatophagoides farinae]
AVGGQDADLAEAPFQISLLK
>AAB27445.1 Putative Pha a I=34 kda pollen allergen {N-terminal} [Phalaris aquatica]
IAKVPPGGXITAEYGDKWLD
>CAA81610.1 Allergen Hol l 1; beta-expansin [Holcus lanatus]
MASSSRSVLLLVAALFAVFLGSAHGIAKVPPGPNITATYGDEWLDAKSTWYGKPTGAGPK
DNGGACGYKDVDKPPFSGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEPVTVHITDD
NEEPIAPYHFDLSGHAFGSMAKKGEEQKLRSAGELELKFRRVKCKYPDGTKPTFHVEKGS
NPNYLALLVKYIDGDGDVVAVDIKEKGKDKWIELKESWGAVWRVDTPDKLTGPFTVRYTT
EGGTKGEAEDVIPEGWKADTAYEAK
>CAA53529.1 Allergen Phl p 2; expansin [Phleum pratense]
MSMASSSSSSLLAMAVLAALFAGAWCVPKVTFTVEKGSNEKHLAVLVKYEGDTMAEVELR
EHGSDEWVAMTKGEGGVWTFDSEEPLQGPFNFRFLTEKGMKNVFDDVVPEKYTIGATYAP
EE
>P00304.2 Allergen Amb a 3; plastocyanine [Ambrosia artemisiifolia var. elatior]
GKVYLVGGPELGGWKLQSDPRAYALWSARQQFKTTDVLWFNFTTGEDSVAEVWREEAYHA
CDIKDPIRLEPGGPDRFTLLTPGSHFICTKDQKFVACVPGR
>P24296.2 Allergen RecName: Full=Non-specific lipid-transfer protein; Short=LTP; AltName: Full=Phospholipid transfer protein; Short=PLTP; AltName: Full=ns-LTP1; Flags: Precursor [Triticum aestivum]
AQVMLMAVALVLMLAAVPRAAVAIDCGHVDSLVRPCLSYVQGGPGPSGQCCDGVKNLHNQ
ARSQSDRQSACNCLKGIARGIHNLNEDNARSIPPKCGVNLPYTISLNIDCSRV
>S32101 Allergen PHLP5A protein - common timothy (fragment) [Phleum pratense]
EAPAGKATTEEQKLIEKINAGFKAALARRLQPADKYRTFVATFGPASNKAFAEGLSGEPK
GAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSEALRIIAGTLEVHAVKP
AAEEVKVIPAAELQVIEKVDAAFKVAATAANAAPANDKFTVFEAAFNDEIKASTGGAYES
YKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITAMSEAQKAAKPPPLPPPPQPP
PLAATGAATAATGGYKV
>CAA49555.1 Allergen CMa, component of tetrameric alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]
MASKSSITPLLLAAVLASVFAAATATGQYCYAGMGLPSNPLEGCREYVAQQTCGVTIAGS
PVSSEPGDTPKDRCCQELDEAPQHCRCEAVRYFIGRRSHPDWSVLKDLPGCPKEPQRDFA
KVLVTPGQCNVLTVHNAPYCLGLDI

>CAA54421.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILEGDTLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>AAB28566.1 Allergen Cyn d; beta-expansin, partial [Cynodon dactylon]
AMGDDPGPKITATYGSKWLDAKATF
>AAB28567.1 Allergen Cyn d; beta-expansin,partial [Cynodon dactylon]
GAAPDDHGGAXGYKDVDKPPFDGMTAXGNEPIFKDDLS
>CAA54481.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYESETTSVIPAARLFKAFILEGDTLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDQEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>CAA54482.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYEIETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA54483.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGIPFKYVKGRVDEVDHTNFKYSYSVIEGGPVGDTLEKISNEIKIVATPNGGSILKINNK
YHTKGDHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>CAA54484.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYEIEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYSYSVIEGGPVGDTLEKISNEIKIVATPNGGSILKINNK
YHTKGDHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>CAA54487.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYSYSVIEGGPVGDTLEKISNEIKIVATPNGGSILKINNK
YHTKGDHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>CAA54488.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYESETTSVIPAARLFKAFILEGDTLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>CAA54489.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETEATSVIPAARMFKAFILDGDKLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA54686.1 Allergen Phl p 12; profilin [Phleum pratense]
MSWQTYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAGAKYMVIQGEPGRVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVEQGM
>AAA33405.1 Allergen Lol p 5; ribonuclease [Lolium perenne]
MAVQKHTVALFLAVALVAGPAASYAADAGYAPATPATPAAPATAATPATPATPATPAAVP
SGKATTEEQKLIEKINAGFKAAVAAAAVVPPADKYKTFVETFGTATNKAFVEGLASGYAD
QSKNQLTSKLDAALKLAYEAAQGATPEAKYDAYVATLTEALRVIAGTLEVHAVKPAAEEV
KVGAIPAAEVQLIDKVDAAYRTAATAANAAPANDKFTVFENTFNNAIKVSLGAAYDSYKF
IPTLVAAVKQAYAAKQATAPEVKYTVSETALKKAVTAMSEAEKEATPAAAATATPTPAAA

TATATPAAAYATATPAAATATATPAAATATPAAAGGYKV
>AAB29137.1 Allergen beta-casein A3 [Bos taurus]
MKVLILACLVALALARELEELNVPGEIVESLSSSEESITRINKKIEKFQSEEQQQTEDEL
QDKIHPFAQTQSLVYPFPGPIPNSLPQNIPPLTQTPVVVPPFLQPEVMGVSKVKEAMAPK
QKEMPFPKYPVEPFTESQSLTLTDVENLHLPLPLLQSWMHQPHQPLPPTVMFPPQSVLSL
SQSKVLPVPQKAVPYPQRDMPIQAFLLYQEPVLGPVRGPFPIIV
>P34071.1 Putative RecName: Full=Enterotoxin type C-2; AltName:
Full=SEC2; Flags: Precursor [Staphylococcus aureus]
MNKSRFISCVILIFALILVLFTPNVLAESQPDPTPDELHKSSEFTGTMGNMKYLYDDHYV
SATKVMSVDKFLAHDLIYNISDKKLKNYDKVKTELLNEDLAKKYKDEVVDVYGSNYYVNC
YFSSKDNVGKVTGGKTCMYGGITKHEGNHFDNGNLQNVLIRVYENKRNTISFEVQTDKKS
VTAQELDIKARNFLINKKNLYEFNSSPYETGYIKFIENNGNTFWYDMMPAPGDKFDQSKY
LMMYNDNKTVDSKSVKIEVHLTTKNG
>P33556.1 Putative Nonspecific lipid-transfer protein P2 (LTP P2) [Vitis
sp.]
AITCGQVSSALSSCLGYLKNGGAVPPGSSCGIKNLNSA
>P80274.1 Putative Nonspecific lipid-transfer protein P4 (LTP P4) [Vitis
sp.]
TVTCGQVASALSPCIDYLQKDGAVPAGSCCXKXLSSA
>CAA55068.1 Allergen Cla h 7; unknown function [Cladosporium herbarum]
MAPKIAIIFYSTWGHVQTLAEAEAKGIREAGGSVDLYRVPETLTQEVLTKMHAPPKDDSI
PEITDPFILEQYDRFPHGHPTRYGNFPAQWRTFWDRTGGQWQTGAFWGKYAGLFISTGTQ
GGGQESTALAAMSTLSHHGIIYVPLGYKTTFHLLGDNSEVRGAAVWGAGTFSGGDGSRQP
SQKELELTAQGKAFYEAVAKVNFQ
>CAA55070.1 Allergen Cla h 6; enolase [Cladosporium herbarum]
MPISKIHSRYVYDSRGNPTVEVDIVTETGLHRAIVPSVASTGSHEACELRDGDKSKWAGK
GVTKAVANVNEIIAPALIKENLDVKDQAAVDAFLNKLDGTTNKTKIGANAILGVSMAVAK
AAAAEKRVPLYAHISDLSGTKKPFVLPVPFMNVVNGGSHAGGRLAFQEFMIVPSGAPSFT
EAMRQGAEVYQKLKSLTKKRYGQSAGNVGDEGGVAPDIQTAEEALDLITDAIEEAGYTGQ
IKIAMDVASSEFYKADEKKYDLDFKNPDSDKSKWITYEQLADQYNELAAKYPIVSIEDPF
AEDDWEAWSYFYKTSGSDFQIVGDDLTVTNPEFIKKAIETKACNALLLKVNQIGTITEAI
NAAKDSFAAGWGVMVSHRSGETEDVTIADIVVGLRAGQIKTGAPARSERLAKLNQILRIE
EELGDKRLYAGDNFRTAINL
>CAA55390.1 Allergen Phl p 1; beta-expansin [Phleum pratense]
MASSSSVLLVVVLFAVFLGSAYGIPKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKDVDKPPFSGMTGCGNTPIFKSGRGCGSCFEIKCTKPEACSGEPVVVHITDDNE
EPIAPYHFDLSGHAFGAMAKKGDEQKLRSAGELELQFRRVKCKYPEGTKVTFHVEKGSNP
NYLALLVKYVNGDGDVVAVDIKEKGKDKWIELKESWGAIWRIDTPDKLTGPFTVRYTTEG
GTKTEAEDVIPEGWKADTSYESK
>S38584 Allergen Phl p Vb - common timothy [Phleum pratense]
MAVPRRGPRGGPGRSYTADAGYAPATPAAAGAAAGKATTEEQKLIEDINVGFKAAVAARQ
RPAADKFKTFEAASPRHPRPLRQGAGLVPKLDAAYSVAYKAAVGATPEAKFDSFVASLTE
ALRVIAGALEVHAVKPVTEEPGMAKIPAGELQIIDKIDAAFKVAATAAATAPADDKFTVF
EAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAAEVKYAVFEAALTKAITAMS
EVQKVSQPATGAATVAAGAATTAAGAASGAATVAAGGYKV
>CAA55854.1 Allergen Bet v 3; calcium-binding protein / polcalcin [Betula
pendula]
MPCSTEAMEKAGHGHASTPRKRSLSNSSFRLRSESLNTLRLRRIFDLFDKNSDGIITVDE
LSRALNLLGLETDLSELESTVKSFTREGNIGLQFEDFISLHQSLNDSYFAYGGEDEDDNE
EDMRKSILSQEEADSFGGFKVFDEDGDGYISARELQMVLGKLGFSEGSEIDRVEKMIVSV
DSNRDGRVDFFEFKDMMRSVLVRSS
>BAA05542.1 Allergen Cry j 1; pectate lyase [Cryptomeria japonica]
MDSPCLVALLVLSFVIGSCFSDNPIDSCWRGDSNWAQNRMKLADCAVGFGSSTMGGKGGD
LYTVTNSDDDPVNPAPGTLRYGATRDRPLWIIFSGNMNIKLKMPMYIAGYKTFDGRGAQV

YIGNGGPCVFIKRVSNVIIHGLHLYGCSTSVLGNVLINESFGVEPVHPQDGDALTLRTAT
NIWIDHNSFSNSSDGLVDVTLSSTGVTISNNLFFNHHKVMLLGHDDAYSDDKSMKVTVAF
NQFGPNCGQRMPRARYGLVHVANNNYDPWTIYAIGGSSNPTILSEGNSFTAPNESYKKQV
TIRIGCKTSSSCSNWVWQSTQDVFYNGAYFVSSGKYEGGNIYTKKEAFNVENGNATPQLT
KNAGVLTCSLSKRC
>BAA05543.1 Allergen Cry j 1; pectate lyase [Cryptomeria japonica]
MDSPCLVALLVFSFVIGSCFSDNPIDSCWRGDSNWAQNRMKLADCAVGFGSSTMGGKGGD
LYTVTNSDDDPVNPAPGTLRYGATRDRPLWIIFSGNMNIKLKMPMYIAGYKTFDGRGAQV
YIGNGGPCVFIKRVSNVIIHGLYLYGCSTSVLGNVLINESFGVEPVHPQDGDALTLRTAT
NIWIDHNSFSNSSDGLVDVTLTSTGVTISNNLFFNHHKVMSLGHDDAYSDDKSMKVTVAF
NQFGPNCGQRMPRARYGLVHVANNNYDPWTIYAIGGSSNPTILSEGNSFTAPNESYKKQV
TIRIGCKTSSSCSNWVWQSTQDVFYNGAYFVSSGKYEGGNIYTKKEAFNVENGNATPHLT
QNAGVLTCSLSKRC
>BAA06172.1 Allergen Cry j 2; polygalacturonase [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>CAA56343.1 Putative Kunitz trypsin inhibitor [Glycine max]
MKSTTSLALFLLCALTSSYQPSATADIVFDTEGNPIRNGGTYYVLPVIRGKGGGIEFAKT
ETETCPLTVVQSPFEGLQRGLPLIISSPFKILDITEGLILSLKFHLCTPLSLNSFSVDRY
SQGSARRTPCQTHWLQKHNRCWFRIQRASSESNYYKLVFCTSNDDSSCGDIVAPIDREGN
RPLIVTHDQNHPLLVQFQKVEAYESSTA
>AAA19973.1 Allergen Der p 3; trypsin [Dermatophagoides pteronyssinus]
MIIYNILIVLLLAINTLANPILPASPNATIVGGEKALAGECPYQISLQSSSHFCGGTILD
EYWILTAAHCVAGQTASKLSIRYNSLKHSLGGEKISVAKIFAHEKYDSYQIDNDIALIKL
KSPMKLNQKNAKAVGLPAKGSDVKVGDQVRVSGWGYLEEGSYSLPSELRRVDIAVVSRKE
CNELYSKANAEVTDNMICGGDVANGGKDSCQGDSGGPVVDVKNNQVVGIVSWGYGCARKG
YPGVYTRVGNFIDWIESKRSQ
>AAA68279.1 Allergen Dol m 2; hyaluronidase [Dolichovespula maculata]
SERPKRVFNIYWNVPTFMCHQYGLYFDEVTNFNIKHNSKDDFQGDKISIFYDPGEFPALL
PLKEGNYKIRNGGVPQEGNITIHLQRFIENLDKTYPNRNFNGIGVIDFERWRPIFRQNWG
NMMIHKKFSIDLVRNEHPFWDKKMIELEASKRFEKYARLFMEETLKLAKKTRKQADWGYY
GYPYCFNMSPNNLVPDCDATAMLENDKMSWLFNNQNVLLPSVYIRHELTPDQRVGLVQGR
VKEAVRISNNLKHSPKVLSYWWYVYQDDTNTFLTETDVKKTFQEIAINGGDGIIIWGSSS
DVNSLSKCKRLREYLLTVLGPITVNVTETVN
>AAB60215.1 Allergen Der p 1; cysteine protease [Dermatophagoides
pteronyssinus]
MKIVLAIASLLALSAVYARPSSIKTFEEYKKAFNKSYATFEDEEAARKNFLESVKYVQSN
GGAINHLSDLSLDEFKNRFLMSAEAFEHLKTQFDLNAETNACSINGNAPAEIDLRQMRTV
TPIRMQGGCGSCWAFSGVAATESAYLAYRNQSLDLAEQELVDCASQHGCHGDTIPRGIEY
IQHNGVVQESYYRYVAREQSCRRPNAQRFGISNYCQIYPPNVNKIREALAQTHSAIAVII
GIKDLDAFRHYDGRTIIQRDNGYQPNYHAVNIVGYSNAQGVDYWIVRNSWDTNWGDNGYG
YFAANIDLMMIEEYPYVVIL
>AAA20065.1 Allergen Amb p 5; unknown function [Ambrosia psilostachya]
MNNEKNVSFEFIGSTDEVDEIKLLPCAWAGNVCGEKRAYCCSDPGRYCPWQVVCYESSEI
CSQKCGKMRMNVTKNTI
>AAA20067.1 Allergen Amb p V allergen [Ambrosia psilostachya]
MNNEKNVSFEFIGSTDEVDEIKLLPCAWAGNVCGEKRAYCCSDPGRYCPWQVVCYESSKI

CSQKCGKMRMNVTKNTI
>AAA20064.1 Allergen Amb p 5; unknown function [Ambrosia psilostachya]
MNNEKNVSFEFIGSTNEVDEIKVMACYAAGSICGEKRGYCSSDPGRYCPWQVVCYESRKI
CAKNAAKMRMNVTKNTI
>AAA20066.1 Allergen Amb p V allergen [Ambrosia psilostachya]
MNNEKNVSFEFIGSTNEVDEIKVMACYAAGSICGEKRGYSSSDPGRYCPWQVVCYESRKI
CAKNAAKMRMNVTKNTI
>AAA20068.1 Allergen Amb p V allergen [Ambrosia psilostachya]
MNNEKNVSFEFIGSTNEVDEIKVMACYAAGSICGEKRGYCCTNPGRYCPWQVVCYESRKI
CAKNAAKMRMNVTKNTI
>BAA07020.1 Allergen Cry j 1; pectate lyase [Cryptomeria japonica]
MDSPCLVALLVFSFVIGSCFSDNPIDSCWRGDSNWAQNRMKLADCAVGFGSSTMGGKGGD
LYTVTNSDDDPVNPAPGTLRYGATRDRPLWIIFSGNMNIKLKMPMYIAGYKTFDGRGAQV
YIGNGGPCVFIKRVSNVIIHGLYLYGCSTSVLGNVLINESFGVEPVHPQDGDALTLRTAT
NIWIDHNSFSNSSDGLVDVTLTSTGVTISNNLFFNHHKVMLLGHDDAYSDDKSMKVTVAF
NQFGPNCGQRMPRARYGLVHVANNNYDPWTIYAIGGSSNPTILSEGNSFTAPNESYKKQV
TIRIGCKTSSSCSNWVWQSTQDVFYNGAYFVSSGKYEGGNIYTKKEAFNVENGNATPQLT
KNAGVLTCSLSKRC
>CAA54696.1 Allergen Bet v 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Betula pendula]
MGVFNYEDEATSVIAPARLFKSFVLDADNLIPKVAPENVSSAENIEGNGGPGTIKKITFP
EGSHFKYMKHRVDEIDHANFKYCYSIIEGGPLGDTLEKISYEIKIVAAPGGGSILKITSK
YHTKGDISLNEEEIKAGKEKGAGLFKAVENYLVAHPNAYN
>CAA54695.1 Allergen 1 Sc2 [Betula pendula]
GVFDYEGETTSVIPAARLFKAFILDGDNLIPKVAPQAVSCVENIEGNGGPGTIKKITFPE
GSPFKYVKERVDEVDRVNFKYSYSVIEGGAVGDTLEKICNEIKIVPAPGGGSILKISNKY
HTKGNHEMKAEQIKASKEKAEALFRAVESYLLAHSDAYN
>CAA54694.1 Allergen 1 Sc1 [Betula pendula]
MGVFDYEGETTSVIPAARLFKAFILDGDNLIPKVAPQTVSCVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHVNFKYSYSVIEGGAVGDTLEKICNEIKIVPAPGGGSILKISNK
YHTKGNHEMKAEQIKASKEKAEALFRAVESYLLAHSDAYN
>A60373 Putative pollen allergen (clone 7.2) - Kentucky bluegrass
(fragment) [Poa pratensis]
EFPGELQVIDKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYQSYKFIPAL
EAAVKQSYAATVATAPAVKYTVFETALKKAITAMAQAQKAAKPAAAVTGIATSAVGAATG
AATAAAGGYKA
>AAB29344.1 Putative 36 kda allergen {peptide 143-111} [Blattella
germanica]
APPGCSNHFNLETVFGNFVK
>AAB29345.1 Putative 36 kda allergen {peptide 143-115} [Blattella
germanica]
GLNICQIDCNKIQSLPXLVFTIGGD
>P35775.1 Allergen Sol i 2; unknown function [Solenopsis invicta]
MKSFVLATCLLGFAQIIYADNKELKIIRKDVAECLRTLPKCGNQPDDPLARVDVWHCAMA
KRGVYDNPDPAVIKERSMKMCTKIITDPANVENCKKVASRCVDRETQGPKSNRQKAVNII
GCALRAGVAETTVLARKK
>P35781.1 Allergen Vesp c 5; unknown function, antigen 5 [Vespa crabro]
NNYCKIKCRSGIHTLCKYGTSTKPNCGKNVVKASGLTKQENLEILKQHNEFRQKVARGLE
TRGNPGPQPPAKSMNTLVWNDELAQIAQVWANQCNYGHDNCRNSAKYSVGQNIAEGSTTA
DNFGSVSNMVKMWEDEVKDYQYGSPKNKLNKVGHYTQMVWAKTKEIGCGSIKYIENGWHR
HYLVCNYGPAGNVGNEPIYERK
>P35782.1 Allergen Vesp c 5; unknown function, antigen 5 [Vespa crabro]
NNYCKIKCRSGIHTLCKYGTSTKPNCGKNVVKASGLTKQENLEILKQHNEFRQKVARGLE
TRGNPGPQPPAKSMNTLVWNDELAQIAQVWANQCNYGHDNCRNSAKYSVGQNIAEGSTSA

DNFVNVSNMVKMWEDEVKDYQYGSPKNKLNKVGHYTQMVWAKTKEIGCGSEDYIEDGWHR
HYLVCNYGPAGNVGNEPIYERK
>P35780.1 Allergen Pol f 5; unknown function, antigen 5 [Polistes fuscatus]
VDYCKIKCSSGIHTVCQYGESTKPSKNCADKVIKSVGPTEEEKKLIVNEHNRFRQKVAQG
LETRGNPGPQPAASDMNNLVWNDELAHIAQVWASQCQILVHDKCRNTAKYQVGQNIAYAG
GSKLPDVVSLIKLWENEVKDFNYNKGITKQNFGKVGHYTQMIWAKTKEIGCGSLKYMKNN
MQHHYLICNYGPAGNYLGQLPYTKK
>P35783.1 Allergen Ves f 5; unknown function, antigen 5 [Vespula flavopilosa]
NNYCKIKCLKGGVHTACKYGSLKPNCGNKVVVSYGLTKQEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWNDELAYVAQVWANQCQYGHDTCRDIAKYQVGQNVALTGSTA
AKYDDPVKLVKMWEDEVKDYNPKKKFSGNNFLKTGHYTQMVWANTKEVGCGSIKFIQEKW
HKHYLVCNYGPSGNFQNEELYQTK
>P35784.1 Allergen Ves g 5; unknown function, antigen 5 [Vespula germanica]
NNYCKIKCLKGGVHTACKYESLKPNCANKKVVAYGLTKQEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWSDELAYIAQVWANQCQYGHDTCRDVAKYPVGQNVALTGSTA
AKYDNPVKLVKMWEDEVKDYNPKKKFSENNFLKIGHYTQMVWANTKEVGCGSIKYIQDKW
HKHYLVCNYGPSGNFGNEELYQTK
>P35760.1 Allergen Ves m 5; unknown function, antigen 5 [Vespula maculifrons]
NNYCKIKCLKGGVHTACKYGSLKPNCGNKKVVSYGLTKQEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWSDELAYIAQVWANQCQYGHDTCRDVAKYQVGQNVALTGSTA
AVYNDPVKLVKMWEDEVKDYNPKKKFSENNFLKIGHYTQMVWANTKEVGCGSIKYIQENW
HKHYLVCNYGPSGNFQNEELYQTK
>P35785.1 Allergen Ves p 5; unknown function, antigen 5 [Vespula pensylvanica]
NNYCKIKCLKGGVHTACKYGSLKPNCGNKIVVSYGLTKEEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWNDELAYVAQVWANQCQYGHDTCRDVAKYPVGQNVALTGSTA
DKYDNPVKLVKMWEDEVKDYNPKKKFSENNFNKIGHYTQMVWANTKEIGCGSIKYIQNEW
HKHYLVCNYGPSGNFGNEELYQTK
>P35786.1 Allergen Ves s 5; unknown function, antigen 5 [Vespula squamosa]
VDYCKIKCLKGGVHTACKYGTSTKPNCGNMVVKSYGVTQAEKQEILKIHNDFRNKVARGL
ETRGNPGPQPPAKNMNNLVWNNELANIAQIWASQCKYGHDTCKDTTKYNVGQNIAVSSST
AAVYENVGNLVKAWENEVKDFNPTISWEQNEFKKIGHYTQMVWAKTKEIGCGSIKYVDNN
WYTHYLVCNYGPAGNFGNQEVYERK
>P35787.1 Allergen Ves vi 5; unknown function, antigen 5 [Vespula vidua]
KVNYCKIKCLKGGVHTACKYGTSTKPNCGKMVVKAYGLTEAEKQEILKVHNDFRQKVAKG
LETRGNPGPQPPAKNMNNLVWNDELANIAQVWASQCNYGHDTCKDTEKYPVGQNIAKRST
TAALFDSPGKLVKMWENEVKDFNPNIEWSKNNLKKTGHYTQMVWAKTKEIGCGSVKYVKD
EWYTHYLVCNYGPSGNFRNEKLYEKK
>AAA28302.1 Allergen Dol m 5; unknown function, antigen 5 [Dolichovespula maculata]
PIINLSFGEANNYCKIKCSRGIHTLCKFGTSMKPNCGSKLVKVHGVSNDEKNEIVNRHNQ
FRQKVAKGLETRGNPGPQPPAKNMNVLVWNDELAKIAQTWANQCSFGHDQCRNTEKYQVG
QNVAIASTTGNSYATMSKLIEMWENEVKDFNPKKGTMGDNNFSKVGHYTQMVWGKTKEIG
CGSVKYIENNWHTHYLVCNYGPAGNYMDQPIY
>AAC37218.1 Allergen Aed a 1; apyrase [Aedes aegypti]
MAGRPGYSAVIFLYVVSVAVIARATDNMPPNKDVSKLFPLTLIHINDLHARFEETNMKSN
ACTQKDQCIAGIARVYQKIKDLLKEYESKNPIYLNAGDNFQGTLWYNLLRWNVTADFIKK
LKPAAMTLGNHEFDHTPKGLAPYLAELNKEGIPTIVANLVMNNDPDLKSSKIPKSIKLTV
GKRKIGIIGVLYDKTHEIAQTGKVTLSNAVEAVRREAAALKKDKIDIIVVLSHCSYEEDK

KIAAEAGDDIDVIVGAHSHSFLYSPDSKQPHDPKDKVEGPYPTIVESKNKRKIPIVQAKS
FGKYVGRLTLYFDDTGEVQHWEGYPVFIDHKVQQDPQILKDLVPWREKVEAIGSTVVGET
KIELDRDSCRDQECTLGVLYADGFADQYTNDTFRPFAIIQAGNFRNPIKVGKITNGDIIE
AAPFGSTADLIRLKGADIWDVAEHSFALDDEGRTNCLQVSGLRIVIDISKPIRSRVKKIE
VMDYTNPKSDELKPLDKQAEYYIVVPSYLADGKDGFSAMKRATARRTGPLDSDVFKNYVE
KIKKVDNLKLGRVIVCKGSKCT
>Q08169.1 Allergen Api m 2; hyaluronidase [Apis mellifera]
MSRPLVITEGMMIGVLLMLAPINALLLGFVQSTPDNNKTVREFNVYWNVPTFMCHKYGLR
FEEVSEKYGILQNWMDKFRGEEIAILYDPGMFPALLKDPNGNVVARNGGVPQLGNLTKHL
QVFRDHLINQIPDKSFPGVGVIDFESWRPIFRQNWASLQPYKKLSVEVVRREHPFWDDQR
VEQEAKRRFEKYGQLFMEETLKAAKRMRPAANWGYYAYPYCYNLTPNQPSAQCEATTMQE
NDKMSWLFESEDVLLPSVYLRWNLTSGERVGLVGGRVKEALRIARQMTTSRKKVLPYYWY
KYQDRRDTDLSRADLEATLRKITDLGADGFIIWGSSDDINTKAKCLQFREYLNNELGPAV
KRIALNNNANDRLTVDVSVDQV
>P32936.2 Allergen Alpha-amylase/trypsin inhibitor CMb precursor
(Chloroform/methanol-soluble protein CMb) [Hordeum vulgare]
MASKSSCDLLLAAVLVSIFAAVAAVGSEDCTPWTATPITPLPSCRDYVEQQACRIETPGP
PYLAKQQCCGELANIPQQCRCQALRFFMGRKSRPDQSGLMELPGCPREVQMDFVRILVTP
GFCNLTTVHNTPYCLAMDEWQWNRQFCSS
>CAA57160.1 Putative LepdI allergen, partial [Lepidoglyphus destructor]
IHRGEKMTLEAKFAANQDTAKVTIKVLAKVAGTTIQVPGLETDGCKFIKCPVKKGEALDF
IYSGTIPAITPKVKADVTAELIGDHGVMACGTVHGQVE
>AAA60330.1 Allergen Met e 1; tropomyosin [Metapenaeus ensis]
MKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQVQESLLKANNQ
LVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAADESERMRKVL
ENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAEERAETGESKI
VELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAEFAERSVQKLQ
KEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>CAA57342.1 Allergen Cand a 1; alcohol dehydrogenase [Candida albicans]
MSEQIPKTQKAVVFDTNGGQLVYKDYPVPTPKPNELLIHVKYSGVCHTDLHARKGDWPLA
TKLPLVGGHEGAGVVVGMGENVKGWKIGDFAGIKWLNGSCMSCEFCQQGAEPNCGEADLS
GYTHDGSFEQYATADAVQAAKIPAGTDLANVAPILCAGVTVYKALKTADLAAGQWVAISG
AGGGLGSLAVQYARAMGLRVVAIDGGDEKGEFVKSLGAEAYVDFTKDKDIVEAVKKATDG
GPHGAINVSVSEKAIDQSVEYVRPLGKVVLVGLPAHAKVTAPVFDAVVKSIEIKGSYVGN
RKDTAEAIDFFSRGLIKCPIKIVGLSDLPEVFKLMEEGKILGRYVLDTSK
>S43242 Putative allergen-like protein Syr v I isoform 1 - Syringa
vulgaris [Syringa vulgaris]
EDVPQPPIPQFHIQGQVYCDTCRARFITELSEFIPGASIRLQCKDRENGKITFTEIGYTR
AEGLYSMLVEGDHKNEFCEITLISSGREDCDEIPVEGWAKPSLKFKLNTVNGTTRTINPI
GFFKKEALPKCTQVYNKLGMYPPNM
>S43243 Putative allergen-like protein Syr v I isoform 2 - Syringa
vulgaris [Syringa vulgaris]
EDVPQPPVPQFHIQGQVYCDTCRARFITELSEFIPGAGIRLQCKDGEHGKITFTEIGYTR
AEGLYSMLVEGDHKNEFCEITLLSSSRKDCEEIPIEGWVKPSLKFILNTVNGTTRTINPL
GFFKKEVLPKCPQVFNKLGMYPPNM
>S43244 Putative allergen-like protein Syr v I isoform 3 - Syringa
vulgaris [Syringa vulgaris]
EDVPQPPVPQFHIQGQVYCDTCRARFITELSEFIPGASIRLQCKDGENGKITFTEIGYTR
AEGLYSMLVEGDHKNEFCEITLISSGRKDCDEIPVEGWVKPSLKFKLNTVNGTTRTINPI
GFFKKEALPKCTQVYNKLGMYPPNM
>AAB30434.1 Allergen Can f 3 ; serum albumin [Canis familiaris]
LSSAKERFKCASLQKFGDRAFKAWSVARLSQRFPKADFAEISKVVTDLTKVHKECCHGDL
LECADDRADLAKYMCENQDSISTKLKECCDKPVLEKSQCLAEVERDELPGDLPSLAADFV
EDKEVCKNYQEAKDVFLGTFLYEYSRRHPEYSVSLLLRLAKEYEATLEKCCATDDPPTCY

AKVLDEFKPLVDEPQNLVKTNCELFEKLGEYGFQNALLVRYTKKAPQVSTPTLVVEVSRK
LGKVGTKCCKKPESERMSCADDFLS
>AAB07620.1 Putative Asp FII [Aspergillus fumigatus]
SARDEAGLNEAVELARHAKAHILRWGNESEIYRKYFGNRPTMEAVGAYDVIVNGDKANVL
FRCDNPDGNCALEGWGGHWRGANATSETVICDRSYTTRRWLVSMCSQGYTVAGSETNTFW
ASDLMHRLYHVPAVGQGWVDHFADGYDEVIALAKSNGTESTHDSEAFEYFALEAYAFDIA
APGVGCAGESHGPDQGHDTGSASAPASTSTSSSSSGSGSGATTTPTDSPSATIDVPSNCH
THEGGQLHCT
>CAA59370.1 Allergen Par j 1; lipid transfer protein (LTP) type 1
[Parietaria judaica]
MRTVSARSSVALVVIVAAVLVWTSSASVAPAPAPGSEETCGTVVGALMPCLPFVQGKEKE
PSKGCCSGAKRLDGETKTGPQRVHACECIQTAMKTYSDIDGKLVSEVPKHCGIVDSKLPP
IDVNMDCKTLGVLHYKGN
>P40918.1 Heat shock 70 kDa protein (Allergen Cla h 4) (Cla h IV)
[Cladosporium herbarum]
MAPAIGIDLGTTYSCVGIYRDDRIEIIANDQGNRTTPSFVAFTDTERLIGDSAKNQVAIN
PHNTVFDAKRLIGRKFQDAEVQADMKHFPFKVIEKAGKPVTQVEFKGETKDFTPEEISSM
ILTKMRETAESYLGGTVNNAVITVPAYFNDSQRQATKDAGLIAGLNVLRIINEPTAAAIA
YGLDKKQEGEKNVLIFDLGGGTFDVSFLTIEEGIFEVKSTAGDTHLGGEDFDNRLVNHFS
NEFKRKHKKDLSDNARALRRLRTACERAKRTLSSSAQTSIEIDSLFEGIDFFTSNTRARF
EEVGQDLFRGNMEPGERTLRDDKIDKSSVHEIVLGGGSTRIPKVQKLVSDFFNGKEPCKS
INPDEAVAYGAAVQAAILSGDTSSKSTKEILLLDVAPLSLGIETAGGVMTALIKRNTTIP
TKKSETFSTFSDNQPGVLIQVFEGERARTKDINLMGKFELSGIRPAPRGVPQIEVTFDLD
ANGIMNVSALEKGTGKTNKIVITNDKGRLSKEEIERMLADAEKYKEEDEAEAGRIQAKNG
LESYAYSLKNTVSDPKVEEKLSAEDKETLTGAIDKTVAWIDENQTATKEEYEAEQKQLES
VANPVMMKIYGAEGGAPGGMPGQGAGAPPPGAGDDGPTVEEVD
>P16311.2 Allergen Der f 1; cysteine protease [Dermatophagoides farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQRCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDNGYQPNYHAVNIVGYGSTQGDDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>CAA26478.1 Putative Glycinin-like protein product [Glycine max]
MGKPFTLSLSSLCLLLLSSACFAISSSKLNECQLNNLNALEPDHRVESEGGLIQTWNSQH
PELKCAGVTVSKLTLNRNGLHSPSYSPYPRMIIIAQGKGALGVAIPGCPETFEEPQEQSN
RRGSRSQKQQLQDSHQKIRHFNEGDVLVIPPSVPYWTYNTGDEPVVAISLLDTSNFNNQL
DQTPRVFYLAGNPDIEYPETMQQQQQQKSHGGRKQGQHQQEEEEEGGSVLSGFSKHFLAQ
SFNTNEDIAEKLESPDDERKQIVTVEGGLSVISPKWQEQQDEDEDEDEDDEDEQIPSHPP
RRPSHGKREQDEDEDEDEDKPRPSRPSQGKRNKTGQDEDEDEDEDQPRKSREWRSKKTQP
RRPRQEEPRERGCETRNGVEENICTLKLHENIARPSRADFYNPKAGRISTLNSLTLPALR
QFQLSAQYVVLYKNGIYSPHWNLNANSVIYVTRGQGKVRVVNCQGNAVFDGELRRGQLLV
VPQNFVVAEQAGEQGFEYIVFKTHHNAVTSYLKDVFRAIPSEVLAHSYNLRQSQVSELKY
EGNWGPLVNPESQQGSPRVKVA
>CAA27052.1 Allergen glutenin [Triticum aestivum]
MAKRLVLFVAVVVALVALTVAEGEASEQLQCERELQELQERELKACQQVMDQQLRDISPE
CHPVVVSPVAGQYEQQIVVPKGGSFYPGETTPPQQLQQRIFWGIPALLKRYYPSVTSPQQ
VSYYPGQASPQRPGQGQQPGQGQQSGQGQQGYYPTSPQQPGQWQQPEQGQPGYYPTSPQQ
PGQLQQPAQGQQPGQGQQGRQPGQGQPGYYPTSSQLQPGQLQQPAQGQQGQQPGQGQQGQ
QPGQGQQPGQGQQGQQPGQGQQPGQGQQGQQLGQGQQGYYPTSLQQSGQGQPGYYPTSLQ
QLGQGQSGYYPTSPQQPGQGQQPGQLQQPAQGQQPEQGQQGQQPGQGQQGQQPGQGQQPG
QGQPGYYPTSPQQSGQGQPGYYPTSSQQPTQSQQPGQGQQGQQVGQGQQAQQPGQGQQPG
QGQPGYYPTSPLQSGQGQPGYYLTSPQQSGQGQQPGQLQQSAQGQKGQQPGQGQQPGQGQ
QGQQPGQGQQGQQPGQGQPGYYPTSPQQSGQGQQPGQWQQPGQGQPGYYPTSPLQPGQGQ

PGYDPTSPQQPGQGQQPGQLQQPAQGQQGQQLAQGQQGQQPAQVQQGQQPAQGQQGQQLG
QGQQGQQPGQGQQPAQGQQGQQPGQGQQGQQPGQGQQPGQGQPWYYPTSPQESGQGQQPG
QWQQPGQWQQPGQGQPGYYLTSPLQLGQGQQGYYPTSLQQPGQGQQPGQWQQSGQGQHGY
YPTSPQLSGQGQRPGQWLQPGQGQQGYYPTSPQQSGQGQQLGQWLQPGQGQQGYYPTSLQ
QTGQGQQSGQGQQGYYSSYHVSVEHQAASLKVAKAQQLAAQLPAMCRLEGGDALSASQ
>2008179A Allergen major allergen Par j I [Parietaria judaica]
MVRALMPCLPFVQGKEKEPSKGCCSGAKRLDGETKTGPQRVHACECIQTAMKTYSDIDGK
LVSEVPKHCGIVDSKLPPIDVNMDCKTVGVVPRQPQLPVSLRHGPVTGPSRSRPPTKHGW
RDPRLEFRPPHRKKPNPAFSTLG
>CAA58646.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKVGKEKAHGLFKLIESYLKDHPDAYN
>CAA26040.1 Allergen Gal d 3; ovotransferrin [Gallus gallus]
MKLILCTVLSLGIAAVCFAAPPKSVIRWCTISSPEEKKCNNLRDLTQQERISLTCVQKAT
YLDCIKAIANNEADAISLDGGQVFEAGLAPYKLKPIAAEIYEHTEGSTTSYYAVAVVKKG
TEFTVNDLQGKNSCHTGLGRSAGWNIPIGTLLHWGAIEWEGIESGSVEQAVAKFFSASCV
PGATIEQKLCRQCKGDPKTKCARNAPYSGYSGAFHCLKDGKGDVAFVKHTTVNENAPDLN
DEYELLCLDGSRQPVDNYKTCNWARVAAHAVVARDDNKVEDIWSFLSKAQSDFGVDTKSD
FHLFGPPGKKDPVLKDFLFKDSAIMLKRVPSLMDSQLYLGFEYYSAIQSMRKDQLTPSPR
ENRIQWCAVGKDEKSKCDRWSVVSNGDVECTVVDETKDCIIKIMKGEADAVALDGGLVYT
AGVCGLVPVMAERYDDESQCSKTDERPASYFAVAVARKDSNVNWNNLKGKKSCHTAVGRT
AGWVIPMGLIHNRTGTCNFDEYFSEGCAPGSPPNSRLCQLCQGSGGIPPEKCVASSHEKY
FGYTGALRCLVEKGDVAFIQHSTVEENTGGKNKADWAKNLQMDDFELLCTDGRRANVMDY
RECNLAEVPTHAVVVRPEKANKIRDLLERQEKRFGVNGSEKSKFMMFESQNKDLLFKDLT
KCLFKVREGTTYKEFLGDKFYTVISNLKTCNPSDILQMCSFLEGK
>CAA60533.1 Putative A5A4B3 subunit [Glycine soja]
MGKPFTLSLSSLCLLLLSSACFAISSSKLNECQLNNLNALEPDHRVESEGGLIQTWNSQH
PELKCAGVTVSKLTLNRNGLHLPSYSPYPRMIIIAQGKGALGVAIPGCPETFEEPQEQSN
RRGSRSQKQQLQDSHQKIRHFNEGDVLVIPPGVPYWTYNTGDEPVVAISLLDTSNFNNQL
DQTPRVFYLAGNPDIEYPETMQQQQQQKSHGGRKQGQHQQEEEEEGGSVLSGFSKHFLAQ
SFNTNEDIAEKLQSPDDERKQIVTVEGGLSVISPKWQEQQDEDEDEDEDDEDEQIPSHPP
RRPSHGKREQDEDEDEDEDKPRPSRPSHGKREQDQDQDEDEDEDEDQPRKSREWRSKKTQ
PRRPRQEEPRERGCETRNGVEENICTLKLHENIARPSRADFYNPKAGRISTLNSLTLPAL
RQFQLSAQYVVLYKNGIYSPHWNLNANSVIYVTRGQGKVRVVNCQGNAVFDGELRRGQLL
VVPQNFVVAEQAGEQGFEYIVFKTHHNAVTSYLKDVFRAIPSEVLAHSYNLRQSQVSELK
YEGNWGPLVNPESQQGSPRVKVA
>AAB32224.1 Allergen Der p 8; glutathione S-transferase [Dermatophagoides pteronyssinus]
MSQPILGYWDIRGYAQPIRLLLTYSGVDFVDKRYQIGPAPDFDRSEWLNEKFNLGLDFPN
LPYYIDGDMKMTQTFAILRYLGRKYKLNGSNDHEEIRISMAEQQTEDMMAAMIRVCYDAN
CDKLKPDYLKSLPDCLKLMSKFVGEHAFIAGANISYVDFNLYEYLCHVKVMVPEVFGQFE
NLKRYVERMESLPRVSDYIKKQQPKTFNAPTSKWNASYA
>BAA06905.1 Allergen Cuc m 1; serine protease (cucumisin) [Cucumis melo]
MSSSLIFKLFFFSLFFSNRLASRLDSDDDGKNIYIVYMGRKLEDPDSAHLHHRAMLEQVV
GSTFAPESVLHTYKRSFNGFAVKLTEEEAEKIASMEGVVSVFLNEMNELHTTRSWDFLGF
PLTVPRRSQVESNIVVGVLDTGIWPESPSFDDEGFSPPPPKWKGTCETSNNFRCNRKIIG
ARSYHIGRPISPGDVNGPRDTNGHGTHTASTAAGGLVSQANLYGLGLGTARGGVPLARIA
AYKVCWNDGCSDTDILAAYDDAIADGVDIISLSVGGANPRHYFVDAIAIGSFHAVERGIL
TSNSAGNGGPNFFTTASLSPWLLSVAASTMDRKFVTQVQIGNGQSFQGVSINTFDNQYYP
LVSGRDIPNTGFDKSTSRFCTDKSVNPNLLKGKIVVCEASFGPHEFFKSLDGAAGVLMTS
NTRDYADSYPLPSSVLDPNDLLATLRYIYSIRSPGATIFKSTTILNASAPVVVSFSSRGP
NRATKDVIKPDISGPGVEILAAWPSVAPVGGIRRNTLFNIISGTSMSCPHITGIATYVKT

YNPTWSPAAIKSALMTTASPMNARFNPQAEFAYGSGHVNPLKAVRPGLVYDANESDYVKF
LCGQGYNTQAVRRITGDYSACTSGNTGRVWDLNYPSFGLSVSPSQTFNQYFNRTLTSVAP
QASTYRAMISAPQGLTISVNPNVLSFNGLGDRKSFTLTVRGSIKGFVVSASLVWSDGVHY
VRSPITITSLV
>CAA23682.1 Allergen Gal d 2; ovalbumin [Gallus gallus]
MGSIGAASMEFCFDVFKELKVHHANENIFYCPIAIMSALAMVYLGAKDSTRTQINKVVRF
DKLPGFGDSIEAQCGTSVNVHSSLRDILNQITKPNDVYSFSLASRLYAEERYPILPEYLQ
CVKELYRGGLEPINFQTAADQARELINSWVESQTNGIIRNVLQPSSVDSQTAMVLVNAIV
FKGLWEKTFKDEDTQAMPFRVTEQESKPVQMMYQIGLFRVASMASEKMKILELPFASGTM
SMLVLLPDEVSGLEQLESIINFEKLTEWTSSNVMEERKIKVYLPRMKMEEKYNLTSVLMA
MGITDVFSSSANLSGISSAESLKISQAVHAAHAEINEAGREVVGSAEAGVDAASVSEEFR
ADHPFLFCIKHIATNAVLFFGRCVSP
>CAA60628.1 Allergen Bet v 4; calcium-binding protein, polcalcin [Betula pendula]
MADDHPQDKAERERIFKRFDANGDGKISAAELGEALKTLGSITPDEVKHMMAEIDTDGDG
FISFQEFTDFGRANRGLLKDVAKIF
>AAB01362.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHY
HTKGDVEIKEEHVKAGKEKAHGLFKLIESYLKGHPDAYN
>CAA59279.1 Allergen Fel d 2; serum albumin [Felis catus]
MKWVTFISLLLLFSSAYSRGVTRREAHQSEIAHRFNDLGEEHFRGLVLVAFSQYLQQCPF
EDHVKLVNEVTEFAKGCVADQSAANCEKSLHELLGDKLCTVASLRDKYGEMADCCEKKEP
ERNECFLQHKDDNPGFGQLVTPEADAMCTAFHENEQRFLGKYLYEIARRHPYFYAPELLY
YAEEYKGVFTECCEAADKAACLTPKVDALREKVLASSAKERLKCASLQKFGERAFKAWSV
ARLSQKFPKAEFAEISKLVTDLAKIHKECCHGDLLECADDRADLAKYICENQDSISTKLK
ECCGKPVLEKSHCISEVERDELPADLPPLAVDFVEDKEVCKNYQEAKDVFLGTFLYEYSR
RHPEYSVSLLLRLAKEYEATLEKCCATDDPPACYAHVFDEFKPLVEEPHNLVKTNCELFE
KLGEYGFQNALLVRYTKKVPQVSTPTLVEVSRSLGKVGSKCCTHPEAERLSCAEDYLSVV
LNRLCVLHEKTPVSERVTKCCTESLVNRRPCFSALQVDETYVPKEFSAETFTFHADLCTL
PEAEKQIKKQSALVELLKHKPKATEEQLKTVMGDFGSFVDKCCAAEDKEACFAEEGPKLV
AAAQAALA
>CAA88833.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGATIKSISHY
HPKGNIEIKEEHVKVGKEKGHGLFKLIESYLKGHPDAYN
>CAA59338.1 Putative low molecular weight glutenin [Triticum aestivum]
FALIAVVATSTIAQMETSCIPGLERPWQQQPLPPQQTLFPQQQPFPQQQPPFSQQQPSFS
QQQPPFSQQQPILPEPPFSLQQQPVLPQQSPFSQQQLVLPPQQQQQLPQQQISIVQPSVL
QQLNPCKVFLQQQCSPVAMPQRLARSQMWQQSRCHVMQQQCCQQLSQIPEQSRYDAICAI
TYSIILQEQQQGFVQAQQQQPQQSGQGVSQSQQQSQQQLGQCSFQQPQQ
>CAA59339.1 Putative low molecular weight glutenin [Triticum aestivum]
HIPSLEKPLQQQPLPLQQILWYQQQQPIQQQPQPFPQQPPCSQQQQPPLSQQQQPPFSQQ
QPPFSQQQQPILPQQPPFSQQQQQFPQQQQPLLPQQPPFSQQQPPFSQQQQQPPFSQQQQ
QPILLQQPPFSQHQQPVLPQQQIPSVQPSILQQLNPCKVFLQQQCSPVAMPQSLARSQML
WQSSCHVMQQQCCRQLPQIPEQSRYDAIRAIIYSIVLQEQQHGQGLNQPQQQQPQQSVQG
VSQPQQQQKQLGQCSFQQPQQ
>CAA59340.1 Putative low molecular weight glutenin [Triticum aestivum]
HIPSLEKPSQQQPLPLQQILWYHQQQPIQQQPQPFPQQPPCSQQQQPPLSQQQQPPFSQQ
QPPFSQQELPILPQQPPFSQQQQPQFSQQQQPFPQQQQPLLLQQPPFSQQRPPFSQQQQQ
PVLPQQPPFSQQQQQQPILPQQPPFSLHQQPVLPQQQIPYVQPSILQQLNPCKVFLQQQC
SPVAMPQSLARSQMLWQSSCHVMQQQCCQQLPRIPEQSRYDAIRAIIYSIVLQEQQHGQG

FNQPQQQQPQQSVQGVSQPQQQQKQLGQCSFQQPQQ
>AAB48072.1 Allergen Ves v 1; phospholipase A1 [Vespula vulgaris]
MEENMNLKYLLLFVYFVQVLNCCYGHGDPLSYELDRGPKCPFNSDTVSIIIETRENRNRD
LYTLQTLQNHPEFKKKTITRPVVFITHGFTSSASETNFINLAKALVDKDNYMVISIDWQT
AACTNEAAGLKYLYYPTAARNTRLVGQYIATITQKLVKHYKISMANIRLIGHSLGAHASG
FAGKKVQELKLGKYSEIIGLDPARPSFDSNHCSERLCETDAEYVQIIHTSNYLGTEKTLG
TVDFYMNNGKNQPGCGRFFSEVCSHSRAVIYMAECIKHECCLIGIPKSKSSQPISSCTKQ
ECVCVGLNAKKYPSRGSFYVPVESTAPFCNNKGKII
>CAA24933.1 Allergen HMW gluten-like protein product [Triticum aestivum]
EKLGQGQQPRQWLQPRQGQQGYYPTSPQQSGQGQQLGQGQQGYYPTSPQQSGQGQQGYDS
PYHVSAEHQAASLKVAKAQQLAAQLPAMCRLEGGDALLASQ
>AAA78904.1 Allergen Blo t 12; chitin binding protein [Blomia tropicalis]
MKSVLIFLVAIALFSANIVSADEQTTRGRHTEPDDHHEKPTTQCTHEETTSTQHHHEEVV
TTQTPHHEEKTTTEETHHSDDLIVHEGGKTYHVVCHEEGPIHIQEMCNKYIICSKSGSLW
YITVMPCSIGTKFDPISRNCVLDN
>AAB32842.1 Allergen Der p 5; unknown function [Dermatophagoides pteronyssinus]
MKFIIAFFVATLAVMTVSGEDKKHDYQNEFDFLLMERIHEQIKKGELALFYLQEQINHFE
AKPTKEMKDKIVAEMDTIIAMIDGVRGVLDRLMQRKDLDIFEQYNLEMAKKSGDILERDL
KKEEARVKKIEV
>CAA51775.1 Allergen Lol p II [Lolium perenne]
EFTVEKGSDEKNLALSIKYSKEGDAMAEVELKEHGSNEWLALKKNGDGVWEIKSDKPLKG
PFNFRFVSEKGMWNVFDDVVPADFKVGT
>CAA59419.1 Allergen Asp f 10; aspartate protease [Aspergillus fumigatus]
MVVFSKVTAVVVGLSTIVSAVPVVQPRKGFTINQVARPVTNKKTVNLPAVYANALTKYGG
TVPDSVKAAASSGSAVTTPEQYDSEYLTPVKVGGTTLNLDFDTGSADLWVFSSELSASQS
SGHAIYKPSANAQKLNGYTWKIQYGDGSSASGDVYKDTVTVGGVTAQSQAVEAASHISSQ
FVQDKDNDGLLGLAFSSINTVSPRPQTTFFDTVKSQLDSPLFAVTLKYHAPGTYDFGYID
NSKFQGELTYTDVDSSQGFWMFTADGYGVGNGAPNSNSISGIADTGTTLLLLDDSVVADY
YRQVSGAKNSNQYGGYVFPCSTKLPSFTTVIGGYNAVVPGEYINYAPVTDGSSTCYGGIQ
SNSGLGFSIFGDIFLKSQYVVFDSQGPRLGFAPQA
>CAA54587.1 Allergen Par j 1; lipid transfer protein (LTP) type 1 [Parietaria judaica]
MVRALMPCLPFVQGKEKEPSKGCCSGAKRLDGETKTGPQRVHACECIQTAMKTYSDIDGK
LVSEVPKHCGIVDSKLPPIDVNMDCKTVGVVPRQPQLPVSLRHGPVTGPSDPAHKARLER
PQIRVPPPAPEKA
>BAA04149.1 Allergen Sola t 4; serine protease inhibitor 7 [Solanum tuberosum]
MKCLFLLCLCLVPIVVFSSTFTSKNPINLPSDATPVLDVAGKELDSRLSYRIISTFWGAL
GGDVYLGKSPNSDAPCANGIFRYNSDVGPSGTPVRFIGSSSHFGQGIFENELLNIQFAIS
TSKLCVSYTIWKVGDYDASLGTMLLETGGTIGQADSSWFKIVKSSQFGYNLLYCPVTSTM
SCPFSSDDQFCLKVGVVHQNGKRRLALVKDNPLDVSFKQVQ
>AAB34365.1 Allergen Sec c 38; alpha amylase inhibitor [Secale cereale]
EQCYGESCRVGKSISNNPVPACREYV
>AAB34785.1 Allergen Pen ch 20; N-acetyl glucosaminidase / N-acetyl hexosaminidase [Penicillium chrysogenum]
GPYKTWQRIYDYDFLTNLTSSEANDIIGAEAPLWSEQVDDVTVSSVFWPRAAALGELVWS
GNRDAAGRKRTTSFTQRILNFREYLVANGVMAAALVPKYCLQHPHACDLYKNQTVMS
>CAA58755.1 Allergen Lep d 2; NPC2-like protein [Lepidoglyphus destructor]
MMKFIALFALVAVASAGKMTFKDCGHGEVTELDISGCSGDTCVIHRGQKMTLDAKFAANQ
DTNKVTIKVLAKVAGTTIQVPGLETDGCKVLKCPIKKGEALDFNYGMTIPAITPKIKADV
TAELVGDHGVMACGTIHGQVE
>CAA50008.1 Allergen Vig r 4; seed albumin [Vigna radiata var. radiata]

MSNLPYINAAFRFSSRDYEVYFFAKNKYVRLQYTPGKTEDKILTNLRLISSGFPSLAGTP
FAEPGIDSAFHTEASEAYVFSANNRAYIDYAPGTTNDKILAGPTTIAEMFPVLRNTVFAD
SIDSAFRSTKGKEVYLFKGNKYVRIDYDSKQLVGSIRNISDGFPVLNGTGFESGIDASFA
SHKEPEAYLFKGDKYVRIHFTPGKTDDTLVGDVRPILDGWPVLKAFCLCELNKPSLSCIN
HLSLVTINKAFISNVCLFFFNVTLGLEACFLS
>AAB34907.1 Allergen group 1 Car b 1=isoallergenic variant [Carpinus
betulus]
GVFNYEAETPSVMPAARLFKSYVLDFDKLIPKVAPQVISSVENVGGNGGPGTIKNITFAE
GIPFKFVKERVDEVDNANFK
>AAB34908.1 Allergen group 1 Car b 1=isoallergenic variant [Carpinus
betulus]
GVFNYEAETPSVIPAARLFKSYVLDFDKLIPKVAPQVISSVENVGGNGGPGTIKNITFAE
GIPFKFVKERVDEVDNANFK
>AAB34909.1 Allergen group 2 Car b 1=isoallergenic variant [Carpinus
betulus]
GVFNYEAETTSVIPAARLFKAFILDGNKLIPKVSPQVVSSVENVEGNGGPGTIKKITFSE
GIPVKYVKERVEEIDHTNFK
>CAA62909.1 Allergen Sin a 1; 2S albumin, conglutin [Sinapis alba]
PAGPFGIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLDDEFDFEDDMENPQGPQQ
RPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLEQQGQQGPHLQHVISRIYQTA
THLPRVCNIRQVSVCPFQKTMPGPS
>CAA62910.1 Allergen Sin a 1.0105 [Sinapis alba]
PAGPFRIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLEGEFDFEDDMENPQGPQQ
RPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLEQQGQQGPHLQHVISRIYQTA
THLPKVCNIPQVSVCPFKKTMPGPS
>CAA62911.1 Allergen Sin a 1.0106 [Sinapis alba]
PAGPFGIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLDDEFDFEDDMENPQGPQQ
RPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLGQQGQQGPQVQHVISRIYQTA
THLPKVCNIPQVSVCPFKKTMPGPS
>CAA62912.1 Allergen Sin a 1.0107 [Sinapis alba]
PAGPFRIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLDDEFDFEDDMENPQGPQQ
RPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLEQQGQQGPHLQHVISRIYQTA
THLPKVCNIPQVSVCPFKKTMPGPS
>CAA62908.1 Allergen Sin a 1.0108 [Sinapis alba]
PAGPFGIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLDDEFDFEDDMENPQGPQQ
KPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLGQQGQQGPQVQHVISRIYQTA
THLPKVCNIPQVSVCPFKKTMPGPS
>AAA80264.1 Allergen Der p 7; bactericidal permeability-increasing like
protein [Dermatophagoides pteronyssinus]
MMKLLLIAAAAFVAVSADPIHYDKITEEINKAVDEAVAAIEKSETFDPMKVPDHSDKFER
HIGIIDLKGELDMRNIQVRGLKQMKRVGDANVKSEDGVVKAHLLVGVHDDVVSMEYDLAY
KLGDLHPNTHVISDIQDFVVELSLEVSEEGNMTLTSFEVRQFANVVNHIGGLSILDPIFA
VLSDVLTAIFQDTVRAEMTKVLAPAFKKELERNNQ
>BAA11251.1 Allergen gamma-gliadin precursor [Triticum aestivum]
NIQVDPSGQVQWPQQQPFPQPHQPFSQQPQQTFPQPQQTFPHQPQQQFSQPQQPQQQFIQ
PQQPFPQQPQQTYPQRPQQPFPQTQQPQQPFPQSQQPQQPFPQPQQQFPQPQQPQQSFPQ
QQPSLIQQSLQQQLNPCKNFLLQQCKPVSLVSSLWSMILPRSDCQVMRQQCCQQLAQIPQ
QLQCAAIHSIVHSIIMQQEQQEQRQGVQILVPLSQQQQVGQGTLVQGQGIIQPQQPAQLE
VIRSSVLQTLATMCNVYVPPYCSTIRAPFASIVAGIGGQ
>2023228A Allergen major allergen Phl p Va [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGADAAGKATTEEQKLIEKINAGFKAALAGAGVQP
ADKYRTFVATFGPASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPE
AKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAANA
APANDKFTVFEAAFNDEIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFET

ALKKAITAMSEAQKAAKPPPLPPPPQPPPLAATGAATAATGGYKV
>2103117A Putative allergen Dac g II [Dactylis glomerata]
EAPVTFTVEKGSDEKNLALSIKYNKEGDSMAEVELKEHGSNEWLALKKNGDGVWEIKSDK
PLKGPFNFRFVSEKGMRNVFVDVVPADFKVGTTYKPEEAAASASRRRSSEVFQFLILSCQ
GRIVNNCEVLICVMRRGNAMCLIASISMHHILTLDRFFFDGLEIIYKIFKMMFQKPRTRT
CIEKDFPRRSSSSIPT
>AAB38064.1 Allergen Pru av 2; thaumatin-like protein (TLP) [Prunus
avium]
MMKTLVVVLSLSLTILSFGGAHAATISFKNNCPYMVWPGTLTSDQKPQLSTTGFELASQA
SFQLDTPVPWNGRFWARTGCSTDASGKFVCATADCASGQVMCNGNGAIPPATLAEFNIPA
GGGQDFYDVSLVDGFNLPMSVTPQGGTGDCKTASCPANVNAVCPSELQKKGSDGSVVACL
SACVKFGTPQYCCTPPQNTPETCPPTNYSEIFHNACPDAYSYAYDDKRGTFTCNGGPNYA
ITFCP
>AAA87851.1 Allergen Bla g 4; lipocalin [Blattella germanica]
AVLALCATDTLANEDCFRHESLVPNLDYERFRGSWIIAAGTSEALTQYKCWIDRFSYDDA
LVSKYTDSQGKNRTTIRGRTKFEGNKFTIDYNDKGKAFSAPYSVLATDYENYAIVEGCPA
AANGHVIYVQIRFSVRRFHPKLGDKEMIQHYTLDQVNQHKKAIEEDLKHFNLKYEDLHST
CH
>CAA93121.1 Allergen Hol l 1; beta expansin [Holcus lanatus]
VFLGSAHGIAKVPPGPNITATYGDEWLDAKSTWYGKPTGAGPKDNGGACGYKDVDKPPFS
GMTGCGNTPIFKDGRGCGSCFEIKCSKPESCSGEPVTVHITDDNEEPIAPYHFDLSGHAF
GSMAKKGEEQKLRSAGELELKFRRVKCKYPDGTKPTFHVEKGSNPNYLALLVKYIDGDGD
VVAVDIKEKGKDKWIELKESWGAVWRVDTPDKLTGPFTVRYTTEGGTKGEAEDVIPEGWK
ADTAYEAK
>P43237.1 Allergen Ara h 1, clone P17 precursor (Ara h I) [Arachis
hypogaea]
MRGRVSPLMLLLGILVLASVSATQAKSPYRKTENPCAQRCLQSCQQEPDDLKQKACESRC
TKLEYDPRCVYDTGATNQRHPPGERTRGRQPGDYDDDRRQPRREEGGRWGPAEPRERERE
EDWRQPREDWRRPSHQQPRKIRPEGREGEQEWGTPGSEVREETSRNNPFYFPSRRFSTRY
GNQNGRIRVLQRFDQRSKQFQNLQNHRIVQIEARPNTLVLPKHADADNILVIQQGQATVT
VANGNNRKSFNLDEGHALRIPSGFISYILNRHDNQNLRVAKISMPVNTPGQFEDFFPASS
RDQSSYLQGFSRNTLEAAFNAEFNEIRRVLLEENAGGEQEERGQRRRSTRSSDNEGVIVK
VSKEHVQELTKHAKSVSKKGSEEEDITNPINLRDGEPDLSNNFGRLFEVKPDKKNPQLQD
LDMMLTCVEIKEGALMLPHFNSKAMVIVVVNKGTGNLELVAVRKEQQQRGRREQEWEEEE
EDEEEEGSNREVRRYTARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHRIFLAG
DKDNVIDQIEKQAKDLAFPGSGEQVEKLIKNQRESHFVSARPQSQSPSSPEKEDQEEENQ
GGKGPLLSILKAFN
>P43238.1 Allergen Ara h 1; 7S globulin, vicilin [Arachis hypogaea]
MRGRVSPLMLLLGILVLASVSATHAKSSPYQKKTENPCAQRCLQSCQQEPDDLKQKACES
RCTKLEYDPRCVYDPRGHTGTTNQRSPPGERTRGRQPGDYDDDRRQPRREEGGRWGPAGP
RERERREEDWRQPREDWRRPSHQQPRKIRPEGREGEQEWGTPGSHVREETSRNNPFYFPSR
RFSTRYGNQNGRIRVLQRFDQRSRQFQNLQNHRIVQIEAKPNTLVLPKHADADNILVIQQ
GQATVTVANGNNRKSFNLDEGHALRIPSGFISYILNRHDNQNLRVAKISMPVNTPGQFED
FFPASSRDQSSYLQGFSRNTLEAAFNAEFNEIRRVLLEENAGGEQEERGQRRWSTRSSEN
NEGVIVKVSKEHVEELTKHAKSVSKKGSEEEGDITNPINLREGEPDLSNNFGKLFEVKPD
KKNPQLQDLDMMLTCVEIKEGALMLPHFNSKAMVIVVVNKGTGNLELVAVRKEQQQRGRR
EEEEDEDEEEEGSNREVRRYTARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHR
IFLAGDKDNVIDQIEKQAKDLAFPGSGEQVEKLIKNQKESHFVSARPQSQSQSPSSPEKE
SPEKEDQEEENQGGKGPLLSILKAFN
>P42058.1 Allergen Alt a 7; unknown function [Alternaria alternata]
MAPKIAIVYYSMYGHIKKMADAELKGIQEAGGDAKLFQVAETLPQEVLDKMYAPPKDSSV
PVLEDPAVLEEFDGILFGIPTRYGNFPAQFKTFWDKTGKQWQQGAFWGKYAGVFVSTGTL
GGGQETTAITSMSTLVDHGFIYVPLGYKTAFSMLANLDEVHGGSPWGAGTFSAGDGSRQP
SELELNIAQAQGKAFYEAVAKAHQ

>P43180.2 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYESETTSVIPAARLFKAFILEGDNLIPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>P43186.2 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYESETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>P30438.2 Allergen Fel d 1; uteroglobin [Felis catus]
MKGACVLVLLWAALLLISGGNCEICPAVKRDVDLFLTGTPDEYVEQVAQYKALPVVLENA
RILKNCVDAKMTEEDKENALSVLDKIYTSPLC
>P46436.3 Allergen Asc s 13 ; glutathione S-transferase [Ascaris suum]
MPQYKLTYFDIRGLGEGARLIFHQAGVKFEDNRLKREDWPALKPKTPFGQLPLLEVDGEV
LAQSAAIYRYLGRQFGLAGKTPMEEAQVDSIFDQFKDFMAELRPCFRVLAGFEEGDKEKV
LKEVAVPARDKHLPLLEKFLAKSGSEYMVGKSVTWADLVITDSLASWESLIPDFLSGHLQ
LKKYIEHVRELPNIKKWIAERPKTPY
>P43212.1 Allergen Cry j 2; polygalacturonase [Cryptomeria japonica]
MAMKFIAPMAFVAMQLIIMAAAEDQSAQIMLDSDIEQYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVKNMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSRHGKIYHP
>P42037.1 Allergen Alt a 5; acidic ribosomal protein P2 [Alternaria alternata]
MKHLAAYLLLGLGGNTSPSAADVKAVLESVGIEADSDRLDKLISELEGKDINELIASGSE
KLASVPSGGAGGAAASGGAAAAGGSAQAEAAPEAAKEEEKEESDEDMGFGLFD
>AAA86533.1 Allergen Ory s 1; beta-expansin [Oryza sativa]
MASSSLLLACVVVAAMVSPSPAGHPKVPPGPNITTSYGDKWLEARPPGMVRPRVLAPKDN
GGACGYKDVDKAPFLGMNSCGNDPIFKDGKGCGSCFEIKCSKPEACSDKPALIHVTDMND
EPIAAYHFDLSGLAMAKDGKDEELRKAGIIDTQFRRVKCKYPADTKITFHIEKASNPNYL
ALLVKYVAGDGDVVEVEIKEKGSEEWKALKESWGAIWRIDTPKPLKGPFSVRVTTEGARR
SSAEDAIPDPGRRQRVQVNVQAK
>AAA86744.1 Allergen Bla g 2; inactive aspartic protease [Blattella germanica]
MIGLKLVTVLFAVATITHAAELQRVPLYKLVHVFINTQYAGITKIGNQNFLTVFDSTSCN
VVVASQECVGGACVCPNLQKYEKLKPKYISDGNVQVKFFDTGSAVGRGIEDSLTISNLTT
SQQDIVLADELSQEVCILSADVVVGIAAPGCPNALKGKTVLENFVEENLIAPVFSIHHAR
FQDGEHFGEIIFGGSDWKYVDGEFTYVPLVGDDSWKFRLDGVKIGDTTVAPAGTQAIIDT
SKAIIVGPKAYVNPINEAIGCVVEKTTTRRICKLDCSKIPSLPDVTFVINGRNFNISSQY
YIQQNGNLCYSGFQPCGHSDHFFIGDFFVDHYYSEFNWENKTMGFGRSVESV
>AAA87456.1 Allergen Hev b 2; beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSFPSRTTVMLLLFFFAASVGITDAQVGVCYGMQGNNLPPVSEVIALYK
KSNITRMRIYDPNRAVLEALRGSNIELILGVPNSDLQSLTNPSNAKSWVQKNVRGFWSSV
LFRYIAVGNEISPVNRGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLANIYPYFTYAYNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHNATILFLKSDM

>AAB09252.1 Putative 34 kDa maturing seed vacuolar thiol protease precursor [Glycine max]
MGFLVLLLFSLLGLSSSSSISTHRSILDLDLTKFTTQKQVSSLFQLWKSEHGRVYHNHEE
EAKRLEIFKNNSNYIRDMNANRKSPHSHRLGLNKFADITPQEFSKKYLQAPKDVSQQIKM
ANKKMKKEQYSCDHPPASWDWRKKGVITQVKYQGGCGRGWAFSATGAIEAAHAIATGDLV
SLSEQELVDCVEESEGSYNGWQYQSFEWVLEHGGIATDDDYPYRAKEGRCKANKIQDKVT
IDGYETLIMSDESTESETEQAFLSAILEQPISVSIDAKDFHLYTGGIYDGENCTSPYGIN
HFVLLVGYGSADGVDYWIAKNSWGEDWGEDGYIWIQRNTGNLLGVCGMNYFASYPTKEES
ETLVSARVKGHRRVDHSPL
>BAA05540.1 Putative prepro AprM [Bacillus sp.]
MRQSLKVMVLSTVALLFMANPAAASEEKKEYLIVVEPEEVSAQSVEESYDVDVIHEFEEI
PVIHAELTKKELKKLKKDPNVKAIEENAEVTISQTVPWGISFINTQQAHNRGIFGNGARV
AVLDTGIASHPDLRIAGGASFISSEPSYHDNNGHGTHVAGTIAALNNSIGVLGVAPSADL
YAVKVLDRNGSGSLASVAQGIEWAINNNMHIINMSLGSTSGSSTLELAVNRANNAGILLV
GAAGNTGRQGVNYPARYSGVMAVAAVDQNGQRASFSTYGPEIEISAPGVNVNSTYTGNRY
VSLSGTSMATPHVAGVAALVKSRYPSYTNNQIRQRINQTATYLGSPSLYGNGLVHAGRAT
Q
>CAA01909.1 Putative B1 protein allergen [Cynodon dactylon]
GTRRFDTNGDGKISLAELTDALRTLGSTSADEVQRMMAEIDTDGDGFIDFDEFISFCNAN
PGLMKDVAKVF
>CAA01910.1 Putative B4 protein allergen [Cynodon dactylon]
GTSFKRFDTNGDGKISLAELTDALRTLGSTSADEVQRMMAEIDTDGDGFIDFDEFISFCN
ANPGLMKDVAKVF
>BAA09634.1 Allergen Bra r 5; calcium-binding protein / polcalcin [Brassica rapa]
MADAEHERIFKKFDTDGDGKISAAELEEALKKLGSVTPDDVTRMMAKIDTDGDGNISFQE
FTEFASANPGLMKDVAKVF
>CAA65341.1 Allergen Mala s 1; unknown [Malassezia sympodialis]
MRYSTVLAALALLGTSAVSVLAALPDQIDVKVKNLTPEDTIYDRTRQVFYQSNLYKGRIE
VYNPKTQSHFNVVIDGASSNGDGEQQMSGLSLLTHDNSKRLFAVMKNAKSFNFADQSSHG
ASSFHSFNLPLSENSKPVWSVNFEKVQDEFEKKAGKRPFGVVQSAQDRDGNSYVAFALGM
PAIARVSADGKTVSTFAWESGNGGQRPGYSGITFDPHSNKLIAFGGPRALTAFDVSKPYA
WPEPVKINGDFGTLSGTEKIVTVPVGNESVLVGARAPYAISFRSWDNWKSANIKKTKRSE
LQNSGFTAVADYYQGSEQGLYAVSAFFDNGAHGGRSDYPLYKLDNSILNF
>BAA07772.1 allergenic protein [Oryza sativa Japonica Group]
RHEVKRQCVATTHPAAPGTEQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATDVG
HPMAEVFPGCRRGDLERRRRSLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>BAA07773.1 allergenic protein [Oryza sativa Japonica Group]
RVVKRQCVATRRTGGADEQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATDVGHP
MAEVFPGCRRGDLERARATLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>BAA07774.1 allergenic protein [Oryza sativa Japonica Group]
FGTRFRQRQCVGPRRTRRRWTQQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATD
VGHPMAEVFPGCRRGDLERAAASLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>BAA12318.1 Allergen alpha-gliadin [Triticum aestivum]
VRVPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQPFPPQQPYPQPQPFPSQQPYLQLQP
FPQPQLPYSQPQPFRPQQPYPQPQPQYSQPQEPISQQQQQQQQQQILQQILQQQLIPCM
DVVLQQHNIAHGRSQVLQQSTYQLLQELCCQHLWQIPEQSQCQAIQNVVHAIILHQQQKQ
QQQPSSQVSFQQPLQQYPLGQGSFRPSQQNPQDQGSVQPQQLPQFEEIRNLALQTLPAMC
NVYIPPYCTIAPFGIFGTN
>BAA09920.1 Allergen Der f 3; trypsin [Dermatophagoides farinae]
MMILTIVVLLAANILATPILPSSPNATIVGGVKAQAGDCPYQISLQSSSHFCGGSILDEY
WILTAAHCVNGQSAKKLSIRYNTLKHASGGEKIQVAEIYQHENYDSMTIDNDVALIKLKT
PMTLDQTNAKPVPLPAQGSDVKVGDKIRVSGWGYLQEGSYSLPSELQRVDIDVVSREQCD
QLYSKAGADVSENMICGGDVANGGVDSCQGDSGGPVVDVATKQIVGIVSWGYGCARKGYP

GVYTRVGNFVDWIESKRSQ
>AAB36008.1 Putative mAb 2F9-reactive major allergen {N-terminal} [Parietaria officinalis]
APAGGVVPIIMPPXXFF
>AAB36009.1 Putative mAb 8C7-reactive major allergen {N-terminal, band 1} [Parietaria officinalis]
APAGGVVVAAMPPPL
>AAB36010.1 Putative mAb 8C7-reactive major allergen {N-terminal, band 2} [Parietaria officinalis]
GPVGGVVHAHMMPLL
>AAB36011.1 Putative mAb 3F8-reactive major allergen {N-terminal} [Parietaria officinalis]
EEXGGVVGALMPPLL
>AAB36012.1 Putative mAb 8B6-reactive major allergen {N-terminal} [Parietaria officinalis]
GTTGTVVGALMPPLFVQGKEKEXPPSXKXG
>CAA96534.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFNYETEFTSVIPPARLFNAFVLDADNLIPKIAPQAVKSAEILEGDGGVGTIKKINFG
EGSTYSYVKHRIDGVDKENFVYKYSVIEGDAISETIEKISYETKLVASGSGSVIKSTSHY
HTKSDVEIKEEHVKAGKEKASHLFKLIENYLLAHSDAYN
>CAA96535.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFNYETETTSVIPAPRLFKAFILDGDNLIPKIAPQAIKSTEIIEGDGGVGTIKKVTFG
EGSQYGYVKQRVNGIDKDNFTYSYSMIEGDTLSDKLEKITYETKLIASPDGGSIIKTTSH
YHAKGDVEIKEEHVKAGKEKASGLFKLLEAYLLAHSDAYN
>CAA96536.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFNYETEFTSVIPAPRLFKAFILDGDNLIPKIAPQAIKSTKIIEGDGGVGTIKKVTFG
EGSQYGYVKQRVNGIDKDNFTYSYSMIEGDTLSDKLEKITYETKLIASPDGGSIIKTNSH
YHAKGDVEIKEEHVKAGKEKASGLFKLLEAYLLAHSDAYN
>CAA96537.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFNYETEFTSVIPAPRLFKAFILDGDNLIPKIAPQAIKSTEIIEGDGGVGTIKKVTFG
EGSQYGYVKQRVNGIDKDNFTYSYSMIEGDTLSDKLEKITYETKLIASPDGGSIIKTTSH
YRAKGDVEIKEEHVKAGKEKASGLFKLLEAYLLAHSDAYN
>AAA99805.1 Putative Der f 3 mite allergen [Dermatophagoides farinae]
IVGGVKAKAGDCPYQISLQSSSHFCGGSILDEYWILTAAHCVNGQSAKKLSIRYNTLKHA
SGGEKIQVAEIYQHENYDSMTIDNDVALIKLKTPMTLDQTNAKPVPLPPQGSDVKVGDKI
RVSGWGYLQEGSYSLPSELQRVDIDVVSREQCDQLYSKAGADVSENMICGGDVANGGVDS
CQGDSGGPVVDIATKQIVGIVSWGYGCARKGYPGVYTRVGNFVDWIESKRSQ
>CAA96546.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETETPSVIPAARLFKAFILDGDKLLPKVAPEAVSSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDRVNFKYSFSVIEGGAVGDALEKVCNEIKIVAAPDGGSILKISNK
FHTKGDHEINAEQIKIEKEKAEGLLKAVESYHLAHSDAYN
>CAA96539.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGIPFKYVKDRVDEVDHANFKYSYSVIEGGPVGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQIKASKEMGETLLRAVERYLLAHSDAYN
>CAA96540.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKLVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKAEALLRAVESYLLAHSDAYN

>CAA96541.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA96542.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYAYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>CAA96543.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>CAA96544.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETEATSVIPAARLFKASILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGSPFKYVKERVDEVDRVNFKYSFSVIEGGAVGDALEKVCNEIKIVAAPDGGSILKISNK
FHTKGDHEINAEQIKIEKEKAVGLLKAVESYLLAHSDAYN
>CAA96547.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVAHKNFKYSYSVIEGGPIGDTLEKISNEIKIVATPDGRSILKISNK
YHTKGDHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>CAA96548.1 Allergen Cor a 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Corylus avellana]
MGVFNYETESTSVIPAARLFKAFILDGNNLIPKVAPQAVSSVENVEGNGGPGTIKKITFS
EGSPFKYVKERVEEVDHTNFKYSYTVIEGGPVGDKVEKICNEIKIVAAPDGGSILKISNK
YHTKGDHEVDAEHIKGGKEKVEGLFRAVEAYLLAHSDAYN
>CAA96549.1 Allergen Cor a 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Corylus avellana]
MGVFNYETETTSVIPPARLFKRFVLDSDNLIPKVAPKAIKSIEIIEGNGGPGTIKKICFD
EGSPFNYIKQKVEEIDQANFSYRYSVIEGDALSDKLEKINYEIKIVASPHGGSILKSISK
YHTIGDHELKDEQIKAGKEKASGLFKAVEGYLLAHSDAYN
>CAA66403.1 Allergen Sal s 1; parvalbumin beta [Salmo salar]
MACAHLCKEADIKTALEACKAADTFSFKTFFHTIGFASKSADDVKKAFKVIDQDASGFIE
VEELKLFLQNFCPKARELTDAETKAFLKAGDADGDGMIGIDEFAVLVKQ
>AAB01092.1 Allergen Dau c 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Daucus carota]
LIFLLILSNNILNIMGAQSHSLEITSSVSAEKIFXXIVLDVDTVIPKAAPGAYKSVDVKG
DGGAGTVRIITLPEGSPITSMTVRTDAVNKEALTYDSTVIDGDILLEFIESIETHMVVVP
TADGGSITKTTAIFHTKGDAVVPEENIKFADAQNTALFKAIEAYLIAN
>P49370.1 Allergen Ves v 2; hyaluronidase [Vespula vulgaris]
SERPKRVFNIYWNVPTFMCHQYDLYFDEVTNFNIKRNSKDDFQGDKIAIFYDPGEFPALL
SLKDGKYKKRNGGVPQEGNITIHLQKFIENLDKIYPNRNFSGIGVIDFERWRPIFRQNWG
NMKIHKNFSIDLVRNEHPTWNKKMIELEASKRFEKYARFFMEETLKLAKKTRKQADWGYY
GYPYCFNMSPNNLVPECDVTAMHENDKMSWLFNNQNVLLPSVYVRQELTPDQRIGLVQGR
VKEAVRISNNLKHSPKVLSYWWYVYQDETNTFLTETDVKKTFQEIVINGGDGIIIWGSSS
DVNSLSKCKRLQDYLLTVLGPIAINVTEAVN
>P49372.1 Allergen Api g 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Apium graveolens]
MGVQTHVLELTSSVSAEKIFQGFVIDVDTVLPKAAPGAYKSVEIKGDGGPGTLKIITLPD
GGPITTMTLRIDGVNKEALTFDYSVIDGDILLGFIESIENHVVLVPTADGGSICKTTAIF
HTKGDAVVPEENIKYANEQNTALFKALEAYLIAN
>P49148.1 Allergen Alt a 12; acidic ribosomal protein P1 [Alternaria alternata]
MSTSELATSYAALILADDGVDITADKLQSLIKAAKIEEVEPIWTTLFAKALEGKDVKDLL

LNVGSGGGAAPLPEALLLRWRAADAAPAAEEKKEEEKEESDEDMGFGLFD
>P02789.2 Allergen Gal d 3; ovotransferrin [Gallus gallus]
MKLILCTVLSLGIAAVCFAAPPKSVIRWCTISSPEEKKCNNLRDLTQQERISLTCVQKAT
YLDCIKAIANNEADAISLDGGQAFEAGLAPYKLKPIAAEVYEHTEGSTTSYYAVAVVKKG
TEFTVNDLQGKTSCHTGLGRSAGWNIPIGTLLHRGAIEWEGIESGSVEQAVAKFFSASCV
PGATIEQKLCRQCKGDPKTKCARNAPYSGYSGAFHCLKDGKGDVAFVKHTTVNENAPDQK
DEYELLCLDGSRQPVDNYKTCNWARVAAHAVVARDDNKVEDIWSFLSKAQSDFGVDTKSD
FHLFGPPGKKDPVLKDLLFKDSAIMLKRVPSLMDSQLYLGFEYYSAIQSMRKDQLTPSPR
ENRIQWCAVGKDEKSKCDRWSVVSNGDVECTVVDETKDCIIKIMKGEADAVALDGGLVYT
AGVCGLVPVMAERYDDESQCSKTDERPASYFAVAVARKDSNVNWNNLKGKKSCHTAVGRT
AGWVIPMGLIHNRTGTCNFDEYFSEGCAPGSPPNSRLCQLCQGSGGIPPEKCVASSHEKY
FGYTGALRCLVEKGDVAFIQHSTVEENTGGKNKADWAKNLQMDDFELLCTDGRRANVMDY
RECNLAEVPTHAVVVRPEKANKIRDLLERQEKRFGVNGSEKSKFMMFESQNKDLLFKDLT
KCLFKVREGTTYKEFLGDKFYTVISSLKTCNPSDILQMCSFLEGK
>P49277.1 Allergen Der p 6; chymotrypsin, serine protease
[Dermatophagoides pteronyssinus]
AIGXQPAAEAEAPFQISLMK
>BAA04557.1 Allergen Der f 10; tropomyosin [Dermatophagoides farinae]
FFFVAAKQQQQPSTKMEAIKKKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRA
LQKKIQQIENELDQVQEQLSAANTKLEEKEKALQTAEGDVAALNRRIQLIEEDLERSEER
LKIATAKLEEASQSADESERMRKMLEHRSITDEERMDGLENQLKEARMMAEDADRKYDEV
ARKLAMVEADLERAEERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAYEQQI
RIMTAKLKEAEARAEFAERSVQKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELTGY
>CAA64868.1 Allergen Cas s 5; chitinase [Castanea sativa]
MKLFSLLLFLAFLLGTSAEQCGRQAGGAACANNLCCSQFGWCGNTAEYCGAGCQSQCSSP
TTTTSSPTASSGGGGDVGSLISASLFDQMLKYRNDPRCKSNGFYTYNAFIAAARSFNGFG
TTGDVTTRKRELAAFLAQTSHETTGGWATAPDGPYAWGYCFVMENNKQTYCTSKSWPCVF
GKQYYGRGPIQLTHNYNYGQAGKAIGADLINNPDLVATNPTISFKTAIWFWMTPQANKPS
SHDVIIGNWRPSAADTSAGRVPSYGVITNIINGGLECGHGSDDRVANRIGFYKRYCDTLG
VSYGNNLDCYNQKPFA
>I53806 Allergen major allergen OLE16 - common olive (fragment) [Olea
europaea]
SQFHIQGQVYCDTCRARFITELSEFIPGAGVRLECRDGEKGSITFTEVGYTRAEGLYSML
IERDHKNEFCEITLASSSRKDCDEIPVEGWVKPSLKFKLNTVNGTTRTINPLGFFKKEVL
PKCPQVFNKLGMYPPNM
>E53806 Allergen major allergen OLE17 - common olive (fragment) [Olea
europaea]
QFHIQGQVYCDTCHARFITELSEFIPGASVRLQCREKENGDITFTEIGYTRAEGLYSMLV
ERDHKNEFCEITLISSGRKDCDEIPIEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALP
KCAQVYNKLGMYPPNM
>F53806 Allergen major allergen OLE19 - common olive (fragment) [Olea
europaea]
QFHIQGQVYCDTCRAGFINELSEFIPGASVRLQCREKKNGDITFTEVGYTRAEGLYSMLV
ERDHKNEFCEITLISSGRKDCNEIPIEGWAKPSLKFILNTVNGTTRTINPLGFYKKEALP
KCAQVYNKLGMYPPNM
>C53806 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]
EDVPQPPISQFYVQGQVYCDTCRTRFITEFSEFIPGAGVRLQCKDGENGKITFTEVGYTR
AEGLYSMLIERDHKNEFCEITLLSSSRKDCDEIPTEGWVKPSVKFILNTVNGTTRTINPL
GFFKKEALPKCPQVFNKLGMYPPNM
>A38968 Allergen major allergen OLE20 - common olive (fragment) [Olea
europaea]
QFHIQGQVYCDTCRARFITELSEFIPGAGVRLECRDGEKGSITFTEVGYTRAEGLYSMLI
ERDHKNEFCEITLASSSRKDCDEIPVEGWVKPSLKFKLNTVNGTTRTINPLGFFKKEVLP
KCAPQVFNKLGMYPPNM

>G53806 Allergen major allergen OLE26 - common olive (fragment) [Olea europaea]
QFHIQGQVYCDTCRAGFITELSEFIPGASVRLQCKEKKNGDITFTEVGYTRAEGLYSMLV
ERDHKNEFCEITLISSGSKDCNEIPTEGWGKPSLKFILNTVNGTTRTVNPLGFYKKEALP
KCAQVYNKLGMYPPNM
>B53806 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]
EDVPQPPVSQFHIQGQVYCDTCRARFITELSEFIPGASVRLQCKDGENGSITFTEVGYTR
AEGLYSMLIERDHKDEFCEITLISSSRKDCDEIPVEGWVKPSLKFMLNTVNGTTRTINPL
GFFKKEALPKCPQVFNKLGMYPPNM
>H53806 Allergen major allergen OLE6 - common olive (fragment) [Olea europaea]
QFHIQGQVYCDTCRARFITELSEFIPGAGVRLECKDGGKGSITFTEVGYTRAEGLYSMLI
ERDHKNEFCEITLASSSRKDCDEIPVEGWVKPSLKFKLNTVNGTTRTINPLGFFKKEVLP
KCPQVFNKLGMYPPNM
>CAA44343.1 Allergen fel d I chain 1 precursor with leader B [Felis catus]
VRRSPSTLPYCCGHSRDCEICPAVKRDVDLFLTGTPDEYVEQVAQYNALPVVLENARILK
NCVDAKMTEEDKENALSVLDKIYTSPLC
>CAA44344.1 Allergen fel d I chain 1 precursor with leader A [Felis catus]
EGGLCSRASLGCLALDLGWKDCEICPAVKRDVDLFLTGTPDEYVEQVAQYNALPVVLENA
RILKNCVDAKMTEEDKENALSVLDKIYTSPLC
>AAC80579.1 Allergen Blo t 13; fatty acid-binding protein [Blomia tropicalis]
MPIEGKYKLEKSDNFDKFLDELGVGFMVKTAAKTLKPTLEVDVQGDTYVFRSLSTFKNTE
IKFKLGEEFEEDRADGKRVKTVVNKEGDNKFIQTQYGDKEVKIVRDFQGDDVVVTASVGD
VTSVRTYKRI
>BAA07710.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVFSALLLIIVSVLAATGPMADHHKDQVVYSLGERCQPGMGYPMYSLPRCRAVVK
RQCVATAHPAARGNEQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATDVGHPMAE
VFPGCRRGDLERAAASLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>BAA07711.1 allergenic protein [Oryza sativa Japonica Group]
GTRLLLIIVSVLAATRRMADHHKDQVVYSLGERCQPGMGYPMYSLPRCRAVVKRQCVGHG
APGGAVDEQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATDVGHPMAEVFPGCRR
GDLERAAASLPAFCNVDIPNGTGGVCYWLGYTPRTPRTGH
>BAA07712.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVIPALLVVVVSVLAATTTMADHHQEQVVYTPGQLCQPGIGYPTYPLPRCRAFVK
RQCVAPGTLDEQVRRGCCRQLAGIDSSWCRCDALNHMLRIIYREERAADAGHPMAEVFRG
CRRGDIERAAASLPAFCNVDIPNGVGGVCYWLPGTGY
>BAA07713.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVFSVLLLAVVSVLAATATMAEYHHQDQVVYTPAPLCQPGMGYPMYPLPRCRALV
KRQCVGRGTAAAAEQVRRDCCRQLAAVDDSWCRCEAISHMLGGIYRELGAPDVGHPMSEV
FRGCRRGDLERAAASLPAFCNVDIPNGGGGVCYWLARSGY
>CAA35188.1 Allergen trypsin inhibitor cme precursor [Hordeum vulgare]
MAFKYQLLLSAAVMLAILVATATSFGDSCAPGDALPHNPLRACRTYVVSQICHQGPRLLT
SDMKRRCCDELSAIPAYCRCEALRIIMQGVVTWQGAFEGAYFKDSPNCPRERQTSYAANL
VTPQECNLGTIHGSAYCPELQPAY
>AAB36316.1 Allergen Myr p 2; pilosulin [Myrmecia pilosula]
MKLSCLLLTLAIIFVLTIVHAPNVEAKALADPESDAVGFADAVGEADPIDWKKVDWKKVS
KKTCKVMLKACKFLG
>AAB35897.1 31 kda major allergen/disease resistance protein homolog {N-terminal} [Malus domestica]
AKITFTNNXPNTVWPGILTGFGQKPQ
>AAC49447.1 Allergen Hev b 5; unknown [Hevea brasiliensis]

MASVEVESAATALPKNETPEVTKAEETKTEEPAAPPASEQETADATPEKEEPTAAPAEPE
APAPETEKAEEVEKIEKTEEPAPEADQTTPEEKPAEPEPVAEEEPKHETKETETEAPAAP
AEGEKPAEEEKPITEAAETATTEVPVEKTEE
>AAC02632.1 Allergen Pru av 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Prunus avium]
MGVFTYESEFTSEIPPPRLFKAFVLDADNLVPKIAPQAIKHSEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSIDKENYSYSYTLIEGDALGDTLEKISYETKLVASPSGGSIIKSTSH
YHTKGNVEIKEEHVKAGKEKASNLFKLIETYLKGHPDAYN
>BAA08246.1 Allergen Cha o 1; pectate lyase [Chamaecyparis obtusa]
MASCTLLAVLVFLCAIVSCFSDNPIDSCWRGDANWDQNRMKLADCAVGFGSSAMGGKGGA
FYTVTSSDDDPVNPAPGTLRYGATRERSLWIIFSKNLNIKLNMPLYIAGNKTIDGRGAEV
HIGNGGPCLFMRTVSHVILHGLNIHGCNTSVSGNVLISEASGVVPVHAQDGDAITMRNVT
DVWIDHNSLSDSSDGLVDVTLASTGVTISNNHFFNHHKVMLLGHSDIYSDDKSMKVTVAF
NQFGPNAGQRMPRARYGLIHVANNNYDPWSIYAIGGSSNPTILSEGNSFTAPNDSDKKEV
TRRVGCESPSTCANWVWRSTQDSFNNGAYFVSSGKNEGTNIYNNNEAFKVENGSAAPQLT
KNAGVLTCILSKPCS
>AAB09632.1 Allergen Per a 3; hemocyanin / arylphorin [Periplaneta americana]
DIGDHYDIEANIGHYKYPHVVKNFISYYKKGLLPRGEPFSVYYEKHREQAIKLFELFFAA
NDYDTFYKTACWARDRVNEGMFMYALTVAAFHREDTKDLVLPPPYEVNPYLFVEDDVIQQ
AYKYWTKESGTDKHVEHVIPVNFTARSQEDLVAYFREDVDLNAFNMYFRYIYPSWFNTTL
YGKSFDRRGEQFYYTYHQIYARYFLERLSNSLPDVKPFQYSKPLKTGYNPHLRYHNGEEM
PARPSNMYPTNFDLFYVSDIKNYERRVEKAIDFGYAFDEHRTPYSLYHDQHGMDYLGQMI
EGTRNSPHQYFYGSVFHFYRLLVGHVVDPYHKNGLAPSALEHPQTALRDPAFYQLWKRID
HIVQKYKNRLPRYTYDELSFPGVKIENVDVGKLYTYFEHFEHSLGNAMYLGKLEDYMKAS
IRARHYRLNHKPFTYNIEVSSDKAQDVYVRIFLGPKYDSLGHECELDERRHYFVEMDRFV
HKVEAGKTVIERKSHDSSIISDSHDSYRNLFKKVSDALQEKDQYYIDKSHKYCGYPENLL
LPKGKKGGQTFTFYVIVTPYVKQDEHDFEPYHYKAFSYCGVGHGRKYPDDKPLGFPFDRK
IHDYDFYTPNMYFKDVVIFHKKYDEVHDVTH
>CAA65122.1 Allergen Par j 2; lipid transfer protein (LTP) type 1 [Parietaria judaica]
MRTVSMAALVVIAAALAWTSSAELASAPAPGEGPCGKVVHHIMPCLKFVKGEEKEPSKSC
CSGTKKLSEEVKTTEQKREACKCIVAATKGISGIKNELVAEVPKKCGITTTLPPITADFD
CSKIESTIFRGYY
>CAA65123.1 Allergen Par j 1; lipid transfer protein (LTP) type 1 [Parietaria judaica]
MRTVSAPSAVALVVIVAAGLAWTSLASVAPPAPAPGSEETCGTVVRALMPCLPFVQGKEK
EPSKGCCSGAKRLDGETKTGLQRVHACECIQTAMKTYSDIDGKLVSEVPKHCGIVDSKLP
PIDVNMDCKTLGVVPRQPQLPVSLRHGPVTGPSDPAHKARLERPQIRVPPPAPEKA
>CAB02155.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAB02156.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAB02157.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDILEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN

>CAB02158.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
GGLPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAB02159.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGLPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAB02160.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPMGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAB02161.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMRETLLRAVESYLLAHSDAYN
>CAB02206.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEKMKGAKEMAEKLLRAVESYLLAHTDEYN
>CAB02207.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDNLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTDEYN
>CAB02208.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDFDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEKMKGAKEMAEKLLRAVESYLLAHTDEYN
>CAB02209.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDFDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>CAB02213.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDFDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKFSYTVIEGDVLGDKLEKVSLELKIVAAPGGGSILKISGK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>CAB02215.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETPSVMPAARLFKSYVLDFDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKFSYTVIEGDVLGDKLEKVSLELTIVAAPGGGSILKISGK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>CAB02216.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETTSVIPAARLFKAFILDGNKLIPKVSPQAVSSVENVEGNGGPGTIKKITFS
EGSPVKYVKERVEEVDHTNFKYSYTVIEGGFVGDKVEKICNEIKIVAAPDGGSILKITSK

YHTKGDHEVPAEHIKGGKERVEGLLKPVEAYLLAHTAEYNN
>CAB02217.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Carpinus betulus]
MGVFNYEAETTSVIPAARLFKAFILDGNNLIPKVAPQAVSSVENVEGNGGPGTIKKITFS
EGSPVKYVKERVEEVDHTNFKYSYTVIEGGPVGDKVEKICNEIKIVAAPDGGSILKITSK
YHTKGDHEVPAEHIKGGKERVEGLLKPVEAYLLAHTAEYNN
>AAB63099.1 Allergen Sola t 3; cysteine protease inhibitor [Solanum tuberosum]
TCHDDDNLVLPEVYDQDGNPLRIGERYIIKNPLLGAGAVYLDNIGNLQCPNAVLQHMSIP
QFLGKGTPVVFIRKSESDYGDVVRLMTAVYIKFFVKTTKLCVDETVWKVNNEQLVVTGGN
VGNENDIFKIKKTDLVIRGMKNVYKLLHCPSHLECKNIGSNFKNGYPRLVTVNDEKDFIP
FVFIKA
>AAC48691.1 Allergen Equ c 1; lipocalin [Equus caballus]
MKLLLLCLGLILVCAQQEENSDVAIRNFDISKISGEWYSIFLASDVKEKIEENGSMRVFV
DVIRALDNSSLYAEYQTKVNGECTEFPMVFDKTEEDGVYSLNYDGYNVFRISEFENDEHI
ILYLVNFDKDRPFQLFEFYAREPDVSPEIKEEFVKIVQKRGIVKENIIDLTKIDRCFQLR
GNGVAQA
>AAB62731.1 Allergen Per a 3; hemocyanin / arylphorin [Periplaneta americana]
LNAFNMYFRYIYPTWFNTTLYGKTFDRRGEQFYYTYHQIYARYFLERLSNSLPDVKPFQY
SKPLKTGYNPHLRYQNGEEMPARPSNMYPTNIDLFYVSDIKNYESRVEKAIDFDAFDEHR
TPYSLYHDQHGMDYLGQMIEGTSNSPYQYFYGSIFHFYRLLVGHVVDPYHKNGLAPSALE
HHQTALRDPAFYQLWKRIDHIVQKYKNRLPRYTYDELSFPGVKIENVDVGKLYTYFEHFE
HSLGNAMYLGKLEDVLKANIRARHYRLNHKPFTYNIEVSSDKAQDVYVRIFLGPKYDSLG
HECELDERRHYFVEMDRFVHKVEAGKTVIERKSHDSSIISDSHDSYRNLFKKVSDALEGK
DQYYIDNSHKYCGYPENLLLPKGKKGGQTFTFYVIVTPYVKQDEHDLESYHYKAFTYCGV
GHGRKYPDDKPLGFPFDRKIHDYDFYTPNMYFKDVVIFHKKYDEVHNETN
>AAB63595.1 Allergen Per a 3; hemocyanin / arylphorin [Periplaneta americana]
EMPARPSNMYPTNIDLFYVSDIKNYESRVEKAIDFGYAFDEHRTPYSLYHDQHGMDYLGQ
MIEGTSNSPYQYFYGSIFHFYRLLVGHVVDPYHKNGLAPSALEHHQTALRDPAFYQLWKR
IDHIVQKYKNRLPRYTYDELSFPGVKIENVDVGKLYTYFEHFEHSLGNAMYIGKLEDLLK
ANIRASHYRLNHKPFTYNIEVSSDKAQDVYVRIFLGPKYDSLGHECELDERRHYFVEMDR
FVHKVEAGKTVIERKSHDSSIISDSHDSYRNLYKKVADALEEKDQYYIDKSHKYCNYPEN
LLLPKGKKGGQTFTFYVIVTPYVKQEQHDFEPYHYKAFSYCGVGHGRKYPDDKPLGFPFD
RKIHDYDFYTPNMYFKDVVIFHKKYDEVHEVTH
>2118249A Putative allergen Lep d 1.01 [Lepidoglyphus destructor]
MMKFIALFALVAVASAGKMTFKDCGHGEVTELDITGCSGDTCVIHRGEKMTLEAKFAANQ
DTAKVTIKVLAKVAGTTIQVPGLETDGCKFIKCPVKKGEALDFIYSGTIPAITPKVKADV
TAELIGDHGVMACGTVHGVQE
>2118249B Putative allergen Lep d 1.02 [Lepidoglyphus destructor]
MMKFIALFALVAVASAGKMTFKDCGHGEVTELDISGCSGDTCVIHRGQKMTLDAKFAANQ
DTNKVTIKVLAKVAGTTIQVPGLETDGCKVLKCPIKKGEALDFNYGMTIPAITPKIKADV
TAELVGDHGVMACGTIHGVQE
>2118271A Allergen PhI p I [Phleum pratense]
MASSSSVLLVVALFAVFLGSAHGIPKVPPGPNITATYGDKWLDAKSTWYGKPTAAGPKDN
GGACGYKDVDKPPFSGMTGCGNTPIFKSGRGCGSCFEIKCTKPEACSGEPVVVHITDDNE
EPIAAYHFDLSGIAFGSMAKKGDEQKLRSAGEVEIQFRRVKCKYPEGTKVTFHVEKGSNP
NYLALLVKFSGDGDVVAVDIKEKGKDKWIALKESWGAIWRIDTPEVLKGPFTVRYTTEGG
TKARAKDVIPEGWKADTAYESK
>2206305A Putative major allergen Myr p II [Myrmecia pilosula]
MKLSCLLLTLAIIFVLTIVHAPNVEAKALADPESDAVGFADAVGGADPIDWKKVDWKKVS
KKTCKVMLKACKFLG
>2209273A Putative Zm13 [Zea mays]

MASVPAPATTTAAVILCLCVVLSCAAADDPNLPDYVIQGRVYCDTCRAGFVTNVTEYIAG
AKVRLECKHFGTGKLERAIDGVTDATGTYTIELKDSHEEDICQVVLVASPRKDCDEVQAL
RDRAGVLLTRNVGISDSLRPANPLGYFKDVPLPVCAALLKQLDSDDDDDQ
>1ESF_B Allergen Chain B, Staphylococcal Enterotoxin A [Staphylococcus aureus]
SEKSEEINEKDLRKKSELQGTALGNLKQIYYYNEKAKTENKESHDQFLQHTILFKGFFTD
HSWYNDLLVDFDSKDIVDKYKGKKVDLYGAYYGYQCAGGTPNKTACMYGGVTLHDNNRLT
EEKKVPINLWLDGKQNTVPLETVKTNKKNVTVQELDLQARRYLQEKYNLYNSDVFDGKVQ
RGLIVFHTSTEPSVNYDLFGAQGQYSNTLLRIYRDNKTINSENMHIDIYLYTS
>AAB60779.1 Allergen Asp f 6; manganese superoxide dismutase [Aspergillus fumigatus]
GTSPIQTPINTMSQQYTLPPLPYPYDALQPYISQQIMELHHKKHHQTYVNGLNAALEAQK
KAAEATDVPKLVSVQQAIKFNGGGHINHSLFWKNLAPEKSGGGKIDQAPVLKAAIEQRWG
SFDKFKDAFNTTLLGIQGSGWGWLVTDGPKGKLDITTTHDQDPVTGAAPVFGVDMWEHAY
YLQYLNDKASYAKGIWNVINWAEAENRYIAGDKGGHPFMKL
>BAA13604.1 Allergen Dau c 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Daucus carota]
MGAQSHSLEITSSVSAEKIFSGIVLDVDTVIPKAAPGAYKSVDVKGDGGAGTVRIITLPE
GSPITSMTVRTDAVNKEALTYDSTVIDGDILLEFIESIETHMVVVPTADGGSITKTTAIF
HTKGDAVVPEENIKFADAQNTALFKAIEAYLIAN
>CAB05371.1 Allergen Phl p 5; unknown function [Phleum pratense]
AVPRRGPRGGPGRSYAADAGYAPATPAAAGAEAGKATTEEQKLIEDINVGFKAAVAAAAS
VPAGDKFKTFEAAFTSSSKAATAKAPGLVPKLDAAYSVAYKAAVGATPEAKFDSFVASLT
EALRVIAGALEVHAVKPVTEEPGMAKIPAGELQIIDKIDAAFKVAATAAATAPADDKFTV
FEAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAPQVKYAVFEAALTKAITAM
SEVQKVSQPATGAATVAAGAATTATGAASGAATVAAGGYKV
>CAB05372.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGGPATPAAPAEAAPAGKATTEEQKLIEKINDGFKAALAAAAGVPPADKYKTFVAT
FGAASNKAFAEGLSAEPKGAAESSSKGALTSKLEAAYKLAYKTSEGATPEAKYDAYVATL
SEALRIIAGTLEVHAVKPAAEEVKVIPAGELQFIEKVDSALKVAATAANAAAANDKFTVF
EAAFNHAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITAMS
EAQKAAKPATEATATATAAVGAATGAATAATGGYKV
>AAB37403.1 Allergen Sec c 20; gamma-70 secalin / partial [Secale cereale]
NMQVNPSGQVQWPQQQPFPQPQQ
>P02222.2 Allergen Chi t 3; hemoglobin CTT IIB [Chironomus thummi thummi]
MKFLVLALCIAAAVAAPLSADEASLVRGSWAQVKHSEVDILYYIFKANPDIMAKFPQFAG
KDLETLKGTGQFATHAGRIVGFVSEIVALMGNSANMPAMETLIKDMAANHKARGIPKAQF
NEFRASLVSYLQSKVSWNDSLGAAWTQGLDNVFNMMFSYL
>P02223.2 Allergen Chi t 3; hemoglobin CTT IX [Chironomus thummi thummi]
MKFFIVLALCIVGAIADPVSSDQANAIRASWAGVKHNEVDILAAVFSDHPDIQARFPQFA
GKDLASIKDTGAFATHAGRIVGFISEIVALVGNESNAPAMATLINELSTSHHNRGITKGQ
FNEFRSSLVSYLSSHASWNDATADAWTHGLDNIFGMIFAHL
>P80198.1 Allergen Hor v 20; gamma-hordein-3 [Hordeum vulgare]
ITTTTMQFNPSGLELERPQQLFPQWQPLPQQPPFLQQEPEQPYPQQQPLPQQQPFPQQPQ
LPHQHQFPQQLPQQQFPQQMPLQPQQQFPQQMPLQPQQQPQFPQQKPFGQYQQPLTQQPY
PQQQPLAQQQPSIEEQHQLNLCKEFLLQQCTLDEKVPLLQSVISFLRPHISQQNSCQLKR
QQCCQQLANINEQSRCPAIQTIVHAIVMQQQVQQQVGHGFVQSQLQQLGQGMPIQLQQQP
GQAFVLPQQQAQFKVVGSLVIQTLPMLCNVHVPPYCSPFGSMATGSGGQ
>P53357.1 Allergen Dol m 1; phospholipase A1B [Dolichovespula maculata]
GILPECKLVPEEISFVLSTRENRDGVYLTLQKLKNGKMFKNSDLSSKKVPFLIHGFISSA
TNKNYADMTRALLDKDDIMVISIDWRDGACSNEFALLKFIGYPKAVENTRAVGKYIADFS
KILIQKYKVLLENIRLIGHSLGAQIAGFAGKEFQRFKLGKYPEIIGLDPAGPSFKKKDCP
ERICETDAHYVQILHTSSNLGTERTLGTVDFYINDGSNQPGCTYIIGETCSHTRAVKYLT

ECIRRECCLIGVPQSKNPQPVSKCTRNECVCVGLNAKEYPKKGSFYVPVEAKAPFCNNNG
KII
>P51528.1 Allergen Ves m 1; phospholipase A1 [Vespula maculifrons]
GPKCPFNSDTVSIIIETRENRNRDLYTLQTLQNHPEFKKKTITRPVVFITHGFTSSASEK
NFINLAKALVDKDNYMVISIDWQTAACTNEYPGLKYAYYPTAASNTRLVGQYIATITQKL
VKDYKISMANIRLIGHSLGAHVSGFAGKRVQELKLGKYSEIIGLDPARPSFDSNHCSERL
CETDAEYVQIIHTSNYLGTEKILGTVDFYMNNGKNNPGCGRFFSEVCSHTRAVIYMAECI
KHECCLIGIPRSKSSQPISRCTKQECVCVGLNAKKYPSRGSFYVPVESTAPFCNNKGKII
>AAB41308.1 Allergen Jug r 1; 2S albumin [Juglans regia]
AALLVALLFVANAAAFRTTITTMEIDEDIDNPRRRGEGCREQIQRQQNLNHCQYYLRQQS
RSGGYDEDNQRQHFRQCCQQLSQMDEQCQCEGLRQVVRRQQQQQGLRGEEMEEMVQSARD
LPNECGISSQRCEIRRSWF
>AAB42069.1 Allergen Sola l 3; lipid transfer protein (LTP) type 1
[Solanum lycopersicum]
MEMFGKIACFVVFCMVVVAPHAESLSCGEVTSGLAPCLPYLEGRGPLGGCCGGVKGLLGA
AKTPEDRKTACTCLKSAANSIKGIDTGKAAGLPGVCGVNIPYKISPSTDCSTVQ
>AAB42200.1 Allergen Dac g 3; expansin [Dactylis glomerata]
VKVTFKVEKGSDPKKLVLDIKYTRPGDTLAEVELRQHGSEEWEPLTKKGNLWEVKSSKPL
TGPFNFRFMSKGGMRNVFDEVIPTAFKIGTTYTPEE
>AAB46819.1 Allergen Par o 1; lipid transfer protein (LTP) type 1
[Parietaria officinalis]
ATGKVVQDIMPPLLFVVQGKEKPSS
>AAB46820.1 Allergen Par o 1; lipid transfer protein (LTP) type 1
[Parietaria officinalis]
GPXGKVVHIIMPPLKFVKGEESEP
>AAB47552.1 Allergen Alt a 1; unknown function [Alternaria alternata]
MQFTTIASLFAAAGLAAAAPLESRQDTASCPVTTEGDYVWKISEFYGRKPEGTYYNSLGF
NIKATNGGTLDFTCSAQADKLEDHKWYSCGENSFMDFSFDSDRSGLLLKQKVSDDITYVA
TATLPNYCRAGGNGPKDFVCQGVADAYITLVTLPKSS
>AAB48041.1 Allergen Alt a 5; ribosomal protein P2 [Alternaria alternata]
MKHLAAYLLLGLGGNTSPSAADVKAVLESVGIEADSDRLDKLISELEGKDINELIASGPE
KLASVPSGGAGGAAASGGAAAAGGSAEAEAAPEAAKEEEKEESDEDMGFGLFD
>CAA62634.1 Allergen Cyn d 7; calcium-binding pollen/polcalcin [Cynodon
dactylon]
KTMADTGDMEHIFKRFDTNGDGKISLAELTDALRTLGSTSADEVQRMMAEIDTDGDGFID
FDEFISFCNANPGLMKDVAKVF
>CAA72273.1 Putative serpin [Triticum aestivum]
MATTLATDVRLSIAHQTRFALRLASTISSNPKSAASNAAFSPVSLHSALSLLAAGAGSAT
RDQLVATLGTGEVEGGHALAEQVVQFVLADASSAGGPRVAFANGVFVDASLLLKPSFQEL
AVCKYKAETQSVDFQTKAAEVTTQVNSWVEKVTSGRIKNILPSGSVDNTTKLVLANALYF
KGAWTDQFDSYGTKNDYFYLLDGSSVQTPFMSSMDDDQYISSSDGLKVLKLPYKQGGDNR
QFSMYILLPEAPGGLSSLAEKLSAEPDFLERHIPRQRVAIRQFKLPKFKISFGMEASDLL
KCLGLQLPFSDEADFSEMVDSPMPQGLRVSSVFHQAFVEVNEQGTEAAASTAIKMVPQQA
RPPSVMDFIADHPFLFLLREDISGVVLFMGHVVNPLLSS
>AAB50883.1 Putative Myr p I=allergenic polypeptide {N-teminal} [Myrmecia
pilosula]
MKLSCLLLTLAIIFVLTIVHAPNVEAKDLADPESEAVGFADAFGEADAVGEADPNAGLGS
VFGRLARILGRVIPKVAKKLGPKVAKVLPKVMKEAIPMAVEMAKSQEEQQPQ
>AAC27724.1 Allergen Hev b 7; patatin-like protein [Hevea brasiliensis]
MATGSTTLTQGKKITVLSIDGGGIRGIIPGIILASLESKLQDLDGPDARIADYFDIIAGT
STGGLITTMLTAPNEDKKPMYQAKDIKDFYLENCPKIFPKESRDNYDPIHSIGPIYDGEY
LRELCNNLLKDLTVKDTSTDVIIPTFDIKLLLPVIFPSDDAKCNALKNARLADVCISTSA
APVLLPAHSFTTEDDKNIHTFELIDGGVAATNPTLLALTHIRNEIIRQNPRFIGANLTES
KSRLVLSLGTGKSEYKEKYNADMTSKWRLYNWALYNGNSPAVDIFSNASSDMVDSHLSAL

FKSLDCEDYYLRIQDDTLTGEESSGHIATEENLQRLVEIGTELLEKQESRINLDTGRLES
IPGAPTNEAAIAKFAKLLSEERKLRQLK
>AAB58417.1 Allergen Aed a 3; unknown function [Aedes aegypti]
MKPLVKLFLLFCLVGIVLSRPMPEDEEPVAEGGDEETTDDAGGDGGEEENEGEEHAGDED
AGGEDTGKEENTGHEDAGEEDAGEEDAGEEDAEKEEGEKEDAGDDAGSDDGEEDSTGGDE
GEANAEDSKGSEKNDPADTYRQVVALLDKDTKVDHIQSEYLRSALNNDLQSEVRVPVVEA
IGRIGDYSKIQGCFKSMGKDVKKVISEEEKKFKSCMSKKKSEYQCSEDSFAAAKSKLSPI
TSKIKSCVSSKGR
>S65144 Putative pollen allergen group II (clone 42) - rape [Brassica
napus]
MADATEKTEHDRFFKKFDANGDGTISSTELGDALKNLGSVTHDDIKRMMAEIDTDGDGFI
SYQEFSDFAKANRGLMKDVAKIF
>S65145 Putative pollen allergen group II (clone 44) - rape [Brassica
napus]
MADATEKAEHDRFFKKFDANGDGTISSTELGDALKNLGSVTHDDIKRMMAEIDTDGDGFI
SYQEFSDFAKANRGLMKDVAKIF
>S65143 Putative pollen allergen group II (clone 4) - turnip (fragment)
[Brassica rapa]
ETERAEHDRIFKKFDANGDGKISASELGDALKNLGSVTHDDIKRMMAEIDTDGDGYISYQ
EFSDFASANRGLMKDVAKIF
>CAA73782.1 Allergen Asp f 18; vacuolar serine protease [Aspergillus
fumigatus]
MKGYLSLSILPLLVAASPVVVDSIHNGAAPILSSMNAKEVPDSYIVVFKKHVNAESAAAH
HSWVQDIHSAQNERVELRKRSLFGFGEEAYLGLKNTFDIAGSLVGYSGHFHEDVIEQVRK
HPDVEYIEKDSEVHTMEDPTVEKSAPWGLARISHRDSLSFGTFNKYLYASEGGEGVDAYT
IDTGINVDHVDFEGRAQWGKTIPTDDEDADGNGHGTHCSGTIAGRKYGVAKKANLYAVKV
LRSSGSGTMSDVVAGVEWAVKSHLKKVKDAKDGKIKGFKGSVANMSLGGGKSRTLEAAVN
AGVEAGLHFAVAAGNDNADACNYSPAAAENPITVGASTLQDERAYFSNYGKCTDIFAPGL
NILSTWIGSKHAVNTISGTSMASPHIAGLLAYFVSLQPSKDSAFAVDELTPKKLKKDIIA
IATQGALTDIPSDTPNLLAWNGGGSSNYTDIIASGGYKVNASVKDRFEGLVHKAEKLLTE
ELGAIYSEIHDAAVA
>CAA69670.1 Allergen Cyn d 12; profilin [Cynodon dactylon]
MSWQAYVDDHLMCEIEGHHLTSAAIIGHDGTVWAQSAAFPAFKPEEMANIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGVTVKKTGQALVIGIYDEPMTPGQCNMVIE
KLGDYLIEQGM
>CAB03715.1 Allergen Dau c 1; pathogenesis-related protein /PR-10 /Bet v
1 -like protein [Daucus carota]
MGAQSHSLEITSSVSAEKIFSGIVLDVDTVIPKAATGAYKSVEVKGDGGAGTVRIITLPE
GSPITTMTVRTDAVNKEALSYDSTVIDGDILLGFIESIETHMVVVPTADGGSITKTTAIF
HTKGDAVVPEENIKFADAQNTALFKAIEAYLIAN
>CAB03716.1 Allergen Dau c 1; pathogenesis-related protein /PR-10 /Bet v
1 -like protein [Daucus carota]
MGAQSHSLEITSSVSAEKIFSGIVLDVDTVIPKAAPGAYKSVDVKGDGGAGTVRIITLPE
GSPITSMTVRTDAVNKEALTYDSTVIDGDILLGFIESIETHLVVVPTADGGSITKTTAIF
HTKGDAVVPEENIKFADEQNTALFKAIEAYLIAN
>CAB06416.1 Allergen Dau c 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Daucus carota]
MGAQSHSLEITSSVSAEKIFSGIVLDVDTVIPKAAPGAYKSVEVKGDGGAGTVRIITLPE
GSPITSMTVRTDAVNKEALTYDSTVIDGDILLGFIESIETHLVVVPTADGGSITKTTAIF
HTKGDAVVPEENIKFADAQNTALFKAIEAYLIAN
>CAB06417.1 Allergen Asp n 14; beta-xylosidase [Aspergillus niger]
MAHSMSRPVAATAAALLALALPQALAQANTSYVDYNIEANPDLYPLCIETIPLSFPDCQN
GPLRSHLICDETATPYDRAASLISLFTLDELIANTGNTGLGVSRLGLPAYQVWSEALHGL
DRANFSDSGAYNWATSFPQPILTTAALNRTLIHQIASIISTQGRAFNNAGRYGLDVYAPN

INTFRHPVWGRGQETPGEDVSLAAVYAYEYITGIQGPDPESNLKLAATAKHYAGYDIENW
HNHSRLGNDMNITQQDLSEYYTPQFHVAARDAKVQSVMCAYNAVNGVPACADSYFLQTLL
RDTFGFVDHGYVSSDCDAAYNIYNPHGYASSQAAAAAEAILAGTDIDCGTTYQWHLNESI
AAGDLSRDDIEQGVIRLYTTLVQAGYFDSNTTKANNPYRDLSWSDVLETDAWNISYQAAT
QGIVLLKNSNNVLPLTEKAYPPSNTTVALIGPWANATTQLLGNYYGNAPYMISPRAAFEE
AGYKVNFAEGTGISSTSTSGFAAALSAAQSADVIIYAGGIDNTLEAEALDRESIAWPGNQ
LDLIQKLASAAGKKPLIVLQMGGGQVDSSSLKNNTNVSALLWGGYPGQSGGFALRDIITG
KKNPAGRLVTTQYPASYAEEFPATDMNLRPEGDNPGQTYKWYTGEAVYEFGHGLFYTTFA
ESSSNTTTKEVKLNIQDILSQTHEDLASITQLPVLNFTANIRNTGKLESDYTAMVFANTS
DAGPAPYPKKWLVGWDRLGEVKVGETRELRVPVEVGSFARVNEDGDWVVFPGTFELALNL
ERKVRVKVVLEGEEEVVLKWPGKE

>CAA73221.1 Allergen Tyr p 2; NCP2-like protein [Tyrophagus putrescentiae]
MKFLILFALVAVAAAGQVKFTDCGKKEIASVAVDGCEGDLCVIHKSKPVHVIAEFTANQD
TCKIEVKVTGQLNGLEVPIPGIETDGCKVLKCPLKKGTKYTMNYSVNVPSVVPNIKTVVK
LLATGEHGVLACGAVNTDVKP

>AAC34736.1 Allergen Per a 1; nitrile-specifier protein [Periplaneta americana]
INEIHSIIGLPPFVPPSRRHARRGVGINGLIDDVIAILPVDELKALFQEKLETSPDFKAL
YDAIRSPEFQSIISTLNAMQRSEHHQNLRDKGVDVDHFIQLIRALFGLSRAARNLQDDLN
DFLHSLEPISPRHRHGLPRQRRRSARVSAYLHADDFHKIITTIEALPEFANFYNFLKEHG
LDVVDYINEIHSIIGLPPFVPPSRRHARRGVGINGLIDDVIAILPVDELKALFQEKLETS
PDFKALYDAIRSPEFQSIISTLNAMPEYQELLQNLRDKGVDVDHFIRVDQGTLRTLSSGQ
RNLQDDLNDFLALIPTDQILAIAMDYLANDAEVQELVAYLQSDDFHKIITTIEALPEFAN
FYNFLKEHGLDVVDYINEIHSIIGLPPFVPPSQRHARRGVGINGLIDDVIAILPVDELKA
LFQEKLETSPDFKALYDAIDLRSSRA

>AAC34737.1 Allergen Per a 1; nitrile-specifier protein [Periplaneta americana]
VGVDGLIDDIIAILPIDDLKALFQEKLETSLDFKAFYDAVRSPEFQSIVQTLNAMPEYQD
LLQKLRDKGVDVDHYIELIRALFGLTREARNLQDDLNDFLALIPTDQILAIAMDYLANDA
EVQELVAYLQSDDFHKIINTIEALPEFANFYNFLKGHGLDVANYINEIHSIIGLPPFVPP
SRRHARRGVGINGLIDDVIAILPVDELKTLFQEKLETSPDFKALYDAIRSPEFQSIISTL
NAMPEYQELLQNLRDKGVDVDHFIELIRSWFGLP

>CAB10766.1 Allergen Hol l 5; ribonuclease [Holcus lanatus]
QKLLEDVNASFKAAVAAAAKVPPADKYKTFLRAFTVLDRGSTEQSKAEETKMPELSSKLV
DAYMAAFKASTGGTQEAKYDAFVTTLTEALRVIAGALEVHAVKPATEEVPAAKIPAGDLQ
VVDKIDASFKIAATAANAAPANDKFTVFETAFNKALKESTGGAYESYKFIPSLEAAVKQA
YASTVAAAPEVKYAVFEAALTKAITAMSQAQKVAQPAAAATGAATVAAGAATTAAGGYKV

>CAB10765.1 Allergen Hol l 5; ribonuclease [Holcus lanatus]
ADAGYTPAAPAAAGAGGKATTDEQKLLEDVNAGFKTAVAAAANVPPADKYKTFEAAFTAS
SKASIAAAATKAPGLIPQLNAATNTAYAAAQGATPEAKYDAFVTTLTEALRVIAGALEVH
AVKPATEEVGAAKIPAGELQIVDKIDAAFRIAATAANAAPVNDKFTVFEGAFNKAIKEST
GGAYEAYKFIPSLETAVKQAYAATVATAPEVKYTVFETALKKAITAMSEAQKEAKPVAAA
TGAATAAAGVAAGAATAAAGGYKV

>AAB66909.1 Allergen Ole e 6; unknown [Olea europaea]
DEAQFKECYDTCHKECSDKGNGFTFCEMKCDTDCSVKDVKEKLENYKPKN

>AAB65434.1 Allergen Sol i 3; unknown function [Solenopsis invicta]
MELIVSILWLAITAENLANTLATNYCNLQSCKRNNAIHTMCQYTSPTPGPMCLEYSNVGF
TDAEKDAIVNKHNELRQRVASGKEMRGTNGPQPPAVKMPNLTWDPELATIAQRWANQCTF
EHDACRNVERFAVGQNIAATSSSGKNKSTPNEMILLWYNEVKDFDNRWISSFPSDDNILM
KVGHYTQIVWAKTTKIGCGRIMFKEPDNWTKHYLVCNYGPAGNVLGAPIYEIKK

>AAB72147.1 Allergen Bla g 5; glutathione S-transferase [Blattella germanica]
YKLTYCPVKALGEPIRFLLSYGEKDFEDYRFQEGDWPNLKPSMPFGKTPVLEIDGKQTHQ

SVAISRYLGKQFGLSGKDDWENLEIDMIVDTISDFRAAIANYHYDADENSKQKKWDPLKK
ETIPYYTKKFDEVVKANGGYLAAGKLTWADFYFVAILDYLNHMAKEDLVANQPNLKALRE
KVLGLPAIKAWVAKRPPTDL
>AAB69424.1 Allergen tropomyosin [Dermatophagoides pteronyssinus]
MEAIKKKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRALQKKIQQIENELDQV
QEQLSAANTKLEEKEKALQTAEGDVAALNRRIQLIEEDLERSEERLKIATAKLEEASQSA
DESERMRKMLEHRSITDEERMEGLENQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAHEQQIRIMTTKLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELTGY
>CAA50281.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGADAAGKATTEEQKLIEKINAGFKAALAGAGVQP
ADKYRTFVATFGPASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPE
AKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAANA
APANDKFTVFEAAFNDEIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFET
ALKKAITAMSEAQKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAA81609.1 Allergen Phl p 5; unknown function [Phleum pratense]
AAAAVPRRGPRGGPGRSYTADAGYAPATPAAAGAAAGKATTEEQKLIEDINVGFKAAVAA
AASVPAADKFKTFEAAFTSSSKAAAAKAPGLVPKLDAAYSVAYKAAVGATPEAKFDSFVA
SLTEALRVIAGALEVHAVKPVTEEPGMAKIPAGELQIIDKIDAAFKVAATAAATAPADDK
FTVFEAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAPQVKYAVFEAALTKAI
TAMSEVQKVSQPATGAATVAAGAATTAAGAASGAATVAAGGYKV
>CAA96545.1 Allergen major allergen Bet v 1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFFLDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFRYVKDRVDEVDHTNFKYSYSVIEGGPVGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKEEQIKASKEMGETLLRAVESYLLAHSDAYN
>CAA70608.1 Allergen Phl p 12; profilin [Phleum pratense]
MSWQTYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAGAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVEQGM
>CAA70609.1 Allergen Phl p 12; profilin [Phleum pratense]
MSWQTYVDEHLMCEIEGHHLASAAIFGHDGTVWAQSADFPQFKPEEITGIMKDLDEPGHL
APTGMFVAAAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVEQGM
>CAA75141.1 Allergen Der p 10; tropomyosin [Dermatophagoides
pteronyssinus]
MEAIKNKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRALQKKIQQIENELDQV
QEQLSAANTKLEEKEKALQTAEGDVAALNRRIQLIEEDLERSEERLKIATAKLEEASQSA
DESERMRKMLEHRSITDEERMEGLENQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAHEQQIRIMTTKLKEAEARAE
FAERSVQKLQKEVGRLEDELVHEKEKYKSISDELDQTFAELTGY
>AAD13683.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKGFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHY
HTKGDVEIKEEHVKAGKEKAHGLFKLIESYLKGHPDAYN
>CAA73038.1 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]
MEDVPQPPVSQFHIQGQVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDVTFTEIGYT
RAEGLYSMLVERDHKNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILNTVNGTTRTVNP
LRFYKKEALPKCAQVYNKLGMYPPNM
>CAA73037.1 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]
MEDVPQPPVSQFHIQGQVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDVTFTEIGYT
RAEGLYSMLVERDHKNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILSTVNGTTRTVNP
LGFYKKEALPKCAQVYNKLGMYPPNM
>CAA73036.1 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]

MEDVPQPPVSQFHIQGQVYCDTCRSRFITELSEFIPGASVRLQCREKENGDITFTEIGYT
RAEGLYSMLVERDHKNEFCEITLISSGRKDCDEIPIEGWAKPSLKFILNTVNGTTRTVNP
LGFFKKEALPKCAQVYNKLGMYPPNM
>CAA73035.1 Allergen Ole e 2; profilin [Olea europaea]
MSWQAYVDDHLMCDIEGHEDHRLTAAAIVGHDGSVWAQSATFPQFKPEEMNGIMTDFNEP
GHLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNM
VVERLGDYLVEQGM
>Q28050.1 Allergen Bos d 3; calcium-binding protein [Bos taurus]
MSSSQLEQAITDLINLFHKYSGSDDTIEKEDLLRLMKDNFPNFLGACEKRGRDYLSNIFE
KQDKNKDRKIDFSEFLSLLADIATDYHNHSHGAQLCSGGNQ
>Q28133.1 Allergen Bos d 2; lipocalin [Bos taurus]
MKAVFLTLLFGLVCTAQETPAEIDPSKIPGEWRIIYAAADNKDKIVEGGPLRNYYRRIEC
INDCESLSITFYLKDQGTCLLLTEVAKRQEGYVYVLEFYGTNTLEVIHVSENMLVTYVEN
YDGERITKMTEGLAKGTSFTPEELEKYQQLNSERGVPNENIENLIKTDNCPP
>P55958.1 Allergen Par j 2; lipid transfer protein [Parietaria judaica]
MRTVSMAALVVIAAALAWTSSAEPAPAPAPGEEACGKVVQDIMPCLHFVKGEEKEPSKEC
CSGTKKLSEEVKTTEQKREACKCIVRATKGISGIKNELVAEVPKKCDIKTTLPPITADFD
CSKIQSTIFRGYY
>Q41260.1 Allergen Pha a 1; beta-expansin [Phalaris aquatica]
MMKMVCSSSSSSLLVVAALLAVFVGSAQGIAKVPPGPNITAEYGDKWLDAKSTWYGKPTG
AGPKDNGGACGYKDVDKAPFNGMTGCGNTPIFKDGRGCGSCFELKCSKPESCSGEPITVH
ITDDNEEPIAPYHFDLSGHAFGSMAKKGEEENVRGAGELELQFRRVKCKYPDGTKPTFHV
EKGSNPNYLALLVKYVDGDGDVVAVDIKEKGKDKWIELKESWGAIWRIDTPDKLTGPFTV
RYTTEGGTKAEFEDVIPEGWKADTHDASK
>P56164.1 Allergen Pha a 5; unknown function [Phalaris aquatica]
MAVQKYTMALFLAVALVAGPAAPTPPTPRTPPLLPPPRARDKATLTSRSVEDINAASRRP
WWASVPPADKFKTFADHVLCVPNADVTSAATKAPQLKAKLDAAYRVAYEAAEGSTPEAKY
DAFIAALTEALRVIAGAFEVHAVKPATEEVVADPVGELQIVDKIDAAFKIAATAANSAPA
NDKFTVFEGAFNKAIKESTAGAYETYKFIPSLEAAVKQAYGATVARAPEVKYAVFEAGLT
KAITAMSEAQKVAKPPLSPQPPQVLPLAAGGAATVAAASDVRVCRSHGTLQDACLLRCRG
GCQPVVWRGGSHRARGGYKV
>P56165.1 Putative Major pollen allergen Pha a 5.2 precursor (Pha a 5)
(Clone 14) [Phalaris aquatica]
MAVQKYTVALFLAVALVAGPAALYAGDGYAPATPAASATLATPATPAASPQHAGTTEYHI
VRKAGLNEEKNAARQTDDEQKRSDEINCPDFNKSVHCRADRLPVCSSTSAHSSKQDVAWM
LGYGSIQGFSMDDASVGSVSSEFHVIESAIEVITYIGEEVKVIPAGEVEVINKVKAAFST
AATAADEAPANDKFTVFVSSFNKAIKETTGGAYAGYKFIPTLEAAVKQAYAASSATAPEV
KYAVFETALKKAISAMSEAQKEAKPAAAISAATTTISASTATPAAPPPPQLGTATPAAVA
GGYKV
>P56166.1 Putative Major pollen allergen Pha a 5.3 precursor (Pha a 5)
(Clone 29) [Phalaris aquatica]
MAVQKYTVALFLAMALVAGPAASYAADAGTPPTPATPAVPGAAAGKATTHEQKLIEDINA
AFKWWPASAPPADKYKTFETAFSKANIAGASTKGLDAAYSVVYNTAAGATPEAKYDSFVT
ALTEALRIMAGTLEVHAVKPATEEEVPSAKILRANSRSSTRSSRFKIAATVATPLSHSTA
ANSAPANDKFTVFEGAFNKAIKERHGGPTETYKFIPSLEAAVKQAYGATVARAPEVKYAV
FEAGLTKAITAMSEAQKVAKPVRLSPQPPQVLPLAAGGAATVAAASDSRGGYKV
>P56167.1 Putative Major pollen allergen Pha a 5.4 (Pha a 5) (Clone 5)
[Phalaris aquatica]
AKYDAFIAALTEALRVIAGAFEVHAVKPATEEVPAAKIPAGELQIVDKIDAAFKIAATAA
NSAPANDKFTVFEGAFNKAIKERHGGAYETYKFIPSLEASRSKQAYGATVARAPEVKYAV
FEAGLTKAITAMSEAQKVAKPVRSVTAAAAGAATAAGGAATVAASRPTSAGGYKV
>P02221.2 Allergen Chi t 2; hemoglobin CTT-I/IA [Chironomus thummi
thummi]
MKFLILALCVAAAMAGPSGDQIAAAKASWNTVKNNQVDILYAVFKANPDIQTAFSQFAGK

DLDSIKGTPDFSKHAGRVVGLFSEVMDLLGNDANTPTILAKAKDFGKSHKSRASPAQLDN
FRKSLVVYLKGATKWDSAVESSWAPVLDFVFSTLKNEL
>P02224.2 Allergen Chi t 3; hemoglobin CTT-VI [Chironomus thummi thummi]
MKFLVLALCIAAASAAVLTTEQADLVKKTWSTVKFNEVDILYAVFKAYPDIMAKFPQFAG
KDLDSIKDSAAFATHATRIVSFLSEVISLAGSDANIPAIQNLAKELATSHKPRGVSKDQF
TEFRTALFTYLKAHINFDGPTETAWTLALDTTYAMLFSAMDS
>CAA05186.1 Allergen pollen allergen Betv1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA05187.1 Allergen pollen allergen Betv1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPMGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA05188.1 Allergen pollen allergen Betv1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA05190.1 Allergen pollen allergen Betv1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>AAB82404.1 Allergen Per a 1; nitrile-specifier protein [Periplaneta
americana]
MKLPIMILAVLGVAFGKSLPNRNLQDDLNDFLALLPVDEITAIVMDYLANDAEVQEAVAY
LQGEEFHKIVFTVEGLQEFGNFVQFLEDHGLDAVGYINRLHSVFGWDPYVPSSKRKHTRR
GVGVDGLIDDIIAILPIDDLKALFQEKLETSPDFKAFYDAVRSPEFQSIVQTLNAMPEYQ
DLLQKLRDKGVDVDHYIELIRALFGLTRAARNLQDDLNDFLALIPTDQILAIAMDYLAND
AEVQELVAYLQSDDFHKIINTIEALPEFANFYNFLKGHGLDVADYINEIHSIIGLPPFVP
PSRRHARRGVGINGLIDDVIAILPVDELKALFQEKLETSPDFKALYDAIRSPEFQSIIST
LNAMPEYQELLQNLRDKAVDVDHFIELIRSLFGLP
>AAC48794.1 Allergen Can f 1; lipocalin [Canis familiaris]
MKTLLLTIGFSLIAILQAQDTPALGKDTVAVSGKWYLKAMTADQEVPEKPDSVTPMILKA
QKGGNLEAKITMLTNGQCQNITVVLHKTSEPGKYTAYEGQRVVFIQPSPVRDHYILYCEG
ELHGRQIRMAKLLGRDPEQSQEALEDFREFSRAKGLNQEILELAQSETCSPGGQ
>AAC48795.1 Allergen Can f 2; lipocalin [Canis familiaris]
MQLLLLTVGLALICGLQAQEGNHEEPQGGLEELSGRWHSVALASNKSDLIKPWGHFRVFI
HSMSAKDGNLHGDILIPQDGQCEKVSLTAFKTATSNKFDLEYWGHNDLYLAEVDPKSYLI
LYMINQYNDDTSLVAHLMVRDLSRQQDFLPAFESVCEDIGLHKDQIVVLSDDDRCQGSRD
>AAB86960.1 Allergen Zea m 12; profilin [Zea mays]
MSWQAYVDEHLMCEIEGQHLSAAAIVGHDGSVWAQSESFPELKPEEVAGIIKDFDEPGTL
APTGLFVGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMSLIIGVYDEPMTPGQCNMVVE
RLGDYLIEQGF
>AAC48287.1 Allergen Hom a 1; tropomyosin [Homarus americanus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANIRAEKTEEEIRITHKKMQQVENELDQV
QEQLSLANTKLEEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>AAC48288.1 Allergen Hom a 1; tropomyosin [Homarus americanus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANIRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANTQLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLANKLKAAEARAE

FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>AAB97141.1 Allergen Pru ar 1; pathogenesis-related protein / PR-10 / Bet v 1-like protein [Prunus armeniaca]
MGVFTYETEFTSVIPPEKLFKAFILDADNLIPKVAPTAVKGTEILEGDGGVGTIKKVTFG
EGSQYAYVKHRVDGIDKDNLSYSYTLIEGDALSDVIENIAYDIKLVASPDGGSIVKTTSH
YHTKGDVEIKEEQVKAGKEKAAGLFKLVEAYLLANPDAYN
>AAD13644.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKDLQAKILYYYDELEGDAKKEATEHL
KDGCREILKHVVGEEKEAELKKLKDSGASKEEVKAKVEEALHAVTDEEKKQYIADFGPAC
KKIFAAAHTSRRRR
>AAD13645.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKDLQAKILHYYDELEGDAKKEATEHL
KDGCREILKHVVGEEKEAELKKPKDSGASKEEVKTKVEEALHAVTDEEKKQYIADFGPAC
KKIFGAAHTSRRRR
>AAD13646.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKDLQAKILHYYDELEGDAKKEATEHL
KDGCREILKHVVGEEKEAELKKLKDSGASKEEVKAKVEEALHAVTDEEKKQYIADFGPAC
KKIFGAAHTSRRRR
>AAD13647.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKELEAKILHYYDELEGDAKKEATEHL
KGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIADFGPAC
KKIYGVHTSRRRR
>AAD13649.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HHFTLESSLDTHLKWLSQEQKDESLKMKKGGKAKKELEAKILHYYDEPEGDAKKEATEHL
KGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVIDEEKKQYIADFGPAC
KKIFGVHTSRRRR
>AAD13650.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HTMEHYLKTYLSWLTEEQKEKLKEMKEAGQTKAEIQHEVMHYYDQLHGEEKQQATEKLKV
GCKMLLKGIIGEEKVVELRNVKEAGADIQELQQKVEKMLSEVTDEKQKEKVHEYGPACKK
IFGATTLQHHRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYD
ELEGDAKKEATEHLKGGCPEILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTD
EEKKQYIADFGPACKKIYGVHTSRRRR
>AAD13651.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HTMEHYLKTYLSWLTEEQKEKLKEMKEAGKTKAEIQHEVMRYYDQLHGEEKQQATEKLKV
GCKMLLKGIIGEEKVVELRNMKEAGADIQELQQKVEKMLSEVTDEKQKEKVHEYGPACKK
IFGATTLQHHRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYD
ELEGDAKKEATEHLKGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTD
EEKKQYIADFGPACKKIYGVHTSRRRR
>AAD13652.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HTMEHYLKTYLSWLTEEQKEKLKEMKEAGKTKAEIQHEVMHYYDQLHGEEKQQATEKLKV
GCKMLLKGIIGEEKVVELRNMKEAGADIQELQQKVEKMLSEVTDEKQKEKVHEYGPACKK
IFGATTLQHHRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKELEAKILHYYD
ELEGDAKKEATEQLKGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTD
EEKKQYIADFGPACKKIYGVHTSRRRR
>AAB93837.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HTMEHYLKTYLSWLTEEQKEKLKEMKEAGKTKAEIQHEVMRYYDQLHGEEKQQATEKLKV
GCKMLLKGIIGEEKVVELRNMKEAGADIQELRQKVEKMLSEVTDEKQKEKVHEYGPACKK
IFGATTLQHHRRRR
>AAB93839.1 Putative ABA-1 allergen [Ascaris lumbricoides]
HTMEHYLKTYLSWLTEEQKEKLKEMKEAGKTKAEIQHEVMHFYDQLHGEEKQQATEKLKV
GCKMLLKGVIGEEKVVELRNMKEAGADIQELQQKVEKMLSEVTDEKQKEKVHEYGPACKK
IFGATTLQHHRRRR
>AAC67308.1 Putative 22.6 kDa tegumental antigen [Schistosoma japonicum]
MATTEYRLSLMEQFIRAFIEIDKDNNELIDKQELTKYCQQNQMDMKQIDPWIARFDTDKD

GKVSLEEFCRGFGLKVWEVRREKEELKKDKEGKVSTLPLDIQIIAATMSKAKQYNICCKF
KELLDKTSRTGDEVRAVANDLKAFLDSEYGRVWQVIILTGSYWMNFSHEPFLSMQFKYSN
YVCLLWRTPSS
>AAB95638.1 Allergen Asp f 3; peroxisomal protein [Aspergillus fumigatus]
MSGLKAGDSFPSDVVFSYIPWSEDKGEITACGIPINYNASKEWADKKVILFALPGAFTPV
CSARHVPEYIEKLPEIRAKGVDVVAVLAYNDAYVMSAWGKANQVTGDDILFLSDPDARFS
KSIGWADEEGRTKRYALVIDHGKITYAALEPAKNHLEFSSAETVLKHL
>AAB99797.1 allergenic protein [Oryza sativa Japonica Group]
MASNKVVFSVLLLAVVSVLAATATMAEYHHQDQVVYTPGPLCQPGMGYPMYPLRVAGVGE
APLLGRARPRRRAVPGDCCRQFPPVDYSWCRCEAISHMLGGIYRELGAPDVGHPMSEVFR
GCRRGTWSARRRAPGVLQVDIPNGGGGVCYWLARSGY
>CAA05978.1 Allergen prohevein [Hevea brasiliensis]
EQCGRQAGGKLCPNNLCCSQWGWCGSTDEYCSPDHNCQSNCKDSGEGVGGGSASNVLATY
HLYNSQDHGWDLNAASAYCSTWDANKPYSWRSKYGWTAFCGPVGAHGQPSCGKCLSVTNT
GTGAKATVRIVDQCSNGGLDLDVNVFRQLDTDGKGYERGHLTVNYQFVDCGDSFNPLFSV
MKSSVIN
>Q25641.1 Allergen Per a 3; hemocyanin, arylphorin [Periplaneta
americana]
MKTALVFAAVVAFVAARFPDHKDYKQLADKQFLAKQRDVLRLFHRVHQHNILNDQVEVGI
PMTSKQTSATTVPPSGEAVHGVLQEGHARPRGEPFSVNYEKHREQAIMLYDLLYFANDYD
TFYKTACWARDRVNEGMFMYSFSIAVFHRDDMQGVMLPPPYEVYPYLFVDHDVIHMAQKY
WMKNAGSGEHHSHVIPVNFTLRTQDHLLAYFTSDVNLNAFNTYYRYYYPSWYNTTLYGHN
IDRRGEQFYYTYKQIYARYFLERLSNDLPDVYPFYYSKPVKSAYNPNLRYHNGEEMPVRP
SNMYVTNFDLYYIADIKNYEKRVEDAIDFGYAFDEHMKPHSLYHDVHGMEYLADMIEGNM
DSPNFYFYGSIYHMYHSMIGHIVDPYHKMGLAPSLEHPETVLRDPVFYQLWKRVDHLFQK
YKNRLPRYTHDELAFEGVKVENVDVGKLYTYFEQYDMSLDMAVYVNNVDQISNVDVQLAV
RLNHKPFTYNIEVSSDKAQDVYVAVFLGPKYDYLGREYDLNDRRHYFVEMDRFPYHVGAG
KTVIERNSHDSNIIAPERDSYRTFYKKVQEAYEGKSQYYVDKGHNYCGYPENLLIPKGKK
GGQAYTFYVIVTPYVKQDEHDFEPYNYKAFSYCGVGSERKYPDNKPLGYPFDRKIYSNDF
YTPNMYFKDVIIFHKKYDEVGVQGH
>CAA11266.1 Allergen Asp f 9; unknown function [Aspergillus fumigatus]
KRSFILRSADMYFKYTAAALAAVLPLCSAQTWSKCNPLEKTCPPNKGLAASTYTADFTSA
SALDQWEVTAGKVPVGPQGAEFTVAKQGDAPTIDTDFYFFFGKAEVVMKAAPGTGVVSSI
VLESDDLDEVDWEVLGGDTTQVQTNYFGKGDTTTYDRGTYVPVATPQETFHTYTIDWTKD
AVTWSIDGAVVRTLTYNDAKGGTRFPQTPMRLRLGSWAGGDPSNPKGTIEWAGGLTDYSA
GPYTMYVKSVRIENANPAESYTYSDNSGSWQSIKFDGSVDISSSSSVTSSTTSTASSASS
TS
>CAA75803.1 Allergen Sola l 4; pathogenesis-related protein / PR-10 / Bet
v 1-like protein [Solanum lycopersicum]
MGVNTYTYESTTTISPTRLFKALVLDFDNLVPKLLSQHVKNNETIEGDGGVGSIKQMNFV
EGGPIKYLKHKIHVIDDKNLETKYSLIEGDILGEKLESITYDIKFEANDNGGCVYKTTTE
YHTKGDHVVSEEEHNVGRRENHEYFQGCRSIPSRESFCLRLNIDEKESGLHVRNYACT
>AAC34312.1 Allergen Per a 1; nitrile-specifier protein [Periplaneta
americana]
SIISTLNAMPEYQDLLQNLRDKGVDVDHYIELIRALFGLTRAARNLQDDLNDFLALIPTD
QILAIAMDYLANDAEVQELVAYLQSDDFHKIITTIEGLPEFANFYNFLKEHGLDVADFLN
EIHSIIGLPPFVPPSRRHARRGVGINGLIDDVIAILPVDELKALFDEKLETSPDFKALYD
AIRSPEFQSIISTLNAMPEYQDLLQNLRDKGVDVDHFIELIRSLFGLP
>CAA73720.1 Allergen Mer a 1; profilin [Mercurialis annua]
MSWQTYVDDHLMCDIDGQGQHLAAASIVGHDGSIWAQSASFPQLKPEEITGIMKDFDEPG
HLAPTGLYIAGTKYMVIQGESGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLIEQGM
>CAA76556.1 Allergen Phl p 6; unknown function [Phleum pratense]
MAAHKFMVAMFLAVAVVLGLATSPTAEGGKATTEEQKLIEDINASFRAAMATTANVPPAD

KYKTFEAAFTVSSKRNLADAVSKAPQLVPKLDEVYNAAYNAADHAAPEDKYEAFVLHFSE
ALHIIAGTPEVHAVKPGA
>CAA76557.1 Allergen Phl p6 allergen [Phleum pratense]
MAAHKFMVAMFLAVAVVLGLATSPTAEGGKATTEEQKLIEDVNASFRAAMATTANVPPAD
KYKTFEAAFTVSSKRNLADAVSKAPQLVPKLDEVYNAAYNAADHAAPEDKYEAFVLHFSE
ALRIIAGTPEVHAVKPGA
>CAA76558.1 Allergen Phl p6 IgE binding fragment [Phleum pratense]
TEEQKLIEDVNASFRAAMATTANVPPADKYKTLEAAFTVSSKRNLADAVSKAPQLVPKLD
EVYNAAYNAADHAAPEDKYEAFVLHFSEALRIIAGTPEVHAVKPGA
>CAA04959.1 Allergen Asp f 4; unknown function [Aspergillus fumigatus]
GEVGDTVYATINGVLVSWINEWSGEAKTSDAPVSQATPVSNAVAAAAAASTPEPSSSHSD
SSSSSGVSADWTNTPAEGEYCTDGFGGRTEPSGSGIFYKGNVGKPWGSNIIEVSPENAKK
YKHVAQFVGSDTDPWTVVFWNKIGPDGGLTGWYGNSALTLHLEAGETKYVAFDENSQGAW
GAAKGDELPKDQFGGYSCTWGEFDFDSKINHGWSGWDVSAIQAENAHHEVQGMKICNHAG
ELCSIISHGLSKVIDAYTADLAGVDGIGGKVVPGPTRLVVNLDYKE
>CAA06305.1 Allergen Aspf1 allergen [Aspergillus fumigatus]
RLVYNQAKAESNSHHAPLSDGKTGSSYPHWFTNGYDGDGKLIKGRMPIKFGKADCDRPPK
HGKDGMGKDDHYLLEFPTFPDGHDYKFDSKKPKEDPGPARVIYTYPNKVFCGIVAHERGN
QGDLR
>CAA11755.1 Allergen Gly m 3; profilin [Glycine max]
MSWQAYVDDHLLCGIEGNHLTHAAIIGQDGSVWLQSTDFPQFKPEEITAIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTGAALIIGIYDEPMTPGQCNMVVE
RLGDYLIDQGY
>CAA11756.1 Allergen Gly m 3; profilin [Glycine max]
MSWQAYVDDHLLCDIEGNHLTHAAIIGQDGSVWAQSTDFPQFKPEEITAIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTGAALIIGIYDEPMTPGQCNMVVE
RPGDYLIDQGY
>AAC38996.1 Allergen Pan s 1; tropomyosin [Panulirus stimpsoni]
MKLEKDNAMDRADTLEQQNKEANIRAEKAEEEVHNLQKRMQQLENDLDQVQESLLKANTQ
LEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAADESERMRKVL
ENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAEERAETGESKF
VELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAEFAERSVQKLQ
KEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>CAA11041.1 Allergen Hev b 7; patatin-like protein [Hevea brasiliensis]
MATGSTTLTQGKKITVLSIDGGGIRGIIPGIILASLESKLQDLDGPDARIADYFDIIAGT
STGGLITTMLTAPNEDKKPMYQAKDIKDFYLENCPKIFPKESRDNYDPIHSIGPIYDGEY
LRELCNNLLKDLTVKDTLTDVIIPTFDIKLLLPVIFSSDDAKCNALKNARLADVCISTSA
APVLLPAHSFTTEDDKNIHTFELIDGGAAATNPTLLALTHIRNEIIRQNPRFIGANLTES
KSRLVLSLGTGKSEYKEKYNADMTSKWRLYNWALYNGNSPAVDIFSNASSDMVDFHLSAL
FKSLDCEDYYLRIQDDTLTGEESSGHIATEENLQRLVEIGTRLLEKQESRINLDTGRLES
IPGASTNEAAITKFAKLLSEERKLRQLK
>BAA25899.1 Putative Bd 30K [Glycine max]
MGFLVLLLFSLLGLSSSSSISTHRSILDLDLTKFTTQKQVSSLFQLWKSEHGRVYHNHEE
EAKRLEIFKNNLNYIRDMNANRKSPHSHRLGLNKFADITPQEFSKKYLQAPKDVSQQIKM
ANKKMKKEQYSCDHPPASWDWRKKGVITQVKYQGGCGSGWAFSATGAIEAAHAIATGDLV
SLSEQELVDCVEESEGCYNGWHYQSFEWVLEHGGIATDDDYPYRAKEGRCKANKIQDKVT
IDGYETLIMSDESTESETEQAFLSAILEQPISVSIDAKDFHLYTGGIYDGENCTSPYGIN
HFVLLVGYGSADGVDYWIAKNSWGEDWGEDGYIWIQRNTGNLLGVCGMNYFASYPTKEES
ETLVSARVKGHRRVDHSPL
>P81216.1 Allergen Equ c 2; Lipocalin [Equus caballus]
SQXPQSETDYSQLSGEWNTIYGAASNIXK
>P81217.1 Allergen Equ c 2; Lipocalin [Equus caballus]
XQDPQSETDYSQLSGEWNT
>AAC16525.1 Allergen Phl p 5; unknown function [Phleum pratense]

ADLGYGGPATPAAPAEAAPAGKATTEEQKLIEKINDGFKAALAAAAGVPPADKYKTFVAT
FGAASNKAFAEGLSAEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAEYDAYVATL
SEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDSALKVAATAANAAPANDKFTVF
EAAFNNAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITATS
EAQKAAKPATEATATATAAVGAATGAATAATGGYKV
>AAC16526.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGGPATPAAPAEAAPAGKATTEEQKLIEKINDGFKAALAAAAGVPPADKYKTFVAT
FGAASNKAFAEGLSAEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATL
SEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDSAFKVAATAANAAPANDKFTVF
EAAFNNAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITAMS
EAQKAAKPATEATATATAAVGAATGAATAATGGYKV
>AAC16527.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGGPATPAAPAEAAPAGKATTEEQKLIEKINDGFKAALAAAAGVPPADKYKTFVAT
FGAASNKAFAEGLSAEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATL
SEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDSAFKVAATAANAAPANDKFTVF
EAAFNNAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITAMS
EAQKAAKPAAAATATATSAVGAATGATTAAAGGYKV
>AAC16528.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGGPATPAAPAEAAPAGKATTEEQKLIEKINDGFKAALAAAAGVPPADKYKTFVAT
FGAASNKAFAEGLSAEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATL
SEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDSAFKVAATAANAAPANDKFTVF
EAAFNNAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAFTAMS
EAQKAAKPATEATATATAAVGAATGAATAATGGYKV
>CAA75312.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDERLMCEIEGNHLTAAAIIGQDGSVWAQSSNFPQFKSEEITAIMSDFDEPGTL
APTGLHLGGTKYMVIQGEAGAVIRGKKGPGGVTVRKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLLEQGM
>CAB01591.1 Allergen Pers a 1; chitinase (class 1)/ hevein-like protein
[Persea americana]
MVYCTASLPLLLLLLVGLLAGEAFAEQCGRQAGGALCPGGLCCSQFGWCGSTSDYCGPTC
QSQCGGVTPSPGGGVASLISQSVFNQMLKHRNDAACQAKGFYTYNAFIAAANSFNGFASV
GDTATRKREIAAFLAQTSHETTGGWATAPDGPYAWGYCFLKEQGNPPDYCVPTAQWPCAP
GKKYYGRGPIQISYNYNYGPAGRAIGYDLINNPDAVATDPVISFKTALWFWMTPQSPKPS
CHNVITGRWTPSAADRAAGRLPGYGVITNIINGGIECGKGFNDKVADRIGFYKRYCDLLG
VSYGSNLDCYNQRSFGVSTNPLAASS
>AAC24001.1 Allergen Pyr c 5; isoflavon reductase / phenylcoumaran
benzylic ether reductase [Pyrus communis]
MASKSQILFIGGTGYIGKFIVEASAKAGYPTYVLVREASLSDPAKSKVIENFKALGVNFV
LGDLYDHESLVKAIKQVDVVISTVGHGQLADQGKIIAAIKEAGNVKRFFPSEFGNDVDRS
HAVEPAKSAFETKAKIRRAVEAEGIPYTYVSSNFFAGYFLPTLNQPGASSAPRDKVVILG
DGNPKAIFNKEDDIGTYTIRAVDDPRTLNKVLYIRPPANTISFNELVSLWEKKIGKTLER
IYVPEEQLLKNIQEAAVPLNVILSISHAVFVKGDHTNFEIEPSFGVEATALYPDVKYTTV
DEYLNQFV
>CAA54818.1 Allergen Lig v 1; Ole e 1 -like protein/ trypsin inhibitor
[Ligustrum vulgare]
EDVPQPPVSQFYIQGQVYCDTCRARFITELSEFIPGAGVRLQCKDGENGKVTFTEVGYTK
AEGLYNMLIERDHKNEFCEITLISSSRKDCDEIPTEGWVKPSLKFVLNTVNGTTRTINPL
GFLKKEVLPKCPQVFNKLGMYPPNM
>CAA54819.1 Allergen Lig v 1; Ole e 1 -like protein/ trypsin inhibitor
[Ligustrum vulgare]
EDVPQPPVSQFYIQGQVYCDTCRARFITELSEFIPGAGVRLQCKDGENGKITFTEVGYTR
AEGLYSMLIERDHKNEFCEITLLSSSRKDCDEIPIEGWVKPSLKFMLNTVNGTTRTINPL
GFFKKEALPKCPQVFNKLGMYPPNM
>P81402.1 Allergen Pru p 3; lipid transfer protein [Prunus persica]

ITCGQVSSALAPCIPYVRGGGAVPPACCNGIRNVNNLARTTPDRQAACNCLKQLSASVPG
VNPNNAAALPGKCGVHIPYKISASTNCATVK
>CAA11042.1 Allergen latex allergen [Hevea brasiliensis]
MATGSTTLTQGKKITVLSIDGGGIRGIIPGIILASLESKLQDLDGPDARIADYFDIIAGT
STGGLITTMLTAPNEDKKPIYQAKDIKDFYLENCPKIFPKESRDTYDPIHSIGPIYDGEY
LRELCNNLLKDLTVKDTLTDVIIPAFDIKLLLPVIFSSDDAKCNALKNARLADVCISTSA
APVLLPAHSFTTEDDKNIHTFELIDGGVAAANPTLLALTHIRNEIIRQNPRFIGANLTES
KSRLVLSLGTGKSEYKEKYNADMTSKWRLYNWALYNGNSPAVDIFSNASSDMVDFHLSAL
FKSLDCEDYYLRIQDDTLTGEESSGHIATEENLQRLVEIGTELLEKQESRINLDTGRLES
IPGAPTNEAAIAKFAKLLSEERKLRQLK
>AAC25994.1 Allergen Phl p 5; ribonuclease [Phleum pratense]
MAVHQYTVALFLAVALVAGPAGSYAADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKAT
TEEQKLIEKINAGFKAALAAAAGVPPADKYRTFVATFGAASNKAFAEGLSGEPKGAAESS
SKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATVSEALRIIAGTLEVHAVKPAAEEVK
VIPAGELQVIEKVDAAFKVAATAANAAPANDKFTVFEAAFNDAIKASTGGAYESYKFIPA
LEAAVKQAYAATVATAPEVKYTVFETALKKAITAMSEAQKAAKPAAAATATATAAVGAAT
GAATAATGGYKV
>AAC25995.1 Allergen Phl p 5; ribonuclease [Phleum pratense]
SVKRSNGSAEVHRGAVPRRGPRGGPGRSYAADAGYAPATPAAAGAEAGKATTEEQKLIED
INVGFKAAVAAAASVPAADKFKTFEAAFTSSSKAATAKAPGLVPKLDAAYSVAYKAAVGA
TPEAKFDSFVASLTEALRVIAGALEVHAVKPVTEEPGMAKIPAGELQIIDKIDAAFKVAA
TAAATAPADDKFTVFEAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAPQVKY
AVFEAALTKAITAMSEVQKVSQPATGAATVAAGAATTAAGAASGAATVAAGGYKV
>AAC25997.1 Allergen Phl p 5; ribonuclease [Phleum pratense]
MAVQKYTVALFLAVALVAGPAASYAADAGYAPATPAAAGAEAGKATTEEQKLIEDINVGF
KAAVAAAASVPAADKFKTFEAAFTSSSKAATAKAPGLVPKLDAAYSVAYKAAVGATPEAK
FDSFVASLTEALRVIAGALEVHAVKPVTEDPAWPKIPAGELQIIDKIDAAFKVAATAAAT
APADDKFTVFEAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAPQVKYAVFEA
ALTKAITAMSEVQKVSQPATGAATVAAGAATTATGAASGAATVAAGGYKV
>AAC25998.1 Allergen Phl p 5; ribonuclease [Phleum pratense]
MAVQKYTVALFLAVALVAGPAASYAADAGYAPATPAAAGAEAGKATTEEQKLIEDINVGF
KAAVAAAASVPAADKFKTFEAAFTSSSKAATAKAPGLVPKLDAAYSVSYKAAVGATPEAK
FDSFVASLTEALRVIAGALEVHAVKPVTEEPGMAKIPAGELQIIDKIDAAFKVAATAAAT
APADTVFEAAFNKAIKESTGGAYDTYKCIPSLEAAVKQAYAATVAAAPQVKYAVFEAALT
KAITAMSEVQKVSQPATGAATVAAGAATTAAGAASGAATVAAGGYKV
>CAA76831.1 Allergen Aln g 4; calcium-binding protein, polcalcin [Alnus glutinosa]
MADDHPQDQAEHERIFKCFDANGDGKISASELGDALKTLGSVTPDEVKHMMAEIDTDGDG
FISFQEFTNFARANRGLVKDVAKIF
>CAA76841.1 Allergen Can f 4; serum albumin [Canis familiaris]
MDTYKSEIAHRYNDLGEEHFRGLVLVAFSQYLQQCPFEDHVKLAKEVTEFAKACAAEESG
ANCDKSLHTLFGDKLCTVASLRDKYGDMADCCEKQEPDRNECFLAHKDDNPGFPPLVAPE
PDRLCAAFQDNEQLFLGKYLYEIARRHPYFYAPELLYYAQQYKGVFAECCQAADKAACLG
PKTEALREKVLLSSAKERFKCASLQKFGDRAFKAWSVARLSQRFPKADFAEISKVVTDLT
KVHKECCHGDLLECADDRADLAKYMCENQDSISTKLKECCDKPVLEKSQCLAEVERDELP
GDLPSLAADFVEDKEVCKNYQEAKDAFLGTFLYEYSRRHPEYSVSLLLRLAKEYEATLEK
CCATDDPPTCYAKVLDEFKPLVDEPQNLVKTNCELFEKLGEYGFQNALLVRYTKKAPQVS
TPTLVEVSRKLGKVGTKCCKKPESERMSCADDFLSVVLNRLCVLHEKTPVSERVTKCCSE
SLVNRRPCFSGLEVDETYVPKEFNAETFTFHADLCTLPEAEKQVKKQTALVELLKHKPKA
TDEQLKTVMGDFGAFVEKCCAAENKEGCFSEEGPKLVAAAQAALV
>CAA76847.1 Allergen bovine serum albumin [Bos taurus]
MKWVTFISLLLLFSSAYSRGVFRRDTHKSEIAHRFKDLGEEHFKGLVLIAFSQYLQQCPF
DEHVKLVNELTEFAKTCVADESHAGCEKSLHTLFGDELCKVASLRETYGDMADCCEKQEP
ERNECFLSHKDDSPDLPKLKPDPNTLCDEFKADEKKFWGKYLYEIARRHPYFYAPELLYY

ANKYNGVFQECCQAEDKGACLLPKIETMREKVLTSSARQRLRCASIQKFGERALKAWSVA
RLSQKFPKAEFVEVTKLVTDLTKVHKECCHGDLLECADDRADLAKYICDNQDTISSKLKE
CCDKPLLEKSHCIAEVEKDAIPENLPPLTADFAEDKDVCKNYQEAKDAFLGSFLYEYSRR
HPEYAVSVLLRLAKEYEATLEECCAKDDPHACYSTVFDKLKHLVDEPQNLIKQNCDQFEK
LGEYGFQNALIVRYTRKVPQVSTPTLVEVSRSLGKVGTRCCTKPESERMPCTEDYLSLIL
NRLCVLHEKTPVSEKVTKCCTESLVNRRPCFSALTPDETYVPKAFDEKLFTFHADICTLP
DTEKQIKKQTALVELLKHKPKATEEQLKTVMENFVAFVDKCCAADDKEACFAVEGPKLVV
STQTALA
>AAD05375.1 Allergen Ole e 3; calcium-binding protein / polcalcin [Olea europaea]
MADDPQEVAEHERIFKRFDANGDGKISSSELGETLKTLGSVTPEEIQRMMAEIDTDGDGF
ISFEEFTVFARANRGLVKDVAKIF
>CAA08836.1 Allergen BDAI-1; Barley dimeric alpha-amylase inhibitor [Hordeum vulgare subsp. vulgare]
MGAMWMKSMLLVLLLCMLMVTPMTGARSDNSGPWMWCDPEMGHKVSPLTRCRALVKLECV
GNRVPEDVLRDCCQEVANISNEWCRCGDLGSMLRSVYAALGVGGGPEEVFPGCQKDVMKL
LVAGVPALCNVPIPNEAAGTRGVCYWSASTDT
>CAA76887.1 Allergen Phl p 7; calcium-binding protein, polcalcin [Phleum pratense]
MADDMERIFKRFDTNGDGKISLSELTDALRTLGSTSADEVQRMMAEIDTDGDGFIDFNEF
ISFCNANPGLMKDVAKVF
>BAA32435.1 Allergen Mala f 2; peroxysomal membrane protein [Malassezia furfur]
MPGDPTATAKGNEIPDTLMGYIPWTPELDSGEVCGIPTTFKTRDEWKGKKVVIVSIPGAY
TPICHQQHIPPLVKRVDELKAKGVDAVYVIASNDPFVMAAWGNFNNAKDKVVFATDIDLA
FSKALGATIDLSAKHFGERTARYALIIDDNKIVDFASDEGDTGKLQNASIDTILTKV
>BAA32436.1 Allergen Mala f 3; peroxysomal membrane protein [Malassezia furfur]
EIGSTIPNATFAYVPYSPELEDHKVCGMPTSFQSHERWKGKKVVIVAVPGAFTPTCTANH
VPPYVEKIQELKSKGVDEVVVISANDPFVLSAWGITEHAKDNLTFAQDVNCEFSKHFNAT
LDLSSKGMGLRTARYALIANDLKVEYFGIDEGEPKQSSAATVLSKL
>CAA75506.1 Allergen Hel a 2; profilin [Helianthus annuus]
MSWQAYVDEHLMCDIEGTGQHLTSAAILGLDGTVWAQSAKFPQFKPEEMKGIIKEFDEAG
TLAPTGMFIAGAKYMVLQGEPGAVIRGKKGAGGICIKKTGQAMIMGIYDEPVAPGQCNMV
VERLGDYLLEQGM
>AAC36740.1 Allergen Mal d 2; thaumatin-like protein [Malus domestica]
MMKSQVAPRPTLAILFFFSGAHAAKITFTNNCPNTVWPGTLTGDQKPQLSLTGFELASKA
SRSVDAPSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEITIAA
NGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNKVCPAPLQVKAADGSVISCK
SACLAFGDSKYCCTPPNNTPETCPPTEYSEIFEKQCPQAYSYAYDDKNSTFTCSGGPDYV
ITFCP
>AAC61869.1 Putative tropomyosin [Crassostrea virginica]
RNRKVLENLNNASEERTDVLEKQLTEAKLIAEEADKKYDEAARKLAITEVDLERAEARLE
AAEAKVLELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQRLKDAENRATEAER
TVSKLQKEVDRLEDELLAEKERYKAISDELDQTFAELAGY
>AAC63045.1 Allergen Ara h 3; 11S globulin / legumin-like protein [Arachis hypogaea]
RQQPEENACQFQRLNAQRPDNRIESEGGYIETWNPNNQEFECAGVALSRLVLRRNALRRP
FYSNAPQEIFIQQGRGYFGLIFPGCPRHYEEPHTQGRRSQSQRPPRRLQGEDQSQQQRDS
HQKVHRFDEGDLIAVPTGVAFWLYNDHDTDVVAVSLTDTNNNDNQLDQFPRRFNLAGNTE
QEFLRYQQQSRQSRRRSLPYSPYSPQSQPRQEEREFSPRGQHSRRERAGQEEENEGGNIF
SGFTPEFLEQAFQVDDRQIVQNLRGETESEEEGAIVTVRGGLRILSPDRKRRADEEEEYD
EDEYEYDEEDRRRGRGSRGRGNGIEETICTASAKKNIGRNRSPDIYNPQAGSLKTANDLN
LLILRWLGPSAEYGNLYRNALFVAHYNTNAHSIIYRLRGRAHVQVVDSNGNRVYDEELQE

GHVLVVPQNFAVAGKSQSENFEYVAFKTDSRPSIANLAGENSVIDNLPEEVVANSYGLQR
EQARQLKNNNPFKFFVPPSQQSPRAVA
>CAA83015.1 Allergen Asp f 5; metalloprotease [Aspergillus fumigatus]
MRGLLLAGALALPASVFAHPAHQSYGLNRRTVDLNAFRLKSLAKYVNATETVIEAPSSFA
PFKPQSYVEVATQHVKMIAPDATFRVVDDHYVGDNGVAHVHFRQTANGLDIDNADFNVNV
GKDGKVFSYGNSFYTGQIPSSAALTKRDFSDPVTALKGTTNTLQLPITVDSASSESTEEK
ESYVFKGVSGTVSDPKAKLVYFVKDDGTLALAWRVETDIDSNWLLTYIDAKSGEEIHGVV
DYVAEADYQVYAWGINDPTEGERTVIKDPWDSVASEFTWISDGSTNYTTSRGNNGIAQSN
PSGGPSYLNNYRPSSSSLSFKYPYSVSSSPPSSYIDASIIQLFYTANIYHDLLYTLGFTE
KAGNFEYNTNGQGGLGNDYVILNAQDGSGTNNANFATPPDGQPGRMRMYVWTESTPYRDG
SFEAGIVIHEYTHGLSNRLTGGPANSNCLNALESGGMGEGWSDFMATAIRLKPGDKRSTD
YTMGEWASNRAGGIRQYPYSTSLSTNPLTYTSVNSLNAVHAIGTVWASMLYEVLWNLIDK
HGKNDAPKPTLRDGVPTDGKYLAMKLVMDGMALQPCNPNFVQARDAILDADTALTGGENQ
CEIWTAFAKRGLGAGAKYSSRNRVGSTEVPSGVC
>AAC82355.1 Allergen Hev b 3; small rubber particle protein [Hevea
brasiliensis]
MAEEVEEERLKYLDFVRAAGVYAVDSFSTLYLYAKDISGPLKPGVDTIENVVKTVVTPVY
YIPLEAVKFVDKTVDVSVTSLDGVVPPVIKQVSAQTYSVAQDAPRIVLDVASSVFNTGVQ
EGAKALYANLEPKAEQYAVITWRALNKLPLVPQVANVVVPTAVYFSEKYNDVVRGTTEQG
YRVSSYLPLLPTEKITKVFGDEAS
>CAA10140.1 Putative major group I allergen Hol l 1 [Holcus lanatus]
MASSSLVLLVVALFAVFLGTAHGIAKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKDVDKPPFSGMTGCGNTPIFKSGRGCGSCFEIKCTKPESCSGEPIVVHITDDNE
EPIAAYHLDLSGKAFGAMAKKGEEQKLRSAGELELKFRRVKCEYPKGTKVTFHVEKGSNP
NYLALLVKYVDGDGDVVAVDIKEKGKDKWIELKESWGAVWRVDTPDKLTGPFTVRYTTEG
GTKVEAEDVIPEGWKADTAYESK
>CAA81613.1 Allergen Phl p 1; beta-expansin [Phleum pratense]
MASSSSVLLVVALFAVFLGSAHGIPKVPPGPNITATYGDKWLDAKSTWYGKPTAAGPKDN
GGACGYKDVDKPPFSGMTGCGNTPIFKSGRGCGSCFEIKCTKPEACSGEPVVVHITDDNE
EPIAAYHFDLSGIAFGSMAKKGDEQKLRSAGEVEIQFRRVKCKYPEGTKVTFHVEKGSNP
NYLALLVKFVAGDGDVVAVDIKEKGKDKWIALKESWGAIWRIDTPEVLKGPFTVRYTTEG
GTKGEAKDVIPEGWKADTAYESK
>P81496.1 Putative Allergen C-C [Triticum aestivum]
SFREQCVPGREITYECLNACAEYAVRQ
>O24170.1 Putative Profilin-2 (Pollen allergen Ole e 2) [Olea europaea]
MSWQAYVDDHLMCDIEGHEGHRLTAAAIVGHDGSVWAQSATFPQFKPEEMNGIMTDFNEP
GHLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNM
VVERLGDYLLEQGL
>O24171.1 Putative Profilin-3 (Pollen allergen Ole e 2) [Olea europaea]
MSWQAYVDDHLMCDIEGHEGHRLTAAAIVGHDGSVWAQSATFPQFKPEEMNGIMTDFNEP
GHLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNM
VAERLGDYLLEQGL
>AAC82349.1 Allergen Eur m 2; NCP2-like protein [Euroglyphus maynei]
MYKILCLSLLVAAVAADQVDIKDCANHEIKKVMVPGCKGSEPCVIHRGTAFQLEAVFDAN
QNSNAAKIEIKATIDGVEIDVPGIDNNLCHFMKCPLVKGQEYDIKYTWNVPRIAPKSENV
VVTVKLLGDNGVLACAIATHAKIRD
>AAC82350.1 Allergen Eur m 2; NCP2-like protein [Euroglyphus maynei]
VAAVAADQVDVKDCANHEIKKVMVPGCKGSEPCVIHRGTAFQLEAVFDANQNSNAAKIEI
KATIDGVEIDVPGIDNNLCHFMKCPLVKGQEYDIKYTWNVPRIAPKSENVVVTVKLLGDN
GVLACAIATHAKIRD
>AAC82351.1 Allergen Eur m 1; cysteine protease [Euroglyphus maynei]
MKIILAIASLLVLSAVYARPASIKTFEEFKKAFNKTYATPEKEEVARKNFLESLKYVESN
KGAINHLSDLSLDEFKNQFLMNANAFEQLKTQFDLNAETYACSINSVSLPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVASTESAYLAYRNMSLDLAEQELVDCASQNGCHGDTIPRGIE

YIQQNGVVQEHYYPYVAREQSCHRPNAQRYGLKNYCQISPPDSNKIRQALTQTHTAVAVI
IGIKDLNAFRHYDGRTIMQHDNGYQPNYHAVNIVGYGNTQGVDYWIVRNSWDTTWGDNGY
GYFAANINLMMIEQYPYVVML
>AAC82352.1 Allergen Eur m 1; cysteine protease [Euroglyphus maynei]
KHLSTIMKIILAIASLLVLSAVYARPASIKTFEEFKKAFNKSYATPEKEEVARKNFLESL
KYVESNKGAINHLSDLSLDEFKNQFLMNANAFEQLKTQFDLNAETYACSINSVSLPSELD
LRSLRTVTPIRNQGGCGSCWAFSGVASTESAYLAYRNMSLDLAEQELVDCASQNGCHGDT
IPRGIEYIQQNGVVQEHYYPYVAREQSCHRPNAQRYGLKNYCQISPPDSNKIRQALTQTH
TAVAVIIGIKDLNAFRHYDGRTIMQHDNGYQPNYHAVNIVGYGNTQGVDYWIVRNSWDTT
WGDNGYGYFAANINLMMIEQYPYVVIL
>CAA07318.1 Allergen pollen allergen Betv1, isoform at8 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVTTPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA07319.1 Allergen pollen allergen Betv1, isoform at10 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVEGYLLAHSDAYN
>CAA07320.1 Allergen pollen allergen Betv1, isoform at14 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNN
>CAA07323.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA07324.1 Allergen pollen allergen Betv1, isoform at42 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKLVATPDGGSILKISNK
YHTKGDHEMKAEHMKAIKEKGETLLRAVESYLLAHSDAYN
>CAA07325.1 Allergen pollen allergen Betv1, isoform at45 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPMGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA07326.1 Allergen pollen allergen Betv1, isoform at50 [Betula pendula]
MGVFNYETETTSLIPAARLFRAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPMGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA07327.1 Allergen pollen allergen Betv1, isoform at59 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILEGDTLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA07328.1 Allergen pollen allergen Betv1, isoform at87 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPMGDTLEKISNEIKIVATPDGGSILKISNN
>CAA07329.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKLVATPDGGSILEISNK
YHTKGDHEMKAEHMKAIKEKGEALLRAVESYLLAHSDAYN
>CAA07330.1 Allergen pollen allergen Betv1, isoform at7 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILEGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFP
EGSPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN

>CAA10345.1 Putative pollen allergen (group II) [Dactylis glomerata]
MSMASSSSSGLLAMAVLAALFAGAWCVPKVTFTVEKGSNEKHLAVLVKYEGDTMAEVELR
EHGSDEWVAMTKGEGGVWTFDSEEPLQGPFNFRFLTEKGMKNVFDDVVPEKYTIGATYAP
EE
>CAA65313.1 Allergen Tri a 37; alpha purothionin [Triticum aestivum]
MGSKGFKGVIVCLLILGLVLEQLQVEGKSCCRSTLGRNCYNLCRARGAQKLCAGVCRCKI
SSGLSCPKGFPKLALESNSDEPDTIEYCNLGCRSSVCDYMVNAAADDEEMKLYVENCADA
CVSFCNGDAGLPSLDAY
>AAC97369.1 Allergen Sol i 4; unknown function [Solenopsis invicta]
MKTFVLVSCLLVFTQIIYALDIKEISIMNRILEKCIRTVPKRENDPINPLRNVNVWYCAF
TKRGIFTPKGVNTKQYINYCEKTAISPADIKLCKKIASKCVKKVYDRPGPIIERSKNLLS
CVLKKGLLELTVYGKKK
>AAC97370.1 Putative venom allergen Sol i 4.02 precursor [Solenopsis invicta]
MKTFVLVSCLLVFTQIIYALDIKEISIMNRILEKCIRTVPKRENDPINPLKNVNVLYCAF
TKRGIFTPKGVNTKQYINYCEKTIISPADIKLCKKIASKCVKKVYDRPGPIIERSKNLLS
CVLKKGLLELTVYGKKK
>CAA10520.1 Allergen Poa p 1; beta expansin [Poa pratensis]
MASSSSVLLVVALFAVFLGTAHGIAKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKDVDKAPFSGMTGCGNTPIFKSGRGCGSCFEIKCTKPESCSGEPVLVHITDDNE
EPIAAYHFDLSGKAFGAMAKKGEEQKLRSAGELELKFRRVKCEYPEGTKVTFHVEKGSNP
NYLALLVKYVTGDGDVVAVDIKEKGKDKWIELKESWGSIWRVDTPDKLTGPFTVRYTTEG
GTKGEAEDVIPEGWKADTAYASK
>AAD09630.1 Putative napin-type 2S albumin 1 precursor [Glycine max]
MTKLTILLIALLFIAHTCCASKWQQHQQESCREQLKGINLNPCEHIMEKIQAGRRGEDGS
DEDHILIRTMPGRINYIRKKEGKEEEEEGHMQKCCSEMSELKSPICQCKALQKIMDNQSE
QLEGKEKKQMERELMNLAIRCRLGPMIGCDLSSDD
>CAA09883.1 Allergen Mala s 5; unknown [Malassezia sympodialis]
MSATTGSQAPNTTFTYIPWAPELDSGKVCGVPQTFKAHDRWKGKKVVVVAIPGAFTPACH
QNHIPGFVEKINELKAKGVDEVVVIAVNDAFVMSGWGVTVGGKDQIVYACDNDLAFSKAL
GGTLDLTSGGMGVRTARYAVVLDDLKITYFGMDEGNMGAPEKSSVDAVLAQL
>CAA09884.1 Allergen Mala s 6; cyclophilin [Malassezia sympodialis]
MSNVFFDITKNGAPLGTIKFKLFDDVVPKTAANFRALCTGEKGFGYAGSHFHRVIPDFML
QGGDFTAGNGTGGKSIYGAKFADENFQLKHNKPGLLSMANAGPNTNGSQFFITTVVTSWL
DGKHVVFGEVIDGMNVVKAIEAEGSGSGKPRSRIEIAKCGVC
>CAA09885.1 Allergen Mala s 7; unknown [Malassezia sympodialis]
AVSASPTPSKHNLYCYAQGKDLFEFHINDTVTKDVCKSLNSGKYHNMNNEKYCSVADYDV
KWFKERCQSHPTDVKTTKWIAGTDLKIEMDPKEPYELYCFNYYTTFGNLPDAGAKELDDD
ATKKACSALKSGKYQSDPKKKSCRMDKKDIDQFKEQCSQYQPSDRPPYGDWSAGTSLNVV
LNLKKNA
>AAD03608.1 Allergen Jun a 1; pectate lyase [Juniperus ashei]
MASPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
FYTVTSTDDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHSLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLGSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDPWNIYAIGGSSNPTILSEGNSFTAPSESYKKEV
TKRIGCESPSACANWVWRSTRDAFINGAYFVSSGKTEETNIYNSNEAFKVENGNAAPQLT
KNAGVVT
>BAA74451.1 Allergen Vig r 6; cytokinin specific binding protein / pathogenesis-related protein / PR-10 / Bet v 1-like protein [Vigna radiata]
MVKEFNTQTELSVRLEALWAVLSKDFITVVPKVLPHIVKDVQLIEGDGGVGTILIFNFLP
EVSPSYQREEITEFDESSHEIGLQVIEGGYLNQGLSYYKTTFKLSEIEEDKTLVNVKISY
DHDSDIEEKVTPTKTSQSTLMYLRRLERYLSNGSA

>AAD10850.1 Allergen Blo t 5; unknown function, group 5/21 mite allergen [Blomia tropicalis]
MKFAIVLIACFAASVLAQEHKPKKDDFRNEFDHLLIEQANHAIEKGEHQLLYLQHQLDEL
NENKSKELQEKIIRELDVVCAMIEGAQGALERELKRTDLNILERFNYEEAQTLSKILLKD
LKETEQKVKDIQTQ
>AAD13106.1 Allergen Asp n 14; beta-xylosidase [Aspergillus niger]
MAHSMSRPVAATAAALLALALPQALAQANTSYVDYNVEANPDLYPLCIETIPLSFPDCQN
GPLRSHLICDESATPYDRAASLISLFTLDELIANTGNTGLGVSRLGLPAYQVWSEALHGL
DRANFSDSGSYNWATSFPQPILTTAALNRTLIHQIASIISTQGRAFNNAGRYGLDVYAPN
INTFRHPVWGRGQETPGEDVSLAAVYAYEYITGIQGPDPDSNLKLAATAKHYAGYDIENW
HNHSRLGNDMNITQQDLSEYYTPQFHVAARDAKVHSVMCAYNAVDGVPACADSYFLQTLL
RDTFGFVDHGYVSSDCDAAYNIYNPHGYASSQAAAAAEAILAGTDIDCGTTYQWHLNESI
TAGDLSRDDIEKGVIRLYTTLVQAGYFDSNTTKANNPYRDLTWSDVLETDAWNISYQAAT
QGIVLLKNSNNVLPLTEKAYPPSNTTVALIGPWANATTQLLGNYYGNAPYMISPRAAFEE
AGYKVNFAEGTGISSTSTSGFAAALSAARSADVIIYAGGIDNTLEAEALDRESIAWPGNQ
LDLIQKLASSAGSKPLIVLQMGGGQVDSSSLKNNTNVTALLWGGYPGQSGGFALRDIITG
KKNPAGRLVTTQYPASYAEEFPATDMNLRPEGDNPGQTYKWYTGEAVYEFGHGLFYTTFA
ESSSNTTTKEVKLNIQDILSQTHEELASITQLPVLNFTANIKNTGKLESDYTAMVFANTS
DAGPAPYPVKWLVGWDRLGDVKVGETRELRVPVEVGSFARVNEDGDWVLFPGTFELALNL
ERKVRVKVVLEGEEEVVLKWPGKE
>AAD13531.1 Allergen Bla g 1; microvilli-like protein with unknown function [Blattella germanica]
NAIEFLNNIHDLLGIPHIPVTARKHHRRGVGITGLIDDIIAILPVDDLYALFQEKLETSP
EFKALYDAIRSPEFQSIVGTLEAMPEYQNLIQKLKDKGVDVDHIIELIHQIFNIVRDTRG
LPEDLQDFLALIPTDQVLAIAADYLANDAEVKAAVEYLKSDEFETIVVTVDSLPEFKNFL
NFLQTNGLNAIEFLNNIHDLLGIPHIPVTGRKHLRRGVGITGLIDDIIAILPVDDLYALF
QEKLETSPEFKALYDAIRSPEFQSIVETLKAMPEYQSLIQKLKDKGVDVDHIIELIHQIF
NIVRDTRGLPEDLQDFLALIPIDQILAIAADYLANDAEVQAAVEYLKSDEFETIVVTVDS
LPEFKNFLNFLQTNGLNAIEFINNIHDLLGIPHIPATGRKHVRRGVGINGLIDDVIAILP
VDELYALFQEKLESSPEFKALYDAIRSPEFQSIVQTLKAMPEYQDLIQRLKDKGVDVDHF
IELIKKLFGLSH
>AAD13533.1 Allergen Per a 1; nitrile-specifier protein [Periplaneta americana]
EFQSIISTLNAMPEYQELLQNLRDKGVDVDHYIELIRALFGLTRAARNLQDDLNDFLALI
PTDQILAIAMDYLANDAEVQELVAYLQSDDFHKIITTIEGLPEFANFYNFLKEHGLDVAD
FLNEIHSIIGLPPFVPPSRRHARRGVGINGLIDDVIAILPVDELKALFQEKLETSPDFKA
LYDAIRSPEFQSIISTLNAMPEYQDLLQNLRDKGVDVDHFIELIRSLFGLP
>BAA74953.1 Allergen Gly m 6; glycinin/11S globulin [Glycine max]
MGKPFTLSLSSLCLLLLSSACFAISSSKLNECQLNNLNALEPDHRVESEGGLIQTWNSQH
PELKCAGVTVSKLTLNRNGLHLPSYSPYPRMIIIAQGKGALGVAIPGCPETFEEPQEQSN
RRGSRSQKQQLQDSHQKIRHFNEGDVLVIPPGVPYWTYNTGDEPVVAISLLDTSNFNNQL
DQTPRVFYLAGNPDIEYPETMQQQQQQKSHGGRKQGQHQQEEEEEGGSVLSGFSKHFLAQ
SFNTNEDIAEKLQSPDDERKQIVTVEGGLSVISPKWQEQQDEDEDEDEDDEDEQIPSHPP
RRPSHGKREQDEDEDEDEDKPRPSRPSQGKREQDQDQDEDEDEDEDQPRKSREWRSKKTQ
PRRPRQEEPRERGCETRNGVEENICTLKLHENIARPSRADFYNPKAGRISTLNSLTLPAL
RQFQLSAQYVVLYKNGIYSPHWNLNANSVIYVTRGQGKVRVVNCQGNAVFDGELRRGQLL
VVPQNFVVAEQAGEQGFEYIVFKTHHNAVTSYLKDVFRAIPSEVLAHSYNLRQSQVSELK
YEGNWGPLVNPESQQGSPRVKVA
>CAA04823.1 Allergen pollen allergen, Betv1 [Betula pendula]
GVFNYEIETTSVIPAARLFKAFILDGDNLVPKVAPQAISSVENIEGNGGPGTIKKINFPE
GFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISHKY
HTKGNHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA04826.1 Allergen pollen allergen, Betv1 [Betula pendula]
GVFNYESETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFPE

GSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKLVATPDGGSILKISNKY
HTKGDHEMKAEHMKAIKEKGETLLKAVESYLLAHSDAYN
>CAA04827.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
GVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFPE
GIPFKYVKDRVDEVDHANFKYSYSLIEGGPVGDTLEKISNEIKIVATPDGGSILKISNKY
HTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAA04828.1 Allergen Bet v 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Betula pendula]
GVFNYESETTSVIPAARLFKAFILDGDNLIPKVAPQAISSVENIEGNGGPGTIKKITFPE
GSPFKYVKERVDEVDHANFKYSYSMIEGGALGDTLEKICNEIKLVATPDGGSILKISNKY
HTKGDHEMKAEHMKAIKEKGETLLRAVESYLLAHSDAYN
>CAA04829.1 Allergen pollen allergen, Betv1 [Betula pendula]
GVFNYEIGATSVIPAARLFKAFILVGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFPE
GFPFKYVKDRVDEVDHTNFKYSYSVIEGGPVGDTLEKISNEIKIVATPNGGSILKINNKY
HTKGDHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>AAD19606.1 Allergen Per a 7; tropomyosin [Periplaneta americana]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANLRAEKAEEEARSLQKKIQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAA
DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKFICDDLDMTFTELIGN
>AAD20386.1 Allergen pollen allergen Lol p VA precursor; major allergen [Lolium perenne]
MAVQKYTVALFLAVALVAGPAASYAADAGYTPAAAATPATPAATPAAAGGKATTDEQKLL
EDVNAGFKAAVAAAANAPPADKFKIFEAAFSESSKGLLATSAAKAPGLIPKLDTAYDVAY
KAAEGATPEAKYDAFVTALTEALRVIAGALEVHAVKPATEEVPAAKIPTGELQIVDKIDA
AFKIAATAANAAPTNDKFTVFESAFNKALNECTGGAYETYKFIPSLEAAVKQAYAATVAA
APEVKYAVFEAALTKAITAMTQAQKAGKPAAAAATGAATVATGAATAAAGAATAAAGGYK
A
>CAB38044.1 Allergen Hel as 1; tropomyosin [Helix aspersa]
MDAIKKKMLAMKMEKENALDRAEQVEQKLRDCECNKNKVEEDLNNLQKKFAILENDFDSI
NEQLLDANTKLEASEKKNAEIESETAGLQRRIQLLEEDLERSEERLQSATEKLEEASKAA
DESERGRKVLESRSLADDERLDGLEAQLKEAKYIAEDAERKFDEAARKLAITEVDLERAE
ARLEAAEAKILELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQRLKDAENRAS
EAERTVSKLQKEVDRLEDELLAEKERYKATSDELDSTFAELAGY
>CAB38086.1 Allergen Per a 7; tropomyosin [Periplaneta americana]
MDAIKKKMQAMKLEKDNAMDCALLCEQQARDANLRAEKAEEEARSLQKKIQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAV
DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKFICDDLDMTFTELAGY
>CAB39376.1 Allergen Cop c 1; leucine zipper protein [Coprinus comatus]
RFLPSSSHLNPQHLPWLVHPAPVLLLPVLPQLKPVAHPLLLLPLDTTTLHMPPLLLQLQL
PPLLSQGNPACSPKWLQLLVP
>AAD13530.2 Allergen Bla g 1; microvilli-like protein with unknown function [Blattella germanica]
NLLEKLREKGVDVDKIIELIRALFGLTLNAKASRNLQDDLQDFLALIPVDQIIAIATDYL
ANDAEVQAAVAYLQSDEFETIVVALDALPELQNFLNFLEANGLNAIDFLNGIHDLLGIPH
IPVSGRKYHIRRGVGITGLIDDVLAILPIEDLKALFNEKLETSPDFLALYNAIRSPEFQS
IVQTLNAMPEYQNLLQKLREKGVDVDKIIELIRALFGLTLNGKASRNLQDDLQDFLALIP
VDQIIAIATDYLANDAEVQAAVAYLQSDEFETIVVTLDALPELQNFLNFLEANGLNAIDF
LNGIHDLLGIPHIPVSGRKYHIRRGVGITGLIDDVLAILPLDDLKALFNEKLETSPDFLA
LYNAIKSPEFQSIVQTLNAMPEYQNLLEKLREKGVDVDKIIELIRALFGLTH

>AAD25926.1 Allergen Pen c 1; alkaline serine protease [Penicillium citrinum]
MGFLKVLATSLATLAVVDAGTLLTASNTDAVIPSSYIVVMNDDVSTAEFNTHREWATNVH
ARLSRRKNGETGPGKHFEINGLKGYTASFDESTAKDIANDPAVKYIEPDMIVNATANVVQ
SNVPSWGLARISSKRTGTTSYTYDSTAGEGVVFYGVDTGIDISHSDFGGRAKWGTNVVDN
DNTDGNGHGTHTASTAAGSKYGVAKKATLVAVKVLGADGSGTNSGVISGMDWAVKDAKSR
GANGKYVMNMSLGGEFSKAVNDAAANVVKSGIFLSVAAGNEAENASNSSPASAAEVCTIA
ASTSTDGSASFTNFGSVVDLYAPGQSITAAYPGGGSKTLSGTSMAAPHVAGVAAYLMALE
GVSAGNACARIVQLATSSISRAPSGTTSKLLYNGINV
>AAD25927.1 Allergen Mala f 4; mitochondrial malate dehydrogenase [Malassezia furfur]
MFARAALRNSVRAPASARYFSQTAAANRKVAVLGASGGIGQPLSLLMKLNPKVTELRLYD
IRLAPGVAADLSHINTPAVTSGYAQDDLEGAVDGAEIVLIPAGMPRKPGMTRDDLFNSNA
SIVRDLAKVVAKVAPKAYIGVISNPVNSTVPIVAEVFKKAGVYDPKRLFGVTTLDTTRAA
TFLSGIAGSDPQTTNVPVIGGHSGVTIVPLISQAAQGDKVQAGEQYDKLVHRIQFGGDEV
VKAKDGAGSATLSMAYAAAVFTEGLLKGLDGEAVTQCTFVESPLFKDQVDFFASPVEFGP
EGVKNIPALPKLTAEEQKLLDACLPDLAKNIKKGVAWAAENP
>AAD25995.1 Putative alkaline serine protease Pen c2 [Penicillium citrinum]
MKGFLGLALLPLLTAASPVSVESIHNGAAPIISSMNSQEIPDSYIVVFKKHVDTSAAAAH
HSWVQDIHSAVNGRMELKKRGLFGFDTDAFLGVKHSFHVAGSLMGYAGHFHEDVIEQVRR
HPDVDYIEKDSEVHHFDSPSVEKNAPWGLARISHRDSLSFGTFNKYLYAEDGGEGVDAYV
IDTGTNTDHVDFEGRASWGKTIPQGDEDVDGNGHGTHCSGTIAGKKYGVAKKANVYAVKV
LRSNGSGTMSDVVKGVEWAAEAHIKKSKAAKDGKAKGFKGSVANMSLGGGSSRTLDLAVN
AAVDAGMHFAVAAGNDNADACNYSPAAAEKAVTVGASTLADERAYFSNYGKCTDIFAPGL
NILSTWIGSKYAVNTISGTSMASPHIAGLLAYYVSLQPSDDSAFAVEKITPKKLKEALIT
VATSGALTDIPSDTPNLLAWNGGGSSNYTDIVAQGGY
>AAD26546.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKEKAHGLFKLIESYLKGHPDAYN
>AAD26547.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHY
HTKGDVEIKEEHVKAGKEKAHGLFKLIESHLKGHPDAYN
>AAD26548.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLMASGSGSIIKSISHY
HTKGDVEIKEEHVKAGKEKAHGLFKLIESYLKGHPDAYN
>AAD26552.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKEKAHGLFKLIESYLKDHPDAYN
>AAD26553.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVCTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKEKAHGLFKLIESYLKDHPDAYN
>AAD26554.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]

MGVYTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIENISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKEKAHGLFKLIESYLKDHPDAYN
>AAD26555.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKAKAHGLFKLIESYLKGHPDAYN
>AAD26558.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHY
HTKGDVEIKEEHVMAGKEKAHGLFKLIESYLKGHPDAYN
>AAD26560.1 Allergen isoallergen bet v 1 b1 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLKAVESYLLAHSDAYN
>AAD26561.1 Allergen isoallergen Bet v 1 b2 [Betula pendula]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGPILKISNK
YHTKGDHEVKAEQVKASKEMGETLLRAVESYPLAHSDAYN
>AAD26562.1 Allergen isoallergen bet v 1 b3 [Betula pendula]
MGVFNYETEATSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGIPFKYVKDRVDEVDHANFKYSYSLIEGGPVGDTLEKISNEIKIVATPDGGSILKISNK
YHTKGNHEVKAEQIKASKEMGETLLRAVESYLLAHSDAYN
>AAD29409.1 Allergen Api g 4; profilin [Apium graveolens]
MSWQAYVDDHLMCEVEGNPGQTLTAAAIIGHDGSVWAQSSTFPQIKPEEIAGIMKDFDEP
GHLAPTGLYLGGAKYMVIQGEPNAVIRGKKGSGGVTIKKTGQALVFGVYDEPVTPGQCNV
IVERLGDYLIDQGL
>AAD29410.1 Allergen Pyr c 4; profilin [Pyrus communis]
MSWQAYVDDHLMCDIDGHHLTAAAILGHDGSVWAQSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTSQALVFGIYEEPLTPGQCNMIVE
RLGDYLIDQGL
>AAD29411.1 Allergen Pru av 4; profilin [Prunus avium]
MSWQAYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSATFPAFKPEEIAAILKDLDQPGTL
APTGLFLGGTKYMVIQGEAGAVIRGKKGSGGITVKKTNQALIIGIYDEPLTPGQCNMIVE
RLGDYLIEQGL
>AAD29412.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDRLMCDIDGHHLTAAAILGHDGSVWAHSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTGQALVFGIYEEPLTPGQCNMIVE
RLGDYLIDQGL
>AAD29413.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHNGSVWAQSATFPQLKPEEVTGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGPGGVTVKKSTMALLIGIYDEPMTPGQCNMVVE
RLGDYLIEQGL
>AAD29414.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSASFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPVTPGQCNIVVE
RLGDYLIEQGL
>AAD29671.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY
HTKGNIEIKEEHVKAGKEKAHGLFKLIESYLKDHPDAYN

>CAB42886.1 Allergen Phl p 13; polygalacturonase [Phleum pratense]
GKKEEKKEEKKESGDAASGADGTYDITKLGAKPDGKTDCTKEVEEAWASACGGTGKNTIV
IPKGDFLTGPLNFTGPCKGDSVTIKLDGNLLSSNDLAKYKANWIEIMRIKKLTITGKGTL
DGQGKAVWGKNSCAKNYNCKILPNTLVLDFCDDALIEGITLLNAKFFHMNIYECKGVTVK
DVTITAPGDSPNTDGIHIGDSSKVTITDTTIGTGDDCISIGPGSTGLNITGVTCGPGHGI
SVGSLGRYKDEKDVTDITVKNCVLKKSTNGLRIKSYEDAKSPLTASKLTYENVKMEDVGY
PIIIDQKYCPNKICTSKGDSARVTVKDVTFRNITGTSSTPEAVSLLCSDKQPCNGVTMND
VKIEYSGTNNKTMAVCTNAKVTAKGVSEANTCAA
>CAB42887.1 Allergen Ves v 5; unknown function, antigen 5 [Vespula vulgaris]
NNYCKIKCLKGGVHTACKYGSLKPNCGNKVVVSYGLTKQEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWNDELAYIAQVWANQCEYGHDTCRDVAKYQVGQNVALTGSTA
AKYDDPVKLVKMWEDEVKDYNPKKKFSGNNFLKTGHYTQMVWANTKEVGCGSIKYIQEKW
HKHYLVCNYGPSGNFKNEELYQTK
>CAB44442.1 Allergen Asp f 11; peptidyl-prolyl isomerase [Aspergillus fumigatus]
FHQTPSAMSQVFFDVEYAPVGTAETKVGRIVFNLFDKDVPKTAKNFRELCKRPAGEGYRE
STFHRIIPNFMIQGGDFTRGNGTGGRSIYGDKFADENFSRKHDKKGILSMANAGPNTNGS
QFFITTAVTSWLDGKHVVFGEVADEKSYSVVKEIEALGSSSGSVRSNTRPKIVNCGEL
>AAD38942.1 Allergen Der p 4; alpha amylase [Dermatophagoides pteronyssinus]
KYHNPHFIGNRSVITHLMEWKYDDIGDECERFLGPYGYGGVQVSPVNEHAILDRRPWYER
YQPVSYDIRTRSGDEQQFRRMVKRCNKAGVRIYVDIVLNHMTGAQSGKGTNGHHYDGNTL
QYPGVPFGPNDFHGHESCPTQDLEIHDYTNPKEARNCRLSGLRDLKQQSEYVRQKQVDFL
NHLIDIGVAGFRSDASTHQWPDDLRSIYSRLHNLNKEFFPENSQPFIYHETIYYGGNGIN
SNEYTSLGRIIEFRFYKEITNVFRGNNPLHWLKNFGTEWGLVPSGDALVMIDSHDLRVGH
TGKLGFNINCFEGRLLKAATAFMLAWNYGVPRVMSSYFWNQIIKDGKDVNDWVGPPSDKN
GNILSVHPNPDMTCNHEWICEHRWREIYNMVKFRMIAGQEPVHNWWDNGDYQIAFSRGNR
AFIAINLQKNQQNLQQKLHTGLPAGTYCDIISGNLIDNKCTGKSIHVDKNGQADVYVGHD
EFDAFVAYHIGARIVS
>AAD42074.1 Allergen Pen c 3; peroxisomal membrane protein [Penicillium citrinum]
MSLKAGDSFPEGVTFSYIPWAEDASEITSCGIPINYNASKEFANKKVVLFALPGAFTPVC
SANHVPEYIQKLPELRAKGVDQVAVLAYNDAYVMSAWGKANGVTGDDILFLSDPEAKFSK
SIGWADEEGRTYRYVLVIDNGKIIYAAKEAAKNSLELSRADHVLKQL
>AAD42942.1 Allergen Ses i 5; oleosin [Sesamum indicum]
MAEHYGQQQQTRAPHLQLQPRAQRVVKAATAVTAGGSLLVLSGLTLAGTVIALTIATPLL
VIFSPVLVPAVITIFLLGAGFLASGGFGVAALSVLSWIYRYLTGKHPPGADQLESAKTKL
ASKAREMKDRAEQFSQQPVAGSQTS
>AAD42943.1 Allergen Ses i 2; 2S albumin [Sesamum indicum]
MARFTIVLAVLFAAALVSASAHKTVVTTSVAEEGEEENQRGCEWESRQCQMRHCMQWMRS
MRGQYEESFLRSAEANQGQFEHFRECCNELRDVKSHCRCEALRCMMRQMQQEYGMEQEMQ
QMQQMMQYLPRMCGMSYPTECRMRPIFA
>AAD42944.1 Allergen Ses i 6; 11S globulin / legumn-like protein [Sesamum indicum]
MVAFKFLLALSLSLLVSAAIAQTREPRLTQGQQCRFQRISGAQPSLRIQSEGGTTELWDE
RQEQFQCAGIVAMRSTIRPNGLSLPNYHPSPRLVYIERGQGLISIMVPGCAETYQVHRSQ
RTMERTEASEQQDRGSVRDLHQKVHRLRQGDIVAIPSGAAHWCYNDGSEDLVAVSINDVN
HLSNQLDQKFRAFYLAGGVPRSGEQEQQARQTFHNIFRAFDAELLSEAFNVPQETIRRMQ
SEEEERGLIVMARERMTFVRPDEEEGEQEHRGRQLDNGLEETFCTMKFRTNVESRREADI
FSRQAGRVHVVDRNKLPILKYMDLSAEKGNLYSNALVSPDWSMTGHTIVYVTRGDAQVQV
VDHNGQALMNDRVNQGEMFVVPQYYTSTARAGNNGFEWVAFKTTGSPMRSPLAGYTSVIR
AMPLQVITNSYQISPNQAQALKMNRGSQSFLLSPGGRRS

>AAC15474.2 Allergen Jun o 4; calcium-binding protein, polcalcin [Juniperus oxycedrus]
MDEVPSSDGSKSACSGEVVMEQSVHELEEVFKKFDANGDGKISGSELADILRSLGSDVGE
AEVKAMMEEADADGDGYVSLQEFVDLNNKGASVKDLKNAFKVFDRDCNGSISAAELCHTL
ESVGEPCTIEESKNIIHNVDKNGDGLISVEEFQTMMTSEMTDKSK
>AAD46493.1 Allergen L3NieAg.01 [Strongyloides stercoralis]
NSARDENGKLIYTYNGNDYDTKEAMEDAIQRDYPDKIFTFGGDNNNGKKRKIDISKWKGN
NTFSNKIFDEIWEGYNYDNDKAKNFKVMKTKLFNEQNKYRIAHGAKKLIKSKDLEKKAQA
YAEVIARLGRLEHDPKNRIEGTGENLAYGTTFIGHLAVKGWYDEIALYNFKKPGFSPATG
HFTQLVWKGTTHAGFGVVEKGDRVYVVXKYSPPGNYPRQFXANVLQRKQ
>CAB51914.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQAYVDDHLMCEIEGNHLSAAAIIGQDGSVWAQSANFPQFKSEEITGIMSDFHEPGTL
APTGLYIGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLIDQGY
>AAD47382.1 Allergen Ara h 3; 11S globulin / legumin-like protein [Arachis hypogaea]
MAKLLELSFCFCFLVLGASSISFRQQPEENACQFQRLNAQRPDNRIESEGGYIETWNPNN
QEFECAGVALSRLVLRRNALRRPFYSNAPQEIFIQQGRGYFGLIFPGCPSTYEEPAQQGR
RYQSQRPPRRLQEEDQSQQQQDSHQKVHRFNEGDLIAVPTGVAFWLYNDHDTDVVAVSLT
DTNNNDNQLDQFPRRFNLAGNHEQEFLRYQQQSRQSRRRSLPYSPYSPHSRPRREEREFR
PRGQHSRRERAGQEEEDEGGNIFSGFTPEFLEQAFQVDDRQIVQNLWGENESEEEGAIVT
VRGGLRILSPDGTRGADEEEEYDEDQYEYHEQDGRRGRGSRGGGNGIEETICTACVKKNI
GGNRSPHIYDPQRWFTQNCHDLNLLILRWLGLSAEYGNLYRNALFVPHYNTNAHSIIYAL
RGRAHVQVVDSNGNRVYDEELQEGHVLVVPQNFAVAGKSQSENFEYVAFKTDSRPSIANF
AGENSFIDNLPEEVVANSYGLPREQARQLKNNNPFKFFVPPFQQSPRAVA
>AAD48405.1 Allergen Cor a 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Corylus avellana]
MGVFCYEDEATSVIPPARLFKSFVLDADNLIPKVAPQHFTSAENLEGNGGPGTIKKITFA
EGNEFKYMKHKVEEIDHANFKYCYSIIEGGPLGHTLEKISYEIKMAAAPHGGGSILKITS
KYHTKGNASINEEEIKAGKEKAAGLFKAVEAYLLAHPDAYC
>CAB52710.1 Allergen Tri a 33; serpin [Triticum aestivum]
MATTLATDVRLSIAHQTRFGFRLASTISSNPESTANNVAFSPVSLHVALSLITAGAGGAT
RDQLVATLGEGEAERLHALAEQVVQFVLADASYADSPRVTFANGVFVDASLPLKPSFQEL
AVCKYKAEAQSVDFQTKAAEVTAQVNSWVEKVTTGLIKDILPAGSISNTTRLVLGNALYF
KGAWTDQFDSRVTKSDYFYLLDGSSIQTPFMYSSEEQYISSSDGLKVLKLPYKQGGDKRQ
FSMYILLPEAPSGIWSLAEKLSAEPELLERHIPRQKVALRQFKLPKFKISFGIEASDLLK
HLGLQLPFSDEADLSEMVDSPMPQGLRISSVFHKTFVEVNETGTEAAAATIAKAVLLSAS
PPSDMDFIADHPFLFLIREDTSGVVLFIGHVVNPLRSL
>CAB53458.1 Allergen Hev b 10; Mn superoxide dismutase [Hevea brasiliensis]
QTFSLPDLPYDYGALEPAISGEIMQLHHQKHHQTYITNYNKALEQLNDAIEKGDSAAVVK
LQSAIKFNGGGHVNHSIFWKNLAPVREGGGELPHGSLGWAIDADFGSLEKLIQLMNAEGV
ALQGSGWVWLALDKELKKLVVETTANQDPLVTKGPTLVPLLGIDVWEHAYYLQYKNVRPD
YLKNIWKVMNWKYASEVYAKECPSS
>CAA55067.2 Allergen Cla h 5; acidic ribosomal protein P2 [Cladosporium herbarum]
MKYLAAFLLLGLAGNSSPSAEDIKTVLSSVGIDADEERLSSLLKELEGKDINELISSGSE
KLASVPSGGAGAASAGGAAAAGGAAEAAPEAERAEEEKEESDDDMGFGLFD
>AAD52012.1 Allergen Tri r 4; serine protease [Trichophyton rubrum]
MAAAKWLIASLAFASSGLAFTPEDFISAPRRGEAIPDPKGELAVFHVSKYNFDKKDRPSG
WNLLNLKNGDINVLTTDSDVSEITWLGDGTKVVYINGTDSVKGGVGIWISDAKNFGNAYK
AGSVNGAFSGLKLAKSGDKINFVGYGQSTTKGDLYNEAAAKEAVSSARIYDSLFVRHWDT
YVGTQFNAVFSGTLTKSGDKYSFDGKLKNLVQPVKYAESPYPPFGGSGDYDLSSDGKTVA
FMSKAPELPKANLTTSYIFLVPHDGSRVAEPINKRNGPRTPQGIEGASSSPVFSPDGKRI

AYLQMAAKNYESDRRVIHIAEVGTNKPVQRIASNWDRSPEAVKWSSDGRTLYVTAEDHAT
GKLFTLPADARDNHKPAVVKHDGSVSSFYFIGSSKSVLISGNSLWSNALYQVATPDRPNR
KLFYANEHDPELKGLGPNDIEPLWVDGARTKIHSWIVKPTGFDKNKVYPLAFLIHGGPQG
SWGDNWSTRWNPRVWADQGYVVVAPNPTGSTGFGQKLTDDITNDWGGAPYKDLVKIWEHV
HDHIKYIDTDNGIAAGASFGGFMVNWIQGQDLGRKFKALVSHDGTFVGSSKIGTDELFFI
EHDFNGTFFEARQNYDRWDCSKPELVAKWSTPQLVVHNDFDFRLSVAEGVGLFNVLQEKG
VPSRFLNFPDETHWVTKPENSLVWHQQVLGWVNKWSGINKSNPKSIKLSDCPIEVVDHEA
HSYFDY
>AAD52013.1 Allergen Tri r 2; secreted alkaline protease [Trichophyton
rubrum]
MGFITKAIPIVLAALSTVNGARILEAGPHAEAIPNKYIVVMKREVSDEAFNAHTTWLSQS
LNSRIMRRAGSSKPMAGMQDKYSLGGIFRAYSGEFDDAMIKDISSHDDVDFIEPDFVVRT
TTNGTNLTHQDNVPSWGLARVGSKKPGGTTYYYDPSAGKGVTAYIIDTGIDIDHEDFQGR
AKWGENFVDQQNTDCNGHGTHVAGTVGGTKYGLAKGVSLVAVKVLDCDGSGSNSGVIKGM
EWAMRQASGGGNGTAKAAGKSVMNMSLGGPRSEASNQAAKAISDAGIFMAVAAGNENMDA
QHSSPASEPSVCTVAASTKDDGKADFSNYGAVVDVYAPGKDITSLKPGGSTDTLSGTSMA
SPHVCGLGAYLIGLGKQGGPGLCDTIKKMANDVIQSPGEGTTGKLIYNGSGK
>AAD52615.1 Allergen Pol a 1; phospholipase A1 [Polistes annularis]
MSPDCTFNEKDIVFYVYSRDKRDGIILKKETLTNYDLFTKSTISKQVVFLIHGFLSTGNN
ENFVAMSKALIEKDDFLVISVDWKKGACNAFASTKDALGYSKAVGNTRHVGKFVADFTKL
LVEKYKVLISNIRLIGHSLGAHTSGFAGKEVQKLKLGKYKEIIGLDPAGPYFHRSDCPDR
LCVTDAEYVQVIHTSIILGVYYNVGSVDFYVNYGKNQPGCNEPSCSHTKAVKYLTECIKH
ECCLIGTPWKKYFSTPKPISQCRGDTCVCVGLNAKSYPARGAFYAPVEANAPYCHNEGIK
L
>AAD52616.1 Allergen Pol a 2; hyaluronidase [Polistes annularis]
YVSLSPDSVFNIITDDISHQILSRSNCERSKRPKRVFSIYWNVPTFMCHQYGMNFDEVTD
FNIKHNSKDNFRGETISIYYDPGKFPALMPLKNGNYEERNGGVPQRGNITIHLQQFNEDL
DKMTPDKNFGGIGVIDFERWKPIFRQNWGNTEIHKKYSIELVRKEHPKWSESMIEAEATK
KFEKYARYFMEETLKLAKKTRKRAKWGYYGFPYCYNVTPNNPGPDCDAKATIENDRLSWM
YNNQEILFPSVYVRHEQKPEERVYLVQGRIKEAVRISNNLEHSPSVLAYWWYVYQDKMDI
YLSETDVEKTFQEIVTNGGDGIIIWGSSSDVNSLSKCKRLREYLLNTLGPFAVNVTETVN
GRSSLNF
>AAD52672.1 Allergen Der f 15; chitinase [Dermatophagoides farinae]
MKTIYAILSIMACIGLMNASIKRDHNDYSKNPMRIVCYVGTWSVYHKVDPYTIEDIDPFK
CTHLMYGFAKIDEYKYTIQVFDPYQDDNHNSWEKRGYERFNNLRLKNPELTTMISLGGWY
EGSEKYSDMAANPTYRQQFIQSVLDFLQEYKFDGLDLDWEYPGSRLGNPKIDKQNYLALV
RELKDAFEPHGYLLTAAVSPGKDKIDRAYDIKELNKLFDWMNVMTYDYHGGWENFYGHNA
PLYKRPDETDELHTYFNVNYTMHYYLNNGATRDKLVMGVPFYGRAWSIEDRSKLKLGDPA
KGMSPPGFISGEEGVLSYIELCQLFQKEEWHIQYDEYYNAPYGYNDKIWVGYDDLASISC
KLAFLKELGVSGVMVWSLENDDFKGHCGPKNPLLNKVHNMINGDEKNSFECILGPSTTTP
TPTTTPTTPTTTPTTPSPTTPTTTPSPTTPTTTPSPTTPTTTPSPTTPTPTTPTPAPTTS
TPSPTTTEHTSETPKYTTYVDGHLIKCYKEGDIPHPTNIHKYLVCEFVNGGWWVHIMPCP
PGTIWCQEKLTCIGE
>AAD55587.1 Allergen Ara h 5; profilin [Arachis hypogaea]
MSWQTYVDNHLLCEIEGDHLSSAAILGQDGGVWAQSSHFPQFKPEEITAIMNDFAEPGSL
APTGLYLGGTKYMVIQGEPGAIIPGKKGPGGVTIEKTNQALIIGIYDKPMTPGQCNMIVE
RLGDYLIDTGL
>AAD56337.1 Allergen Ara h 6; 2S albumin, conglutin [Arachis hypogaea]
AHASAMRRERGRQGDSSSCERQVDGVNLKPCEQHIMQRIMGEQEQYDSYNFGSTRSSDQQ
QRCCDELNEMENTQRCMCEALQQIMENQCDGLQDRQMVQHFKRELMNLPQQCNFGAPQRC
DLDVSGGRC
>AAD56719.1 Allergen Ara h 7; 2S albumin [Arachis hypogaea]
MMVKLSILVALLGALLVVASATRWDPDRGSRGSRWDAPSRGDDQCQRQLQRANLRPCEEH
MRRRVEQEQEQEQDEYPYSRRGSRGRQPGESDENQEQRCCNELNRFQNNQRCMCQALQQI

LQNQSFWVPAGQEPVASDGEGAQELAPELRVQVTKPLRPL
>P42040.2 Allergen Cla h 6; enolase [Cladosporium herbarum]
MPISKIHSRYVYDSRGNPTVEVDIVTETGLHRAIVPSGASTGSHEACELRDGDKSKWAGK
GVTKAVANVNEIIAPALIKENLDVKDQAAVDAFLNKLDGTTNKTKIGANAILGVSMAVAK
AAAAEKRVPLYAHISDLSGTKKPFVLPVPFMNVVNGGSHAGGRLAFQEFMIVPSGAPSFT
EAMRQGAEVYQKLKSLTKKRYGQSAGNVGDEGGVAPDIQTAEEALDLITDAIEEAGYTGQ
IKIAMDVASSEFYKADEKKYDLDFKNPDSDKSKWITYEQLADQYKQLAAKYPIVSIEDPF
AEDDWEAWSYFYKTSGSDFQIVGDDLTVTNPEFIKKAIETKACNALLLKVNQIGTITEAI
NAAKDSFAAGWGVMVSHRSGETEDVTIADIVVGLRAGQIKTGAPARSERLAKLNQILRIE
EELGDKAVYAGDNFRTAINL
>CAB58171.1 Putative troponin-like protein [Anisakis simplex]
MAEDIEEILAEIDGSQIEEYHKFFDMFDRGKQGYIMATQIGQIMHAMEQDFDEKQLRKLI
RKFDADGSGKLEFDEFCALVYTVANTVDKETLQKELREAFRLFDKEGNGYISRPTLKALL
KEIADDLSDDQLEAAVDEIDEDGSGKIEFEEFWELMAGEAD
>AAB82772.2 Allergen Mus a 5; beta-1,3-glucanase [Musa acuminata AAA
Group]
MATKASLSIKGFALLVSVLVAVPTRVQSIGVCYGMLGNNLPPPSEVVSLYKSNNIARMRL
YDPNQAALQALRNSNIQVLLDVPRSDVQSLASNPSAAGDWIRRNVVAYWPSVSFRYIAVG
NELIPGSDLAQYILPAMRNIYNALSSAGLQNQIKVSTAVDTGVLGTSYPPSAGAFSSAAQ
AYLSPIVQFLASNGAPLLVNVYPYFSYTGNPGQISLPYALFTASGVVVQDGRFSYQNLFD
AIVDAVFAALERVGGANVAVVVSESGWPSAGGGAEASTSNARTYNQNLIRHVGGGTPRRP
GKEIEAYIFEMFNENQKAGGIEQNFGLFYPNKQPVYQISF
>P35776.2 Allergen Sol r 2; unknown function [Solenopsis richteri]
DIEAQRVLRKDIAECARTLPKCVNQPDDPLARVDVWHCAMSKRGVYDNPDPAVVKEKNSK
MCPKIITDPADVENCKKVVSRCVDRETQRPRSNRQKAINITGCILRAGVVEATVLAREK
>P35779.2 Allergen Sol r 3; unknown function [Solenopsis richteri]
TNYCNLQSCKRNNAIHTMCQYTSPTPGPMCLEYSNVGFTDAEKDAIVNKHNELRQRVASG
KEMRGTNGPQPPAVKMPNLTWDPELATIAQRWANQCTFEHDACRNVERFAVGQNIAATSS
SGKNKSTLSDMILLWYNEVKDFDNRWISSFPSDGNILMHVGHYTQIVWAKTKKIGCGRIM
FKEDNWNKHYLVCNYGPAGNVLGAQIYEIKK
>P81657.1 Allergen Vesp m 5; unknown function, antigen 5 [Vespa
mandarinia]
NNYCKIKCRSGIHTLCKFGISTKPNCGKNVVKASGLTKAEKLEILKQHNEFRQKVARGLE
TRGKPGPQPPAKSMNTLVWNDELAQIAQVWAGQCDYGHDVCRNTAKYSVGQNIAENGSTA
ASFASVSNMVQMWADEVKNYQYGSTKNKLIEVGHYTQMVWAKTKEIGCGSIKYIENGWHR
HYLVCNYGPAGNIGNEPIYERK
>CAB59976.1 Allergen Gly d 2; NPC2-like protein [Glycyphagus domesticus]
GKMNFTDCGHNEIKELSVSNCTGNYCVIHRGKPLTLDAKFDANQDTASVGLVLTAIIDGD
IAIDIPGLETNACKLMKCPIRKGEHQELIYNIGEIPDATPEIKAKVKAQLIGEHGVLACG
WVDGEVQE
>CAB62212.1 Allergen Lep d 5; unknown/partial [Lepidoglyphus destructor]
DDFRNEFDRLLIHMTEEQFAKLEQALAHLSHQVTELEKSKSKELKAQILREISIGLDFID
SAKGHFERELKRADLNLAEKFNFESALSTGAVLHKDLTALATKVKAIETK
>CAB62213.1 Allergen Lep d 13; fatty acid-binding protein [Lepidoglyphus
destructor]
MANIAGQYKLDKSENFDQFLDKLGVGFLVKTAAKTVKPTLEVAVDGDTYIFRSLSTFKNT
EIKFKLGEEFEEDRADGKRVKTVIVKDGDNKFVQTQYGDKEVKVVREFKGDEVEVTASVD
GVTSVRPYKRA
>CAB62551.1 Allergen Cup a 1; pectate lyase [Cupressus arizonica]
DNPIDSCWRGDSNWDQNRMKLADCVVGFGSSTMGGKGGEIYTVTSSEDNPVNPTPGTLRY
GATREKALWIIFSQNMNIKLQMPLYVAGYKTIDGRGAVVHLGNGGPCLFMRKASHVILHG
LHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVTNAWIDHNSLSDCSDGLIDVTL
GSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAFNQFGPNAGQRMPRARYGLVHV
ANNNYDQWNIYAIGGSSNPTILSEGNSFTAPNESYKKEVTKRIGCETTSACANWVWRSTR

DAFTNGAYFVSSGKAEDTNIYNSNEAFKVENGNAAPQLTQNAGVVA
>AAF18269.1 Allergen Jug r 2; 7S globulin/vicilin-like protein [Juglans regia]
RGRDDDDEENPRDPREQYRQCQEYCRRQGQGQRQQQQCQIRCEERLEEDQRSQEERERRR
GRDVDDQNPRDPEQRYEQCQQQCERQRRGQEQTLCRRRCEQRRQQEERERQRGRDRQDPQ
QQYHRCQRRCQIQEQSPERQRQCQQRCERQYKEQQGRERGPEASPRRESRGREEEQQRHN
PYYFHSQSIRSRHESEEGEVKYLERFTERTELLRGIENYRVVILDANPNTSMLPHHKDAE
SVAVVTRGRATLTLVSQETRESFNLECGDVIRVPAGATVYVINQDSNERLEMVKLLQPVN
NPGQFREYYAAGAKSPDQSYLRVFSNDILVAALNTPRDRLERFFDQQEQREGVIIRASQE
KLRALSQHAMSAGQRPWGRRSSGGPISLKSESPSYSNQFGQFFEACPEEHRQLQEMDVLV
NYAEIKRGAMMVPHYNSKATVVVYVVEGTGRYEMACPHVSSQSYEGQGRREQEEEESTGR
FQKVTARLARGDIFVIPAGHPIAITASQNENLRLLGFDINGENNQRDFLAGQNNIINQLE
REAKELSFNMPREEIEEIFESQMESYFVPTERQSRRGQGRDHPLASILDFAFF
>CAB63699.1 Allergen Lol p 1; beta expansin [Lolium perenne]
MASSSSVLLVVALFAVFLGSAHGIAKVPPGPNITAEYGDKWLDAKSTWYGKPTGAGPKDN
GGACGYKDVDKAPFNGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEAVTVTITDDNE
EPIAPYHFDLSGHAFGSMAKKGEEQKLRSAGELELQFRRVKCKYPDGTKPTFHVEKASNP
NYLAILVKYVDGDGDVVAVDIKEKGKDKWIELKESWGAVWRIDTPDKLTGPFTVRYTTEG
GTKSEVEDVIPEGWKADTSYSAK
>CAB64344.1 Allergen pollen allergen [Lolium perenne]
MAVQKYTVALFLAVALVAGPADSYAADAGYTPAAAATPATPAATPAAGGGKATTDEQKLL
EDVNAGFKAAVAADANAPPADKFKIFEAAFSESCKGLLATSDAKAPGLILKLDTDYDVAY
KAGEGATPEAKYDAFVTALTEALRVIAGALEVHAVKPATEEVPAAKIPTGELQIVDKIDA
AFKIAATAANAAPTNDKFTVFESAFNKALKECTGGAYETYKFIPSLEAAVKQAYATTVAA
APEVKYAVFEAALTKAITAMSQAQKVAKPAAAAATGAATVATGAATAAAGGATAAAGGYK
A
>AAF23726.1 Allergen Pen ch 13; alkaline serine protease [Penicillium chrysogenum]
MGFLKVLATSLATLAVVDAGTLLTASNTDAVIPSSYIVVMNDDVSTAEFSTHREWATNVH
ARLSRRKNGETGPGKHFEINGLKGYTASFDENTAKDIANDPAVKYIEPDMIVNATANVVQ
SNVPSWGLARISSKRTGTTSYTYDSTAGEGVVFYGVDTGIDISHSDFGGRAKWGTNVVDN
DNTDGNGHGTHTASTAAGSKYGVAKKATLVAVKVLGADGSGTNSGVISGMDWAVKDAKSR
GANGKYVMNTSLGGEFSKAVNDAAANVVKSGIFLSVAAGNEAENASNSSPASAAEACTIA
ASTSTDGSASFTNFGSVVDLYAPGQSITAAYPGGGSKTLSGTSMAAPHVAGVAAYLMALE
GVSAGNACARIVQLATSSISRAPSGTTSKLLYNGINV
>CAB64688.1 Allergen Asp f 8; acidic ribosomal protein P2 [Aspergillus fumigatus]
MKYLAAFLLLALAGNTSPSSEDVKAVLSSVGIDADEERLNKLIAELEGKDLQELIAEGST
KLASVPSGGAAAAAPAAAGAAAGGAAAPAAKEKNEEEKEESDEDMGFGLFD
>CAB65963.1 Allergen Lep d 7; bacteriacidal permeability-increasing like protein [Lepidoglyphus destructor]
MQYLAIAVIVALAGLSAAAHKPAYYDDNMANQMVDQIVKSLTTKKELDPFKIEQTKVPID
KKIGLIHIKGSATIKNAVITGLSHISRRGDAKIDTDGGAFAATLKLGDKNIRIKTDLHLD
LGKIIHPNLKFEGHIGDIDMKLKLKLDAEGKPSLDQFEIDEFEQVELFIHGLGPLDPLVD
VIADSFVKYFNPQARKLVTDMLKPILVEEIKKLKLN
>AAF25553.1 Allergen latex protein allergen Hev b 7 [Hevea brasiliensis]
MATGSTPLTQGKKITVLSIDGGGIRGIIPGIILASLESKLQDLDGPDARIADYFDIIAGT
STGGLITTMLTAPNEDKKPMYQAKDIKDFYLENCPKIFPKESRDNYDPIHSIGPIYDGEY
LRELCNNLLKDLTVKDTLTDVIIPTFDIKLLLPVIFSSDDAKCNALKNARLADVCISTSA
APVLLPAHSFTTEDDKNIHTFELIDGGVAATNPTLLALTHIRNEIIRQNPRFIGANLTES
KSRLVLSLGTGKSEYKEKYNADMTSKWRLYNWALYNGNSPAVDIFSNASSDMVDFHLSAL
FKSLDCEDYYLRIQDDTLTGEESSGHIATEENLQRLVEIGTELLEKQESRINLDTGRLES
IPGAPTNEAAIAKFAKLLSEERKLRQLK

>AAF26449.1 Allergen Pru av 3; lipid transfer protein (LTP) type 1 [Prunus avium]
MACSAMTKLALVVALCMVVSVPIAQALTCGQVSSNLAPCIAYVRGGGAVPPACCNGIRNI
NNLAKTTADRQTACNCLKQLSASVPGVNANNAAALPGKCGVNVPYKISPSTNCATVK
>AAF26451.1 Allergen Pyr c 3; lipid transfer protein (LTP) type 1 [Pyrus communis]
MASSAVIKLALVVALCMAVSVAHAITCSQVSANLAPCINYVRSGGAVPPACCNGIKTING
LAKTTPDRQAACNCLKNLAGSVSGVNPGNAESLPGKCGVNVPYKISTSTNCATVK
>AAF28423.1 Allergen Der f 6; chymotrypsin, serine protease [Dermatophagoides farinae]
MIKIFLVTILIVITVTVDARFPRSLQPKWAYLDSNEFPRSKIGDSPIAGVVGGQDADLAE
APFQISLLKDYLIMKRHMCGGSLISESTVVTAAHCTYGQKASSLSVRYGTNQRTSSSYGD
LKVKPIIQHESYEQDQTQTDKTIIILPNPVVPSTNVQMNEIETEDIVDGDKVTIYGWGLT
DGNGKDLPDKLQKGSMTIVGNDRCNEKWGSINAIHPGMICALDKTQSGCNGDSGGPLVSA
NRKLTGIVSWGPSKCPPGEYMSVFTRPKYYLDWITKNIV
>CAB71342.1 Allergen Lep d 10; tropomyosin [Lepidoglyphus destructor]
MEAIKNKMQAMKLEKDNAIDRAEIAEQKSRDANLRAEKSEEEVRGLQKKIQQIENELDQV
QESLTQANTKLEEKEKSLQTAEGDVAALNRRIQLIEEDLERSEGRLKIATSKLEEASQSA
DESERMRKMLEHRSITDEERMEGLESQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAYEQQIRIMTTKLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELTGY
>AAF31151.1 Allergen Ole e 8; calcium-binding protein / polcalcin [Olea europaea]
MAANTDRNSKPSVYLQEPNEVQGVFNRFDANGDGKISGDELAGVLKALGSNTSKEEIGRI
MEEIDTDKDGFINVQEFAAFVKAETDPYPSSGGENELKEAFELYDQDHNGLISSVELHKI
LTRLGERYAEHDCVEMIKSVDSDGDGYVSFEEFKKMMTNKSGNNSQAEPPK
>AAF31152.1 Allergen Ole e 8; calcium-binding protein / polcalcin [Olea europaea]
MAANTDRNSKPSVYLQEPNEVQGVFNRFDANGDGKISGDELACALKALGSNTSKEEIARM
MEEIDTDKDGFINVQEFAAFVKAETDPYPSSGGENELKEAFELYDQDHNGLISSVELHKI
LTRLGERYAEHDCVEMIKSVDSDGDGYVSFEEFKKMMTNKSGNNSQAEPPK
>AAF34341.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDEHLMCDIDGHHLTAAAIIGHDGSVWAQSSSFPQFKPEEVAAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALIIGIYDEPLTPGQCNMIVE
RLGDYLLEQGM
>AAF34342.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDDHLMCDIDGHRLTAAAIIGHDGSVWAQSSSFPQFKSDEVAAIMKDFDEPGSL
APTGLHLGSTKYMVIQGEPGAVIRGKKGSGGITVKKTSQALIIGIYDEPLTPGQCNMIVE
RLGDYLLEQGM
>AAF34343.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDDHLMCDIDGHRLTAAAIIGHDGSVWAQSSGFPQFKSDEVAAVMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALIIGIYDEPLTPGQCNMIVE
RLGDYLLEQGM
>AAF35431.1 Allergen Cha f 1; tropomyosin [Charybdis feriata]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANLRAEKTEEEIRATQKKMQQVENELDQA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLPEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEK
>CAB76459.1 Allergen Gly d 2; NPC2-like protein [Glycyphagus domesticus]
GKMKFKDCGKGEVTELDITDCSGDFCVIHRGKPLTLEAKFAANQDTTKATIKVLAKVAGT
PIQVPGLETDGCKFVKCPIKKGDPIDFKYTTTVPAILPKVKAEVTAELVGDHGVLACGRF
GRQVE
>CAA09886.2 Allergen Mala s 8; unknown [Malassezia sympodialis]

MVALKFAAVLSVVAAAVMAAPSSMDRRASPDNQVWVTSASDYCLILPRHRESIGDSESPG
RMRSFCSKPYDSSQGQINPGFWKEVHFKKTKNYVQLTGCINPRVQSTLLSHDDGGQYDSN
GNGGVGNPEGSVCLGYSSYVELVEPSDGKACIRCCVNDKYCDVGHDEDGCEAVIPGQYC
>CAA09938.2 Allergen Chi k 10; tropomyosin [Chironomus kiiensis]
MDAIKKKMQAMKLEKDNALDRALLCENQARDANLRAEKAEEEARTLQKKIQTIENDLDQT
QGQETLVNGKLEGKEKALQNAESEVAALNRRIQLLGEDLDRSEERLASATAKLSEASAAA
DESERARKILENRSLADEERMDALENQLKEARFLAEEADKKYDEVARKLAMVEADLERAE
ERAEAGEAKIVELEEELRVVGNNLKSLEVSEEKANQREEEYKNQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVSEKEKYREIGDDLDTAFVELILKE
>CAB82855.1 Allergen Pis s 2; 11S globulin / legumin-like protein [Pisum sativum]
MATTIKSRFPLLLLLGIIFLASVVCVTYANYDEGSEPRVPAQRERGRQEGEKEEKRHGEW
RPSYEKEEDEEEGQRERGRQEGEKEEKRHGEWRPSYEKQEDEEEKQKYRYQREKEDEEEK
QKYQYQREKKEQKEVQPGRERWEREEDEEQVDEEWRGSQRREDPEERARLRHREERTKRD
RRHQREGEEEERSSESQERRNPFLFKSNKFLTLFENENGHIRLLQRFDKRSDLFENLQNY
RLVEYRAKPHTIFLPQHIDADLILVVLSGKAILTVLSPNDRNSYNLERGDTIKLPAGTTS
YLVNQDDEEDLRLVDLVIPVNGPGKFEAFDLAKNKNQYLRGFSKNILEASYNTRYETIEK
VLLEEQEKDRKRRQQGEETDAIVKVSREQIEELKKLAKSSSKKSLPSEFEPINLRSHKPE
YSNKFGKLFEITPEKKYPQLQDLDLFVSCVEINEGALMLPHYNSRAIVVLLVNEGKGNLE
LLGLKNEQQEREDRKERNNEVQRYEARLSPGDVVIIPAGHPVAITASSNLNLLGFGINAE
NNERNFLSGSDDNVISQIENPVKELTFPGSVQEINRLIKNQKQSHFANAEPEQKEQGSQG
KRSPLSSILGTFY
>A59055 Allergen phospholipase A2, venom - Indian honeybee [Apis cerana]
IIYPGTLWCGHGNVSSGPNELGRFKHTDACCRTHDMCPDVMSAGESKHGLTNTASHTRLS
CDCDDTFYDCLKNSGEKISSYFVGKMYFNLIDTKCYKLEHPVTGCGERTEGRCLRYTVDK
SKPKVYQWFDLRKY
>AAF65312.1 Allergen Sol g 4; unknown function [Solenopsis geminata]
MKTFVLVSCLLVFTQIIYAVDIKELKIMNRILEKCIRTVPKGENDPINPLKNVNVLYCAF
SKRGIFTPKGVNTKQYINYCEKTIINPADIKQCKKLISKCIKKVYDRPGPIIERSKNLLS
CVLKKGVLELTVYGKKK
>AAF65313.1 Allergen Sol g 4; unknown function [Solenopsis geminata]
MKTFVLVSCLLVFTQIIYAVDIKELKIVNRILKKCIRTVPKGENDPINPLKNVNVLYCAF
SKRGIFTPKGVNTKQYINYCEKTIINPADIKQCKKLISKCIKKVYDRPGPIIERSKNLLS
CVRKKGVLELTVYGKKK
>AAB50734.2 Allergen Cyn d 1; beta expansin [Cynodon dactylon]
AIGDKPGPNITATYGSKWLEARATFYGSNPRGAAPDDHGGACGYKDVDKPPFDGMTACGN
EPIFKDGLGCRACYEIKCKEPVECSGEPVLVKITDKNYEHIAAYHFDLSGKAFGAMAKKG
QEDKLRKAGELTLQFRRVKCKYPSGTKITFHIEKGSNDHYLALLVKYAAGDGNIVAVDIK
PRDSDEFIPMKSSWGAIWRIDPKKPLKGPFSIRLTSEGGAHLVQDDVIPANWKPDTVYTS
KLQFGA
>AAF71379.1 Allergen Pen ch 18; vacuolar serine protease [Penicillium chrysogenum]
MKGFLSLTLLPLLVAASPVAVNSIHNDAAPILSSMTSKDIPDSYIVVFKKHVDPSSASAH
QSWLQEVHTAHTGRMELKKRSLFGFDFEAFMGLKHTFHIAGSLLGYAGHFHEDVIEQIRR
HPDVDYIEKDSEVRTMSEGSVEKNAPWGLARISHRESLSFGNFNKYLYAEEGGEGVDAYV
IDTGANVKHVDFEGRANWGKTIPQGDADEDGNGHGTHCSGTIAGKKFGVAKKANVYAVKV
LRSNGSGTMSDVVKGVEWAAEAHIKKSKKGDKKFKGSVANMSLGGGSSRTLDLAVNAAVD
AGIHFAVAAGNDNADACNYSPAAAEKAITVGASTLADERAYFSNYGKCTDIFAPGLNILS
TWVGSDHATNTISGTSMASPHIAGLLAYYVSLAPAKDSAYAVADVTPKQLKAALISVATE
GTLTDIPSDTPNLLAWNGGGSANYTKILADGGYKAHNAETTVEDRIGIIIDSAEKAFHKE
LGAIYSEIKDAVSV
>AAF72534.1 Allergen Bla g 7; tropomyosin [Blattella germanica]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANIRAEKAEEEARSLQKKIQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAA

DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLNTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKYICDDLDMTFTELIGN
>AAF72625.1 Allergen Cup s 1; pectate lyase [Cupressus sempervirens]
MDSPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
IYTATSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLSSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFAAPNENYKKEV
TKRIGCESTSACANWVWRSTRDAFSNGAYFVSSGKTEETNIYNSNEAFKVENGNLAPQLT
KNAGVVA
>AAF72626.1 Allergen Cup s 1; pectate lyase [Cupressus sempervirens]
MDSPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
IYTVTSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLEMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLSSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFTAPNENYKKEV
TKRIGCESTSACANWVWRSTRDAFSNGAYFVSSGKTEETNIYNSNEAFKVENGNLAPQLT
KNAGVVA
>AAF72627.1 Allergen Cup s 1; pectate lyase [Cupressus sempervirens]
MDSPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
IYTVTSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHSCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLPDCSDGLIDVTLSSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFTAPNENYKKEV
TKRIGCESTSACANWVWRSTRDAFSNGAYFVSSGKTEETNIYNSNEAFKVENGNLAPQLT
KNAGVVA
>AAF72628.1 Allergen Cup s 1; pectate lyase [Cupressus sempervirens]
MDSPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
IYTVTSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGNVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLSSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFAAPNENYKKEV
TKRIGCVSTSACANWVWRSTRDAFSNGAYFVSSGKTEETNIYNSNEAFKVENGNLAPQLT
KNAGVVA
>AAF72629.1 Allergen Cup s 1; pectate lyase [Cupressus sempervirens]
MDSPCLIAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCAVGFGSSTMGGKGGD
IYTVTSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGNVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLSSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFAAPNENYKKEV
TKRIGCVSTSACANWVWRSTRDAFSNGAYFVSSGKTEETNIYTSNEAFKVENGNLAPQLT
KNAGVVA
>AAF72991.1 Putative beta-expansin [Oryza sativa]
MASSCLLLACVVAAAMVSAVSCGPPKVPPGPNITAAYGKQWLEARGTWYGKPKGAGPDDN
GGACGYKDIDKAPFLGMNSCGNDPIFKDGKGCGSCFEVKCSKPEACSDKPVIIHITDMNT
EPIAAYHFDLSGHAFGAMAKEGKDEELRKAGIIDMQFRRVRCKYPGETKVTFHVEKGSNP
NYFAVLVKYVGGDGDVVKVELKEKGSEEWKPLNESWGAIWRIDTPKPLKGPFSLRVTTES
DQKLVANDVIPDNWKANALYKSEIQVD
>AAF75225.1 Allergen Ani s 2; paramyosin, partial [Anisakis simplex]
PRAAGELQKMKSLYEKAVEQKEALARENKKLQDELHEAKEALADANRKLHELDLENARLA
GEIRDLQTALKESDAARREAENRAQRLAADLQQLRIEMERRLQEKEEEMEALRKNMQFEI
DRLTAALADAEARMKAEISRLKKKYQAEIAELEMTVDNLNRANIEAQKTIKKQSEQMKIL
QASLEDTQRHLQQTLDQYALAQRKISALSAELEECKVALDNAIRARKQAEVDLEEANVRI

AELVSLTNNLTTIKNKLETELSTVRADLDETTKELHAADERANRALADAARAIEQLHEEQ
EHSMKIDALRRSLEEQVKQLQVQIQEAEAAALLGGKRVIAKLETRIRDLETALDEETRRH
KETQNALRKKDRRIKEVQMQVDEEHKQFVMAQDTADRLLEKMNIQKRQLGEAESFTMANI
QRVRRYQRELEDAEGRADQAESSLHLIRAKHRSSVVTGRSASASKVYVLEDEQ
>AAF80164.1 Allergen Jun v 1; pectate lyase [Juniperus virginiana]
MASPCLIAFLVFLCAIVSCCSDNPIDSCWRGDSNWGQNRMKLADCAVGFGSSTMGGKGGD
FYTVTSADDNPVNPTPGTLRYGATREKTLWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGDVLVSESIGVVPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLGSTGITIFNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDPWNIYAIGGSSNPTILSEGNSFTAPNENYKKEV
TKRIGCESTSACANWVWRSTRDAFSNGAYFVSSGKIEETNIYNSNEAFKVENGNAAPQLT
KNAGVVA
>AAF80166.1 Allergen Jun v 1; pectate lyase [Juniperus virginiana]
MASPCLIAFLVFLCAIVSCCSDNPIDSCWRGDSNWGQNRMKLADCAVGFGSSTMGGKGGD
FYTVTSADDNPVNPTPGTLRYGATREKTLWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGDVLVSESIGVVPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLGSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDPWNIYAIGGSSNPTILSEGNSFTAPNENYKKEV
TKRIGCESTSACANWVWRSTRDAFSNGAYFVSSGKIEETNIYNSNEAFKVENGNAAPQLT
KNAGVVA
>CAB96215.1 Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDDHLMCDIDGHRLTAAAIIGHDGSVWAQSSSFPQFKSDEVAAVMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALIIGIYDEPLTPGQCNMIVE
RLGDYLLDQGL
>AAF82096.1 Allergen Glo m 5; unknown/antigen 5 [Glossina morsitans
morsitans]
MNFVLATLSLLILGSAAVGGDYCGLCDNHDACVMQNVFQSGCPSGAKMIDLNKYQSALLD
AHNKKRNHVAGGGESKLKRACQMATMKWDSELAKLAEYNVKQCQMNHDRCRNTVKFKYAG
QNLAELGRSGGPPPDYRKLIEKAVDKWYEEVKDCNQGYIDSYPMNYRGPAIGHFTVMVAE
RNTHVGCAASEYTKSNGFQYFLMACNYATTNMMEFPIYKSCGSSAQDCKSGKNSKYPNLC
SPNEKYEVNKWIKNGVEYH
>CAB96931.1 Allergen Tri a 25; thioredoxin [Triticum aestivum]
MAASAATATAAAVGAGEVISVHSLEQWTMQIEEANAAKKLVVIDFTASWCGPCRIMAPIF
ADLAKKFPAAVFLKVDVDELKSIAEQFSVEAMPTFLFMKEGDVKDRVVGAIKEELTNKVG
LHAAQ
>P81295.1 Allergen Jun a 3; thaumatin-like protein [Juniperus ashei]
MARVSELAFLLAATLAISLHMQEAGVVKFDIKNQCGYTVWAAGLPGGGKRLDQGQTWTVN
LAAGTASARFWGRTGCTFDASGKGSCQTGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDV
SLVDGFNIPLAINPTNAQCTAPACKADINAVCPSELKVDGGCNSACNVFKTDQYCCRNAY
VDNCPATNYSKIFKNQCPQAYSYAKDDTATFACASGTDYSIVFCP
>AAF86369.1 Allergen major allergen I 18kDa antigen [Aspergillus
fumigatus]
MTWTCINQQLNPKTNKWEDKRLLYNQAKAESNSHHAPLSDGKTGSSYAHWFTNGYDGNGK
LIKGRTPIKFGKADCDRPPKHSQNGMGKDDHYLLEFPTFPDGHDYKFDSKNKPKEDPGPA
RVIYTYPNKVFCGIVAHQRGNEGDLRLCSH
>AAF86462.1 Allergen Der p 2; NPC2-like protein [Dermatophagoides
pteronyssinus]
MYKILCLSLLVAAVARDQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEAVFEAN
QNTKTAKIEIKASIDGLEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENV
VVTVKVMGDDGVLACAIATHAKIRD
>P82534.1 Allergen Pru d 3; lipid transfer protein [Prunus domestica]
ITCGQVSSNLAPCINYVKGGGAVPPACCNGIRNVNNLARTTADRRAACNCLKQLSGSIPG
VNPNNAAALPGKCGVNVPYKISASTNCATVK
>CAC00532.1 Allergen Hev b 9; enolase [Hevea brasiliensis]

MAITIVSVRARQIFDSRGNPTVEADVKLSDGYLARAAVPSGASTGIYEALELRDGGSDYL
GKGVSKAVENVNIIIGPALVGKDPTDQVGIDNFMVQQLDGTVNEWGWCKQKLGANAILAV
SLAVCKAGAHVKGIPLYEHIANLAGNKNLVLPVPAFNVINGGSHAGNKLAMQEFMILPVG
ASSFKEAMKMGAEVYHHLKSVIKKKYGQDATNVGDEGGFAPNIQENKEGLELLKTAIAKA
GYTGKVVIGMDVAASEFYGSDQTYDLNFKEENNNGSQKISGEALKDLYKSFVAEYPIVSI
EDPFDQDDWAHYAKLTSEIGEKVQIVGDDLLVTNPKRVEKAIKEKACNALLLKVNQIGSV
TESIEAVKMSKRAGWGVMASHRSGETEDTFIADLSVGLATGQIKTGAPCRSERLAKYNQL
LRIEEELGSEAVYAGANFRKPVEPY
>CAC05258.1 Putative Cup a 3 protein [Cupressus arizonica]
VKFDIKNQCGYTVWAAGLPGGGKEFDQGQTWTVNLAAGTASARFWGRTGCTFDASGKGSC
RSGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDVSLVDGFNIPLAINPTNTKCTAPACKA
DINAVCPSELKVDGGCNSACNVLQTDQYCCRNAYVNNCPATNYSKIFKNQCPQAYSYAKD
DTATFACASGTDYSIVFCP
>AAG08987.1 Putative tropomyosin [Haliotis diversicolor]
MDAIKKKMLAMKMEKENAVDRAEQNEQKLRDTEEQKAKIEEDLNNLQKKCANLENDFDNV
NEQLQEAMAKLETSEKRVTEMEQEVSGTTRKITLLEEDLERNEERLQTATERLEEASKAA
DESERGARVLESRSLADDERIDQLEAQLKEAKYIAEDAERKYDEAARKLAITEVDLERAE
ARLEAAEAKILELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQRLKDAENRAT
EAERTVSKLQKEVDRLEDELLAEKEKYKAISDELDQTFAELAGY
>AAG08988.1 Putative tropomyosin [Perna viridis]
MDAIKKKMVAMKMEKKNALDRAEQLEQKLRETEEAKAKIEDDYNSLVKKNIQTENDYDNC
NTQLQDVQAKYERAEKQIQEHEQEIQSLTRKISLLEEGIMKAEERFTTASGKLEEASKAA
DESERNRKVLENLNSGNDERIDQLEKQLTEAKWIAEEADKKYEEAARKLAITEVDLERAE
ARLEAAEAKVIDLEEQLTVVGANIKTLQVQNDQASQREDSYEETIRDLTNRLKDAENRAT
EAERTVSKLQKEVDRLEDELLTEKEKYKAISDELDATFAELAGY
>AAG08989.1 Allergen tropomyosin [Chlamys nobilis]
MDAIKKKMQAMKVDRENAQDLAEQMEQKLKDTETAKAKLEEEFNELQKKLTATENNYDTV
NEQLQEANTKLENSEKQITQLESDVGGLQRRLTLLEEDYERSEEKLNSTTEKLEEASKAA
DESERNRKVLEGRSNSYEERIDELEKQLETAKNVATDADHKFDEAARKLAITEVDLERAE
TRLEAADAKVLELEEELTVVGANIKTLQVQNDQASQREDSYEETIRDLTKSLKDAENRAT
EAERQVVKLQKEVDRLEDELLAEKERYKAISDDLDQTFAEIAGY
>CAC05582.1 Allergen Jun a 2; polygalactorunase [Juniperus ashei]
MSMKFMAALAFLALQLIVMAAGEDQSAQIMLDSDTKQYHRSSRNLRKRVHHARHDVAIVF
NVEHYGAVGDGKHDSTDAFEKTWNAACNKLSAVFLVPANKKFVVNNLVFYGPCQPHFSFK
VDGTIAAYPDPAKWKNSKIWMHFARLTDFNLMGTGVIDGQGNRWWSDQCKTINGRTVCND
KGRPTAIKIDFSKSVTVKELTLTNSPEFHLVFGECDGVKIQGIKIKAPRDSPNTDGIDIF
ASKRFEIEKCTIGTGDDCVAVGTGSSNITIKDLTCGPGHGMSIGSLGKGNSRSEVSFVHL
DGAKFIDTQNGLRIKTWQGGSGLASHITYENVEMINAENPILINQFYCTSAAACKNQRSA
VKIQDVTFKNIHGTSATTAAIQLMCSDSVPCSNIKLSNVFLKLTSGKVATCVNKNANGYY
TNPLNPSCKSLHPGRTPKELELHQKPTTLLMDEKMGASLNSSPPNCKNKCKGCQPCKPKL
IIVHPNQPEDYYPQRWVCSCHNKIYNP
>BAA23360.2 Allergen Gly m 5; beta conglycinin/ 7S globulin partial
[Glycine max]
VEKEECEEGEIPRPRPRPQHPEREPQQPGEKEEDEDEQPRPIPFPRPQPRQEEEHEQREE
QEWPRKEEKRGEKGSEEEDEDEDEEQDERQFPFPRPPHQKEERKQEEDEDEEQQRESEES
EDSELRRHKNKNPFLFGSNRFETLFKNQYGRIRVLQRFNQRSPQLQNLRDYRILEFNSKP
NTLLLPNHADADYLIVILNGTAILSLVNNDDRDSYRLQSGDALRVPSGTTYYVVNPDNNE
NLRLITLAIPVNKPGRFESFFLSSTEAQQSYLQGFSRNILEASYDTKFEEINKVLFSREE
GQQQGEQRLQESVIVEISKEQIRALSKRAKSSSRKTISSEDKPFNLRSRDPIYSNKLGKF
FEITPEKNPQLRDLDIFLSIVDMNEGALLLPHFNSKAIVILVINEGDANIELVGLKEQQQ
EQQQEEQPLEVRKYRAELSEQDIFVIPAGYPVVVNATSNLNFFAIGINAENNQRNFLAGS
QDNVISQIPSQVQELAFPGSAQAVEKLLKNQRESYFVDAQPKKKEEGNKGRKGPLSSILR
AFY

>BAA74452.2 Allergen Gly m 5; beta conglycinin/ 7S globulin partial [Glycine max]
VEEEEECEEGQIPRPRPQHPERERQQHGEKEEDEGEQPRPFPFPRPRQPHQEEEHEQKEE
HEWHRKEEKHGGKGSEEEQDEREHPRPHQPHQKEEEKHEWQHKQEKHQGKESEEEEEDQD
EDEEQDKESQESEGSESQREPRRHKNKNPFHFNSKRFQTLFKNQYGHVRVLQRFNKRSQQ
LQNLRDYRILEFNSKPNTLLLPHHADADYLIVILNGTAILTLVNNDDRDSYNLQSGDALR
VPAGTTYYVVNPDNDENLRMITLAIPVNKPGRFESFFLSSTQAQQSYLQGFSKNILEASY
DTKFEEINKVLFGREEGQQQGEERLQESVIVEISKKQIRELSKHAKSSSRKTISSEDKPF
NLRSRDPIYSNKLGKLFEITPEKNPQLRDLDVFLSVVDMNEGALFLPHFNSKAIVVLVIN
EGEANIELVGIKEQQQRQQQEEQPLEVRKYRAELSEQDIFVIPAGYPVVVNATSDLNFFA
FGINAENNQRNFLAGSKDNVISQIPSQVQELAFPGSAKDIENLIKSQSESYFVDAQPQQK
EEGNKGRKGPLSSILRAFY
>CAC09234.1 Allergen Der p 7 allergen-like [Dermatophagoides pteronyssinus]
MMKLLLIAAAAFVAVSADPIHYDKITEEINKAVDEAVAAIEKSETFDPMKVPDHSDKFER
HIGIIDLKGQLDMRNIQVRGLKQMKRVGDANVKSEDGVVKAHLLVGVHDDVVSMEYDLAY
KLGDLHPNTHVISDIQDFVVELSLEVSEEGNMTLTSFEVRQFANVVNHIGGLSILDPIFA
VLSDVLTAIFQDTVRAEMTKVLAPAFKKELERNNQ
>AAF80379.2 Allergen Cyn d 1; beta expansin [Cynodon dactylon]
AMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGACGYKDVDKAPFDGMTGCGN
EPIFKDGLACGSCYEIKCKEPAECSGEPVLIKITDKNYEHIAAYHFDLSGKAFGAMAKKG
EEDKLRKAGELMLQFRRVKCEYPSDTKIAFHVEKGSSPNYLALLVKYAAGDGNIVGVDIK
PKGSDEFLPMKQSWGAIWRMDPPKPLKGPFTIRLTSESGGHVEQDDVIPEDWKPDTVYKS
KIQF
>BAB15802.1 Allergen Gly m 6; glycinin/11S globulin [Glycine max]
MGKPFFTLSLSSLCLLLLSSACFAITSSKFNECQLNNLNALEPDHRVESEGGLIETWNSQ
HPELQCAGVTVSKRTLNRNGLHLPSYSPYPQMIIVVQGKGAIGFAFPGCPETFEKPQQQS
SRRGSRSQQQLQDSHQKIRHFNEGDVLVIPPGVPYWTYNTGDEPVVAISLLDTSNFNNQL
DQNPRVFYLAGNPDIEHPETMQQQQQQKSHGGRKQGQHQQQEEEGGSVLSGFSKHFLAQS
FNTNEDTAEKLRSPDDERKQIVTVEGGLSVISPKWQEQEDEDEDEDEEYEQTPSYPPRRP
SHGKHEDDEDEDEEEDQPRPDHPPQRPSRPEQQEPRGRGCQTRNGVEENICTMKLHENIA
RPSRADFYNPKAGRISTLNSLTLPALRQFGLSAQYVVLYRNGIYSPHWNLNANSVIYVTR
GKGRVRVVNCQGNAVFDGELRRGQLLVVPQNFVVAEQGGEQGLEYVVFKTHHNAVSSYIK
DVFRAIPSEVLSNSYNLGQSQVRQLKYQGNSGPLVNP
>AAG22740.1 Allergen Bet v 6; phenylcoumaran benzylic ether reductase [Betula pendula]
MAHKSKILIIGGTGYIGKFIVEASAKSGHPTFALVRESTVSDPVKGKLVEKFKGLGVTLL
HGDLYDHESLVKAFKQVDVVISTVGHLQLADQVKIIAAIKEAGNIKRFFPSEFGNDVDRV
HAVEPAKTAFATKAEIRRKTEAEGIPYTYVSSNFFAGYFLPTLAQPGLTSPPREKVVIFG
DGNARAVFNKEDDIGTYTIRAVDDPRTLNKIVYIKPAKNIYSFNEIVALWEKKIGKTLEK
IYVPEEKLLKDIQESPIPINVILAINHSVFVKGDHTNFEIEASFGVEASELYPDVKYTTV
EEYLQQFV
>AAG23840.1 Allergen Ses i 4; oleosin [Sesamum indicum]
MADRDRPHPHQIQVHPQHPHRYEGGVKSLLPQKGPSTTQILAIITLLPISGTLLCLAGIT
LVGTLIGLAVATPVFVIFSPVLVPAAILIAGAVTAFLTSGAFGLTGLSSLSWVLNSFRRA
TGQGPLEYAKRGVQEGTLYVGEKTKQAGEAIKSTAKEGGREGTART
>CAC13961.1 Allergen Hev b 10; Mn superoxide dismutase [Hevea brasiliensis]
QTFSLPDLPYDYGALEPAISGEIMQLHHQKHHQTYITNYNKALEQLNDAIEKGDSAAVVK
LQSAIKFNGGGHVNHSIFWKNLAPVREGGGELPHGSLGWAIDADFGSLEKLIQLMNAEGA
ALRGSGWVWLALDKELKKLVVETTANQDPLVTKGPTLVPLLGIDVWEHAYYLQYKNVRPD
YLKNIWKVMNWKYASEVYAKECPSS
>CAC14917.1 Allergen Tri a 31; triosephosphate isomerase [Triticum aestivum]

MGRKFFVGGNWKCNGTVEQVESIVNTLNAGQIASTDVVEVVVSPPYVFLPTVKGKLRPEI
QVAAQNCWVKKGGAFTGEVSAEMLVNLGVPWVILGHSERRSLMGESSEFVGEKVAYALAQ
GLKVIACVGETLEQREAGSTMAVVAEQTKAIADKIKDWTNVVVAYEPVWAIGTGKVASPA
QAQEVHANLRDWLKTNVSPEVAESTRIIYGGSVTGASCKELAAQPDVDGFLVGGASLKPE
FIDIINAAAVKSA
>AAG31026.1 Allergen subtilisin precursor [Bacillus licheniformis]
MMRKKSFWLGMLTAFMLVFTMAFSDSASAAQPAKNVEKDYIVGFKSGVKTASVKKDIIKE
SGGKVDKQFRIINAAKAKLDKEALKEVKNDPDVAYVEEDHVAHALAQTVPYGIPLIKADK
VQAQGFKGANVKVAVLDTGIQASHPDLNVVGGASFVAGEAYNTDGNGHGTHVAGTVAALD
NTTGVLGVAPSVSLYAVKVLNSSGSGSYSGIVSGIEWATTNGMDVINMSLGGASGSTAMK
QAVDNAYAKGVVVVAAAGNSGSSGNTNTIGYPAKYDSVIAVGAVDSNSNRASFSSVGAEL
EVMAPGAGVYSTYPTNTYATLNGTSMASPHVAGAAALILSKHPNLSASQVRNRLSSTATY
LGSSFYYGKGLINV
>AAG35601.1 Allergen Zea m 12; profilin [Zea mays]
MSWQAYVDDHLLCDIEGQHLSAAAIVGHDGSVWAQSENFPELKPEEVAGMIKDFDEPGTL
APTGLFVGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMSLIIGIYDEPMTPGQCNMVVE
RLGDYLIEQGF
>1G5U_A Allergen Hev b 8; profilin [Hevea brasiliensis]
MSWQTYVDDHLMCDIDGHRLTAAAIIGHDGSVWAQSSSFPQFKSDEVAAVMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGSGGITVKRTGQALIIGIYDEPLTPGQCNMIVE
RLGDYLLDQGL
>1QNX_A Allergen Chain A, Ves V 5, An Allergen From Vespula Vulgaris
Venom [Vespula vulgaris]
AEAEFNNYCKIKCLKGGVHTACKYGSLKPNCGNKVVVSYGLTKQEKQDILKEHNDFRQKI
ARGLETRGNPGPQPPAKNMKNLVWNDELAYVAQVWANQCQYGHDTCRDVAKYQVGQNVAL
TGSTAAKYDDPVKLVKMWEDEVKDYNPKKKFSGNDFLKTGHYTQMVWANTKEVGCGSIKY
IQEKWHKHYLVCNYGPSGNFKNEELYQTK
>1QMR_A Allergen Chain A, Birch Pollen Allergen Bet V 1 Mutant N28t,
K32q, E45s, P108g [Betula pendula]
GVFNYETETTSVIPAARLFKAFILDGDTLFPQVAPQAISSVENISGNGGPGTIKKISFPE
GLPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATGDGGSILKISNKY
HTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>AAG40329.1 Allergen Cor a 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Corylus avellana]
MGVFSYEDEATSVIPPARLFKSFVLDADNLIPKVAPQHFTGAENLEGNGGPGTIKKITFA
EGSEFKYMKHKVEEIDHANFKYCYSIIEGGPLGHTLEKISYEIKMAAAPHGGGSILKITS
KYHTKGNASISEEEIKAGKEKAAGLFKAVEAYLLAHPDTYC
>AAG40330.1 Allergen Cor a 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Corylus avellana]
MGVFCYEDEATSVIPPARLFKSFVLDADNLIPKVAPQHFTGAENLEGNGGPGTIKKITFA
EGSEFKYMKHKVEEIDHANFKYCYSIIEGGPLGHTLEKISYEIKMAAAPHGGGSILKITS
KYHTKGNASISEEEIKAGKEKAAGLFKAVEAYLLAHPDTYC
>AAG40331.1 Allergen Cor a 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Corylus avellana]
MGVFSYEDEATSVIPPARLFKSFVLDADNLIPKVAPQHFTSAENLEGNGGPGTIKKITFA
EGNEFKYMKHKVEEIDHANFKYCYSIIEGGPLGHTLEKIPYEIKMAAAPHGGGSILKITS
KYHTKGNASINEEEIKAGKEKAAGLFKAVEAYLLAHPDAYC
>AAG42254.1 Allergen Poa p 5; unknown function [Poa pratensis]
MAVQKYTVALFLTVALVAGPAASYAADAGYAPATPAAAGAAAGKITPTQEQKLMEDINVG
FKAAVAAAAGAPPADKFKTFQAAFSASVEASAAKLNAAQAPGFVSHVAATSDATYKAAVG
ATPEAKFDSFVAAFTEALRIIAGVLKVHAVKPITEETGAAKIPAGEQQIIDKIDAAFKVA
ATAANAAPANDKFTVFEAAFNNAIKESTGGAYDTYKSIPSLEAAVKQAYAATIAAAPEVK
FAVFKAALTKAITAMAEVQKVSKPVAGAATVAAGAATAATGAATGAAGAATGAATVSAGG
YKV

>AAG42255.1 Allergen pollen allergen Hol l 5b [Holcus lanatus]
MAVQKYTVALFLTVALVAGPAASYAADAGYAPTTPAAAGAAAGKITPTQEQKLMEDINVG
FKAAVAAAAGAPPADKFKTFQAAFSASVEASAAKLNAAQAPGFVSHVAATSDATYKAAVG
ATPEAKFDSFVAAFTEALRVIAGVLKVHAVKPITEEIGAAKIPAGELQIIDKIDAAFKVA
ATAANAAPANDKFTVFEAAFNNAIKESTGGAYDTYKSIPSLEAAVKQAYAATIAAAPEVK
FAVFKAALTKAITAMAEVQKVSKPVAGAATAATGAATGAAGAATGAATVSAGGYKV
>AAG42802.1 Allergen Ory c 3; lipophilin [Oryctolagus cuniculus]
MKLLVPLLLVALALGCYEADAAACPAFVLDSVGFLFDPKPVYRQKLAKYDAPPEAVEAKL
QVKECTDEIDKGKRVLIAAVLTKIVKECAL
>AAG42806.1 Allergen Ory c 3; lipophilin [Oryctolagus cuniculus]
MKVVMVLLLAALPLYCYAGSGCVLLESVVEKTIDPSVSVEEYKADLQRFIDTEQTEAAVE
EFKECFLSQSNETLANFRVMVHTIYDSLYCAAY
>AAG44478.1 Allergen Pen o 18; serine protease [Penicillium oxalicum]
MKGLLSLTLLPLLAAASPTWSETIHNGAAPLISSTSAKEIPDSYIVVFKKHVGASAASAH
HSWVQDIHSDNVRMELKKRSLFGFESEPYLGVKHTFHVAGSLMGYAGHFHEDVIEQVRRH
PDVEYIEKDSEVHHFEDPAIEKNAPWGLARISHRDSLSFGSFNKYLYAEDGGEGVDAYVI
DTGTNVDHVDFEGRASWGKTIPQGDQDVDGNGHGTHCSGTIAGKKYGVAKKANVYAVKVL
RSNGSGTMSDVVKGVEWAAEAHIKKSKAAKDGKAKGFKGSVANMSLGGGSSRTLDLAVNA
AVDAGMHFAVAAGNDNADACNYSPAAAEKAVTVGASTLADERAYFSNYGKCTDIFAPGLN
ILSTWIGSKYAVNTISGTSMASPHIAGLLAYYVSLQPASDSAYAVEEITPKKLKDALITI
ATSGALSDIPSDTPNLLAWNGGGSSNYTEIVSKGGYKAGASESMKKHLDELVGKVEEVIA
KEQKVLSHELGAIYSEIKDAVSA
>AAG44480.1 Putative vacuolar serine protease [Penicillium citrinum]
DSPSVEKNAPWGLARISHRDSLSFGTFNKYLYAEDGGEGVDAYVIDTGTNTDHVDFEGRA
NWGKTIPEGDEDVDGNGHGTHCSGTIAGKKYGVAKKANVYAVKVLRSNGSGTMSDVVKGV
EWAAEAHIKKAKAGKKGFKGSVANMSLGGGSSRTLDLAVNAAVDAGIHFAVAAGNDNADA
CNYSPAAAENAVTVGASTLADERAYFSNYGKCTDIFAPGLNILSTWIGSKYAVNTISGTS
MASPHIAGLLAYYVSLQPSDDSAFAVEKITPKKLKEALITVATSGALTDIPSDTPNLLAW
NGGGSSNYTDIVAQGGYKAGSTVEDFEEHIHKLVNHAEEVMHKELGAIYSEIKDAVAV
>BAB21489.1 Allergen Bet vI jap1 [Betula platyphylla]
MGVFNYETEATSVIPAARLFKAFILDGDKLVPKVAPQAISSVENIEGNGGPGTIKKINFP
EGFPFKYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLSHSDAYN
>BAB21490.1 Allergen Bet vI jap2 [Betula platyphylla]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFKYVKDGVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLSHSDAYN
>BAB21491.1 Allergen Bet vI jap3 [Betula platyphylla]
MGVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFP
EGFPFEYVKDRVDEVDHTNFKYNYSVIEGGPVGDTLEKISNEIKIVATPDGGCVLKISNK
YHTKGNHEVKAEQVKASKEMGETLLRAVESYLLSHSDAYN
>AAK01235.1 Allergen Cor a 2; profilin [Corylus avellana]
MSWQTYGDEHLMCEIEGNRLAAAAIIGHDGSVWAQSSTFPQLKPEEITGVMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRRKKGPGGVTVKKTSQALIIGIYDEPMTPGQCNMIVE
RLGDYLIDQGL
>AAK01236.1 Allergen Cor a 2; profilin [Corylus avellana]
MSWQAYGDEHLMCEIEGNRLAAAAIIGHDGSVWAQSSTFPQLKPEEITGVMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTSQALIIGIYDEPMTPGQCNMIVE
RLGDYLIDQGL
>AAK09361.1 Allergen Api c 1; phospolipase A2 [Apis cerana cerana]
IIYPGTLWCGHGNVSSGPNELGRFKHTDACCRTHDMCPDVMSAGESKHGLTNTASHTRLS
CDCDDTFYDCLKNSGDKISSYFVGKMYFNLIDTKCYKLEHPVTGCGERTEGRCLRYTVDK
SKPKAYQWFDLRKY

>AAD55792.2 Allergen Mes a 1; lipocalin / male-specific submandibukar protein [Mesocricetus auratus]
MVKFLLLALALGVSCAQHQNLEVSPSEVDGKWHSLYIAADNKSKVSEGGPLRVYVKHLEC
SDECQTFTIKFYTKVENVCQEHRVVGRKGKDGKYITDFSGQNYFHVVEKADDTMTFHNVN
VDDSGKTNVILVVGKGESSSIEQKQRFEKTAEKYDIPKENIEHLVTTDTCNQ
>AAK15087.1 Allergen Ses i 7; 11S globulin / legumn-like protein [Sesamum indicum]
MALTSLLSFFIVVTLLIRGLSAQLAGEQDFYWQDLQSQQQHKLQARTDCRVERLTAQEPT
IRFESEAGLTEFWDRNNQQFECAGVAAVRNVIQPRGLLLPHYNNAPQLLYVVRGRGIQGT
VIPGCAETFERDTQPRQDRRRRFMDRHQKVRQFRQGDILALPAGLTLWFYNNGGEPLITV
ALLDTGNAANQLDQTFRHFFLAGNPQGGRQSYFGRPQTEKQQGETKNIFNGFDDEILADA
FGVDVQTARRLKGQDDLRGRIVRAERLDIVLPGEEEEERWERDPYSGANGLEETLCTAKL
RENLDEPARADVYNPHGGRISSLNSLTLPVLSWLRLSAEKGVLYRNGLVAPHWNLNAHSI
IYITRGSGRFQVVGHTGRSVFDGVVREGQLIIVPQNYVVAKRASQDEGLEWISFKTNDNA
MTSQLAGRLSAIRAMPEEVVMTAYQVSRDEARRLKYNREESRVFSSTSRYSWPRSSRPMS
YMPKPFEYVLDVIKSMM
>AAK15088.1 Allergen Ses i 1; 2S albumin [Sesamum indicum]
MAKKLALAAVLLVAMVALASATTYTTTVTTTAIDDEANQQSQQCRQQLQGRQFRSCQRYL
SQGRSPYGGEEDEVLEMSTGNQQSEQSLRDCCQQLRNVDERCRCEAIRQAVRQQQQEGGY
QEGQSQQVYQRARDLPRRCNMRPQQCQFRVIFV
>AAK15089.1 Allergen Ses i 3; 7S globulin/vicilin-like protein [Sesamum indicum]
MSCGGRLCLVLFALLLASAVVASESKDPELKQCKHQCKAQQQISKEQKEACIQACKEYIR
QKHQGEHGRGGGDILEEEVWNRKSPIERLRECSRGCEQQHGEQREECLRRCQEEYQREKG
RQDDDNPTDPEKQYQQCRLQCRRQGEGGGFSREHCERRREEKYREQQGREGGRGEMYEGR
EREEEQEEQGRGRIPYVFEDQHFITGFRTQHGRMRVLQKFTDRSELLRGIENYRVAILEA
EPQTFIVPNHWDAESVVFVAKGRGTISLVRQDRRESLNIKQGDILKINAGTTAYLINRDN
NERLVLAKLLQPVSTPGEFELFFGAGGENPESFFKSFSDEILEAAFNTRRDRLQRIFGQQ
RQGVIVKASEEQVRAMSRHEEGGIWPFGGESKGTINIYQQRPTHSNQYGQLHEVDASQYR
QLRDLDLTVSLANITQGAMTAPHYNSKATKIALVVDGEGYFEMACPHMSRSRGSYQGETR
GRPSYQRVASRLTRGTVVIIPAGHPFVAVASSNQNLQVLCFEVNANNNEKFPLAGRRNVM
NQLEREAKELAFGMPAREVEEVSRSQQEEFFFKGPRQQQQGRADA
>AAB32652.2 Allergen Ole e 1; trypsin-inhibitor [Olea europaea]
QVYCDTCRAGFITELSEFIPGASVRLQCKEKKNGDITFTEVGYTRAEGLYSMLVERDHKN
EFCEITLISSGSKDCNEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQVY
NKLGMYPPNM
>AAK25823.1 Allergen group V allergen Phl p 5 precursor [Phleum pratense]
PISVTAPPPQLPRPPATPPPPPPPQLGASPYKLGPSPKARSERPAIVPPADKYRTFVATF
GAASNKAFAEGLSGEPKGGAESSSKAALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLS
EALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAANAAPANDKFTVFE
AAFNNAIKAGTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETALKKAITAMSE
AQKAAKPAAAATATATSAVGAPTGATTAAAGGYKV
>AAK28533.1 Allergen Cor a 8; lipid transfer protein (LTP) type 1 [Corylus avellana]
MGSLKLVCAVLLCMMVAAPVARASLTCPQIKGNLTPCVLYLKNGGVLPPSCCKGVRAVND
ASRTTSDRQSACNCLKDTAKGIAGLNPNLAAGLPGKCGVNIPYKISPSTNCNNVK
>AAK39511.1 Allergen Der f 11; paramyosin [Dermatophagoides farinae]
MNKKRDSELAKLRKLLEDVHIESEETAHHLRQKHQAAIQEMQDQLDQLQKAKNKSDKEKQ
KFQAEVFELLAQLETANKEKLTALKNVEKLEYTVHELNIKIEEINRTVIELTSHKQRLSQ
ENTELIKEVHEVKLQLDNANHLKTQIAQQLEDTRHRLEEEERKRASLENHAHTLEVELES
LKVQLDEESEARLELERQLTKANGDAASWKSKYEAELQAHADEVEELRRKMAQKISEYEE
QLEALLNKCSSLEKQKSRLQSEVEVLIMDLEKATRHAQQLEKRVAQLEKINLDLKNKLEE
VTMLMEQAQKELRVKIAELQKLQHEYEKLRDQRDQLARENKKLTDDLAEAKSQLNDAHRR
IHEQEIEIKRLENERDELSAAYKEAETLRKQEEAKNQRLIAELAQVRHDYEKRLAQKDEE

IEALRKQYQIEIEQLNMRLAEAEAKLKTEIARLKKKYQAQITELELSLDAANKANIDLQK
TIKKQALQITELQAHYDEVHRQLQQAVDQLGVTQRRCQALQAELEEMRIALEQANRAKRQ
AEQLHEEAVVRVNELTTINVNLASAKSKLESEFSALQADYDEVHKELRISDERVQKLTIE
LKSTKDLLIEEQERLVKLETVKKSLEQEVRTLHVRIEEVEANALAGGKRVIAKLESRIRD
VEIEVEEERRRHAETDKMLRKKDHRVKELLLQ
>AAK49451.1 Allergen Asp f 22; enolase [Aspergillus fumigatus]
MPISKIHARSVYDSRGNPTVEVDVATETGLHRAIVPSGASTGQHEAHELRDGDKTQWGGK
GVLKAVKNVNETIGPALIKENIDVKDQSKVDEFLNKLDGTANKSNLGANAILGVSLAVAK
AGAAEKGVPLYAHISDLAGTKKPYVLPVPFQNVLNGGSHAGGRLAFQEFMIVPDSAPSFS
EALRQGAEVYQKLKALAKKKYGQSAGNVGDEGGVAPDIQTAEEALDLITEAIEQAGYTGK
IKIAMDVASSEFYKADVKKYDLDFKNPESDPSKWLTYEQLADLYKSLAAKYPIVSIEDPF
AEDDWEAWSYFYKTSDFQIVGDDLTVTNPGRIKKAIELKSCNALLLKVNQIGTLTESIQA
AKDSYADNWGVMVSHRSGETEDVTIADIAVGLRSGQIKTGAPCRSERLAKLNQILRIEEE
LGENTVYAGSKFRTAVNL
>AAK51201.1 Allergen Pen c 22; enolase [Penicillium citrinum]
MPIAKVHARSVYVSRGNPTVEVDVVTETGLHRAIVPSGASTGQHEAVELRDGDKAKWGGK
GVLKAVKNVNETIGPALIKENIDVKDQAKVDEFLNKLDGTANKGNLGANAILGVSLAIAK
AAAAEKGVPLYVHISDLAGTKKPYVLPVPFQNVLNGGSHAGGRLAFQEFMIVPDTAESFS
EGLRQGAEVYQKLKALAKKKYGQSAGNVGDEGGVAPDIQTAEEALDLITEAIEQAGYTGK
ISIAMDVASSEFYKTDAKKYDLDFKNPDSDPTKWLTYEQLADLYKSLAAKYPIVSIEDPF
AEDDWEAWSYFYKTSDFQIVGDDLTVTNPLRIKKAIELKSCNALLLKVNQIGTLTESIQA
AKDSYADNWGVMVSHRSGETEDVTIADIAVGLRSGQIKTGAPARSERLAKLNQILRIEEE
LGENAIYAGKNFRTSVNL
>AAK54834.1 Allergen Mus a 1; profilin [Musa acuminata]
MSWQAYVDDHLLCDIDGQCLTAAAIVGHDGSVWAQSDAFPQCKPEEIAAIMKDFDEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGSGGVTIKKTNLALIIGIYNEPMTPGQCNMVVE
RLGDYLFDQGF
>AAK56124.1 Putative beta-expansin 1 [Zea mays]
MGSLVNNIMVVGAVLAALVAGGSCGPPKVPPGPNITTNYNGKWLTARATWYGQPNGAGAP
DNGGACGIKNVNLPPYSGMTACGNVPIFKDGKGCGSCYEVRCKEKPECSGNPVTVYITDM
NYEPIAPYHFDLSGKAFGSLAKPGLNDKIRHCGIMDVEFRRVRCKYPAGQKIVFHIEKGC
NPNYLAVLVKYVADDGDIVLMEIQDKLSAEWKPMKLSWGAIWRMDTAKALKGPFSIRLTS
ESGKKVIAKDVIPANWRPDAVYTSNVQFY
>AAG44693.2 Putative vacuolar serine protease [Penicillium chrysogenum]
MKGFLSLTLLPLLVAASPVAVNSIHNDAAPILSSMTSKDIPDSYIVVFKKHVDPSSASAH
QSWLQEVHTAHTGRMELKKRSLFGFDFEAFMGLKHTFHIAGSLLGYAGHFHEDVIEQIRR
HPDVDYIEKDSEVRTMSEGSVEKNAPWGLARISHRESLSFGNFNKYLYAEEGGEGVDAYV
IDTGANVKHVDFEGRANWGKTIPQGDADEDGNGHGTHCSGTIAGKKFGVAKKANVYAVKV
LRSNGSGTMSDVVKGVEWAAEAHIKKSKKGDKKFKGSVANMSLGGGSSRTLDLAVNAAVD
AGIHFAVAAGNDNADACNYSPAAAEKAITVGASTLADERAYFSNYGKCTDIFAPGLNILS
TWVGSDHATNTISGTSMASPHIAGLLAYYVSLAPAKDSAYAVADVTPKQLKAALISVATE
GTLTDIPSDTPNLLAWNGGGSANYTKILADGGYKAHNAETTVEDRIGGIIDSAEKAFHKE
LGAIYSEIKDAVSA
>AAK58415.1 Allergen Blo t 1; cysteine protease [Blomia tropicalis]
IPANFDWRQKTHVNPIRNQGGCGSCWAFAASSVAETLYAIHRHQNIILSEQELLDCTYHL
YDPTYKCHGCQSGMSPEAFKYMKQKGLLEESHYPYKMKLNQCQANARGTRYHVSSYNSLR
YRAGDQEIQAAIMNHGPVVIYIHGTEAHFRNLRKGILRGAGYNDAQIDHAVVLVGWGTQN
GIDYWIVRTSWGTQWGDAGYGFVERHHNSLGINNYPIYASL
>AAK58515.1 Allergen Ole e 9; beta 1,3 glucanase [Olea europaea]
MAANVQTSSLLFLVFLLLQNFYSANSQSFLGVNYGQLSDNLPSLQATVNLLKSTTIQKVR
LFGAEPAVIKAFANTGVEIVIGFDNGDIPTLASNPNVASQFVKSNVMSFYPASNIIAITV
GNEVLTSGDQKLISQLLPAMQNVQNALNAASLGGKVKVSTVHAMAVLSQSYPPSSGVFNP
GLGDTMKALLQFQSANDAPFMISPYPYFAYKNQPTPDTLAFCLFQPNAGQVDSGNGHKYT
NMFDAQVDAVHSALNAMGFKDIEIVVAETGWPHGGDSNEVGPSLDNAKAYVGNLINHLKS

KVGTPLMPGKSIDTYLFSLYDEDKKTGASSEKYFGLFKPDGSTTYDVGLLKNTQNPTTPA
TPTPTPKAAGSWCVPKPGVSDDQLTGNINYACGQGIDCGPIQPGGACFEPNTVKAHAAYV
MNLYYQSAGRNSWNCDFSQTATLTNTNPSYGACNFPSGSN
>O04004.1 Allergen Amb a 6; lipid transfer protein [Ambrosia artemisiifolia]
MDCIRILWSVAVGLLLVSWRPTMFAASPTCDTVQNILAPCAGFLTGQEPSKACCTGVNNL
NNSRKTKADRVAVCNCIKELTKSIAYDPKRMPLLSTKCGVKPDFPAVDKNLDCSKLPV
>CAC41633.1 Allergen Pla l 1; Ole e 1-like protein / trypsin inhibitor [Plantago lanceolata]
TQTSHPAKFHVEGEVYCNVCHSRNLINELSERMAGAQVQLDCKDDSKKVIYSIGGETDQD
GVYRLPVVGYHEDCEIKLVKSSRPDCSEIPKLAKGTIQTSKVDLSKNTTITEKTRHVKPL
SFRAKTDAPGC
>CAC41634.1 Allergen Pla l 1; Ole e 1-like protein / trypsin inhibitor [Plantago lanceolata]
TQTSHPAKFHVEGEVYCNVCHSRNLINELSERMAGAQVQLDCKDDSKKVIYSIGGETGQD
GVYRLPVVGYHEDCEIKLVKSSRPDCSEIPKLAKGTIQTSKVDLSKNTTITEKTRHVKPL
SFRAKTDAPGC
>CAC41635.1 Allergen Pla l 1; Ole e 1-like protein / trypsin inhibitor [Plantago lanceolata]
TQTSHPAKFHVEGEVYCNVCHSRNLINELSERMAGAQVQLDCKDDSKKVIYSIGGETGQD
GVYRLPVVGYHEDCEIKLVKSGRPDCSEIPKLAKGTIQTSKVDLSKNTTITEKTRHVKPL
SFRAKTDAPGC
>AAK62278.1 Putative group 5 allergen precursor [Dactylis glomerata]
MAVQKYTVALFLAVVLVAGPVASYAADAGYTPAAAATPATAGGKAMTEEQTLIEDVNAGF
KAAVAAASSAPPADKFKTFEATFTAACKANIAAAATKVPLFVAKLDAAYAVAYKTATGPT
PEAKYDAFVAALTEALRVIAGALEVHAVKPAAEEVPAAKIPAGELQIVDKIDAAYKIAAT
AANAAPANDKFTVFEGAFNKAIKESTGGAYESYKFIPTLEAAVKQAYAATVAAAPEVKYA
VFEAALTKAITAMSEAQKVATPAAVATGAATAAASAATGAATAAAGGYKV
>P92918.1 Allergen Api g 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Apium graveolens]
MGVQKTVVEAPSTVSAEKMYQGFLLDMDTVFPKVLPQLIKSVEILEGDGGVGTVKLVHLG
EATEYTTMKQKVDVIDKAGLAYTYTTIGGDILVDVLESVVNEFVVVPTDGGCIVKNTTIY
NTKGDAVLPEDKIKEATEKSALAFKAVEAYLLANLQFLA
>Q9HDT3.2 Allergen Alt a 6; enolase [Alternaria alternata]
MTITKIHARSVYDSRGNPTVEVDIVTETGLHRAIVPSGASTGSHEACELRDGDKSKWGGK
GVTKAVANVNDTIAPALIKEKLDVKDQSAVDAFLNKLDGTTNKTNLGANAILGVSMAIAK
AAAAEKGVPLYAHISDLAGTKKPYVLPVPFQNVLNGGSHAGGRLAFQEFMIVPCEAPTFS
EAMRQGAEVYQKLKALAKKTYGQSAGNVGDEGGVAPDIQTAEEALDLITKAIEEAGYTGK
IKIAMDVASSEFYKADEKKYDLDFKNPDSDKSKWLTYEQLAEMYKSLAEKYPIVSIEDPF
AEDDWEAWSYFFKTYDGQIVGDDLTVTNPEFIKKAIELKSCNALLLKVNQIGTITEAIQA
AKDAFGAGWGVMVSHRSGETEDVTIADIVVGLRSGQIKTGAPARSERLAKLNQILRIEEE
LGDNAVYAGNNFRTAVNL
>Q9LEI9.1 Putative Enolase 2 (2-phosphoglycerate dehydratase 2) (2-phospho-D-glycerate hydro-lyase 2) (Allergen Hev b 9) [Hevea brasiliensis]
MAITIVSVRARQIFDSRGNPTVEADVKLSDGYLARAAVPRGASTGIYEALELRDGGSDYL
GKGVSKAVENVNIIIGPALVGKDPTDQVGIDNFMVQQLDGTVNEWGWCKQKLGANAILAV
SLAVCKAGAHVKGIPLYKHVANLAGNKNLVLPVPAFNVINGGSHAGNKLAMQEFMILPVG
ASSFKEAMKMGAEVYHHLKSVIKKKYGQDATNVGDEGGFAPNIQENKEGLELLKTAIAKA
GYTGKVVIGMDVAASEFYGSDKTYDLNFKEENNNGSQKISGDVLKDLYKSFVTEYPIVSI
EDPFDQDDWEHYAKLTSEIGVKVQIVGDDLLVTNPKRVEKAIKEKACNALLLKVNQIGSV
TESIEAVKMSKRAGWGVMASHRSGETEDTFIADLSVGLATGQIKTGAPCRSERLAKYNQL
LRIEEELGAEAVYAGANFRTPVEPY
>P78983.2 Allergen Alt a 3; heat shock protein 70 [Alternaria alternata]

KTNKIVITNDKGRLSKEEIERMLAEAEKYKAEDEAEAARISAKNALESYAYSLRNTLSDS
KVDEKLDAGDKQKLTAEIDKTVQWLDDNQTATKDEYESQQKELEGVANPIMMKFYGAGGE
GGMPGGMPGGGMPGGAPGGAAGDDGPTVEEVD
>Q92260.1 Allergen Pen c 19; heat shock protein 70 [Penicillium citrinum]
AYLGGTVNNAVITVPAYFNDSQRQATKDAGLIAGLNVLRIINEPTAAAIAYGLDKKTEGE
RNVLIFDLGGGTFDVSLLTIEEGIFEVKSTAGDTHLGGEDFDNRLVNHFVNEFKRKHKKD
LTTNARALRRLRTACERAKRTLSSAAQTSIEIDSLFEGIDFYTSITRARFEELCQDLFRG
TMEPVERVLRDAKIDKSSVHEIVLVGGSTRIPKIQKLVSDFFNKDANKSINPDEAVAYGA
AVQAAILSGDTSSKSTNEILLLDVAPLSLGIETAGGVMTPLIKRNTTIPTKKSETFSTYS
DNQPGVLIQVFEGERARTKDNNLLGKFELTGIPPAPRGVPQIEVTFDLDANGIMNVSASE
KGTGKSNKITITNDKGRLSKEEIERMLAEAEKYKAEDEAEASRIQAKNGLESYAYSLKNT
ITEGKLQMSDDDKKKIEDKISEIISWLDNNQTAEKDEYESQQKELEAIANPIMQAAYGAA
GGAPPQQRADGETEEKKDEEELD
>Q9M5X7.1 Allergen Mal d 3; lipid transfer protein [Malus domestica]
MASSAVTKLALVVALCMAVSVAHAITCGQVTSSLAPCIGYVRSGGAVPPACCNGIRTING
LARTTADRQTACNCLKNLAGSISGVNPNNAAGLPGKCGVNVPYKISTSTNCATVK
>P82971.1 Allergen Bom t 1; phospholipase A2 [Bombus terrestris]
IIFPGTLWCGNGNLANGTNQLGSWKETDSCCRTHDMCPDLIEAHGSKHGLTNAADYTRLS
CECDEEFRRCLHNSGDTVSAGFVGRTYFTVLHTQCFRLDYPIVKCKVKSTILHRSKCYDF
ETFAPKKYQWFDVLQY
>P58171.1 Allergen Syr v 3; polcalcin [Syringa vulgaris]
MAEEVAELERIFKRFDANGDGKISSSELGETLKTLGSVTPEEIQRMMAEIDTDGDGFISF
EEFKDFARANSGLIKDVAKIF
>Q9T0M8.1 Allergen Par j 3; profilin [Parietaria judaica]
MSWQAYVDDHLMCDVGDGNTLASAAIIGHDGSVWAQSANFPQLKPEEVTGIMNDFNEGGF
LAPTGLFLGGTKYMVIQGESGAVIGKKGSGGATLKKTGQAIVIGIYDEPMTPGQCNLVVE
RLGDYLLEQGM
>Q9XG85.1 Allergen Par j 3; profilin [Parietaria judaica]
MSWQAYVDDHLMCDVGDGNTPASAAIIGHDGSVWAQSANFPQLKPEEVTGIMNDFNEAGF
LAPTGLFLGGTKYMVIQGESGAVIRGKKGSGGATLKKTGQAIVIGIYDEPMTPGQCNLVV
ERLGDYLLEQGL
>O65200.1 Allergen Pyr c 1; pathogenesis related protein, PR-10, Bet v 1-
like protein [Pyrus communis]
MGLYTFENEFTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGNGGPGTIKKITFG
EGSQYGYVKHRVDSIDEASYSYAYTLIEGDALTDTIEKISYEAKLVASGSGSTIKSISHY
HTKGDIEIKEEHVKAGKEKAHGLFKLIESYLKDHPDAYN
>Q9NAS5.1 Allergen Ani s 3; tropomyosin [Anisakis simplex]
MDAIKKKMQAMKIEKDNALDRADAAEEKVRQMTDKLERIEEELRDTQKKMMQTENDLDKA
QEDLSTANSNLEEKEKKVQEAEAEVAALNRRMTLLEEELERAEERLKLATAKLEEATHTA
DESERVRKVMENRSFQDEERANTVESQLKEAQMLAEEADRKYDEVARKLTMVEADLERAE
ERAETGENKIVELEEELRVVGNNLKSLEVSEEKALQREDSYEEQIRTVSARLKEAETRAE
FAERSVQKLQKEVDRLEDELVHEKERYKSISEELDQTFQELSGY
>P19963.2 Allergen Ole e 1; Ole e 1-like protein [Olea europaea]
EDIPQPPVSQFHIQGQVYCDTCRAGFITELSEFIPGASLRLQCKDKENGDVTFTEVGYTR
AEGLYSMLVERDHKNEFCEITLISSGRKDCNEIPTEGWAKPSLKFKLNTVNGTTRTVNPL
GFFKKEALPKCAQVYNKLGMYPPNM
>AAK63086.1 Allergen Gad m 1; parvalbumin beta [Gadus morhua]
MAFAGILADADCAAAVKACEAAESFSYKAFFAKCGLSGKSADDIKKAFFVIDQDKSGFIE
EDELKLFLQVFKAGARALTDAETKAFLKAGDSDGDGAIGVDEWAVLVKA
>AAK63087.1 Allergen Gad m 1; parvalbumin beta [Gadus morhua]
MAFAGILNDADITAALAACKAEGSFDHKAFFTKVGLAAKSPADIKKVFEIIDQDKSDFVE
EDELKLFLQNFSAGARALSDAETKVFLKAGDSDGDGKIGVDEFGAMIKA
>AAK63088.1 Allergen parvalbumin [Theragra chalcogramma]
MSFAGVLADADVKAALAGCAAADSFNYKTFFKACGLAAKSHEEVKKAFFVIDQDQSGFIE

EDELKLFLQTFGAGARELTAAETKAFLAAGDEDGDGMIGVDEFVTLVKA
>AAK63089.1 Allergen parvalbumin [Theragra chalcogramma]
MAFAGILKDAEVAAALEACKSAGSFDHTKFFKSCGLAGKSSDDVKKAFGIIDQDQSDFIE
EEELKLFLQNFSASARALSDAETKAFLKAGDSDGDGKIGVDEFAAMVKA
>CAC42881.1 Allergen Hev b 11; chitinase (class I) [Hevea brasiliensis]
EQCGRQAGGALCPGGLCCSQYGWCANTPEYCGSGCQSQCDGGGGGEDGGIDLGSIISRST
FEEMLKHRNDAACPAKGFYTYDAFISAAKAFPAFGTTGDVDTCKREIAAFFGQTSHATTG
GWPTAPDGPYAWGYCYKEELNQASSYCSPSPAYPCAPGKKYYGRGPIQLSWNYNYGQCGQ
ALGLDLLNNPDLVATDRVISFKAAIWFWMTPQFPKPSCHDVITGQWSPTGHDISAGRAPG
YGVITNIINGGLECGRGWDARVEDRIGFYKRYCDMFAVGYGSNLDCYNQTPFGLG
>AAK67491.1 Allergen Cur l 2; enolase [Curvularia lunata]
MAITKIHARSVYDSRGNPTVEVDIVTETGLHRAIVPSGASTGSHEACELRDGDKTKWGGK
GVTKAVANVNDIIAPALIKEKLDVKDQSAVDAFLNKLDGTENKTKLGANAILGVSMAIAK
AAAAEKGVPLYAHISDLAGTKKPYVFRFLSKNVLNGGSHAGGFLLFQEFMIAPAKTFAEA
LRIRQGAEVYQKLKALTKKTYGQSAGNYGDEGGVAPDIQTAEEALDLIVDAIEAAGHTGQ
IKIAMDVASSEFFKDDEKKYDLDFKNPDSDKSKWLTYPQLAEMYKSLAEKYPIVSIEDPF
AEDDWEAWSHFYKDGDFQIVGDDLTVTNPEFIKTAIELKSCNALLLKVNQIGTISEAINA
AKDAFGAGWGVMVSHRSGETEDVTIADIVVGLRSGQIKTNAPARSERLAKYNQILRIEEE
LGDKRLFAGNKFHTAINLYL
>AAK67492.1 Allergen Cur l 3; cytochrome c [Curvularia lunata]
MGFEQGDAKKGANLFKTRCAQCHTLKAGEGNKIGPELHGLFGRKTGSVAGYSYTDANKQK
GIEWNHDTLFEYLENPKKYIPGTKMAFGGLKKPKDRNDLITFLEQETK
>AAG02250.1 Allergen ferritin heavy chain-like protein [Dermatophagoides
pteronyssinus]
MAANPESTTKTSRVRMNFHKECEAGINKQINLELYASYVYQQMAFHFNREDVALPGFEKF
FHESSEEEREHAEKLMKLQNQRGGRIVLQDIPKPVQQDWSSGLEALKASLELEKTVNQSL
LDLHDLATKHNDAQFADFIESNYLHEQVEAIKKLADYITNLERCGSVGLGEYLFDRHTLQ
>CAC48400.1 Putative putative allergen jun o 1 [Juniperus oxycedrus]
MASPCLRAVLVFLCAIVSCYSDNPIDSCWRGDSNWGQNRMKLADCVVGFGSSTMGGKGGE
FYTVTSAEDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLKMPLYVAGHKTIDGRGADV
HLGNGGPCLFMRKVSHVILHGLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLGSTGITISNNHFFNHHKVMLLGHDDTYDNDKSMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDPWNIYAIGGSSNPTILSEGNSFTAPSESYKKEV
TKRIGCESTSACANWVWRSTRDAFTNGAYFVSSGKIEETNIYNSNEAFKVENGNAAPQLT
KNAGVVT
>AAK96255.1 Allergen Cyn d 1; beta expansin [Cynodon dactylon]
AMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGACGYKDVDKAPFDGMTGCGN
EPIFKDGLACGSCYEIKCKEPAECSGEPVLIKITDKNYEHIAAYHFDLSGKAFGAMAKKG
EEDKLRKAGELMLQFRRVKCEYPSDTKIAFHVEKGSSPNYLALLVKYAAGDGNIVGVDIK
PKGSDEFLPMKQSWGAIWRIDPPKPLKGPFTIRLTSESGGHVEQDDVIPEDWKPDTVYKS
KIQF
>AAK96887.1 Allergen Ara h 2; 2S albumin, conglutin [Arachis hypogaea]
MAKLTILVALALFLLAAHASARQQWELQGDRRCQSQLERANLRPCEQHLMQKIQRDEDSY
ERDPYSPSQDPYSPSPYDRRGAGSSQHQERCCNELNEFENNQRCMCEALQQIMENQSDRL
QGRQQEQQFKRELRNLPQQCGLRAPQRCDLDVESGG
>AAK13027.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Malus domestica]
MGVFTYESEFTSVIPPARLFNAFVLDADNLIPKIAPQAVKSAEILEGDGGVGTIKKINFG
EGSTYSYVKHRIDGVDKDNFVYKYSVIEGDAISETIEKISYETKLVAAGSGSVIKSTSHY
HTKGDVEIKEEHVKAGKEKASHLFKLIENYLLEHQDAYN
>AAK13029.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Malus domestica]
MGVCTFENEFTSEIPPSRLFKAFVLDADNLIPKIAPQAIKQAEILEGNGGPGTIKKITFG
EGSQYGYVKHRIDSIDEASYSYSYTLIEGDALTDTIEKISYETKLVACGSGSTIKSISHY

HTKGNIEIKEEHVKVGKEKAHGLFKLIESYLKDHPDAYN
>AAK13030.1 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVYTFENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTTKKITFG
EGSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHY
HTKGDVEIKEEHVKAGKEKAHGLFKLIESYLKGHPDAYN
>AAK96889.1 Putative tropomyosin [Crassostrea gigas]
NSARGFDTVNEKYQECQTKMEEAEKTASEAEQEIQSLNRRIQLLEEDMERSEERLQTATE
KLEEASKAADESERNRKVLENLNNASEERTDVLEKQLTEAKLIAEEADKKYDEAARKLAI
TEVDLERAEARLEAAEAKVLELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQR
LKDAENRATEAERTVSKLQKEVDRLEDELLAEKERYKAISDELDQTFAELAGY
>BAB64303.1 Putative beta-conglycinin alpha prime subunit [Glycine max]
MMRARFPLLLLGVVFLASVSVSFGIAYWEKQNPSHNKCLRSCNSEKDSYRNQACHARCNL
LKVEEEEECEEGQIPRPRPQHPERERQQHGEKEEDEGEQPRPFPFPRPRQPRQEGEHEQK
EEHEWHRKEEKHGGKGSEEEQDGREHPRPHQPHQKEEEKHEWQHKQEKHQGKESEEEEED
QDEDEEQDKESQESEGSESQREPRRHKNKNPFHFNSKRFQTLFKNQYGHVRVLQRFNKRS
QQLQNLRDYRILEFNSKPNTLLLPHHADADYLIVILNGTAILTLVNNDDRDSYNLQSGDA
LRVPAGTTYYVVNPDNDENLRMITLAIPVNKPGRFESFFLSSTQAQQSYLQGFSKNILEA
SYDTKFEEINKVLFGREEGQQQGEERLQESVIVEISKKQIRELSKRAKSSSRKTISSEDK
PFNLRSRDPIYSNKLGKLFEITPEKNPQLRDLDVFLSVVDMNEGALFLPHFNSKAIVVLV
INEGEANIELVGIKEQQQRQQQEEQPLEVRKYRAELSEQDIFVIPAGYPVVVNATSDLNF
FAFGINAENNQRNFLAGSKDNVISQIPSQVQELAFLGSAKDIENLIKSQSESYFVDAQPQ
QKEEGNKGRKGPLSSILRAFY
>BAB64306.1 Putative beta-conglycinin beta-subunit [Glycine max]
MMRVRFPLLVLLGTVFLASVCVSLKVREDENNPFYFRSSNSFQTLFENQNGRIRLLQRFN
KRSPQLENLRDYRIVQFQSKPNTILLPHHADADFLLFVLSGRAILTLVNNDDRDSYNLHP
GDAQRIPAGTTYYLVNPHDHQNLKIIKLAIPVNKPSRYDDFFLSSTQAQQSYLQGFSHNI
LETSFHSEFEEINRVLFGEEEEQRQQEGVIVELSKEQIRQLSRRAKSSSRKTISSEDEPF
NLRSRNPIYSNNFGKFFEITPEKNPQPRDLDIFLSSVDINEGALLLPHFNSKAIVILVIN
EGDANIELVGIKEQQQKQKQEEEPLEVQRYRAELSEDDVFVIPAAYPFVVNATSNLNFLA
FGINAENNQRNFLAGEKDNVVRQIERQVQELAFPGSAQDVERLLKKQRESYFVDAQPQQK
EEGSKGRKGPFPSILGALY
>AAF07903.2 Allergen Tria p 1; procalin [Triatoma protracta]
MKTFIVITFIGILSYAYADECENPEPMQGFSASQFYQGXWYVTHETSAXTLSECNILTTS
NDNGKFTVKHKYTKDGXVGELICEGQASANNKFTYDCKFXGZTMEQVTRTAMDTDYNDYA
LYYLCTTYKXGPNAGKKEGHYILSRRQPNTEIPDALKTKTKDLNLKLCG
>AAL07320.1 Allergen Lit c 1; profilin [Litchi chinensis]
MSWQTYVDDHLMCETDGQHLTAAAIIGHDGSVWAQSANFPQFKPAEIAAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGPGGITVKKTTQALIIGIYDEPMTPGQCNMVVE
RLGDYLVDQGL
>1JTI_A Allergen Gal d 2; ovalbumin [Gallus gallus]
GSIGAASMEFCFDVFKELKVHHANENIFYCPIAIMSALAMVYLGAKDSTRTQINKVVRFD
KLPGFGDSIEAQCGTSVNVHSSLRDILNQITKPNDVYSFSLASRLYAEERYPILPEYLQC
VKELYRGGLEPINFQTAADQARELINSWVESQTNGIIRNVLQPSSVDSQTAMVLVNAIVF
KGLWEKTFKDEDTQAMPFRVTEQESKPVQMMYQIGLFRVASMASEKMKILELPFASGTMS
MLVLLPDEVSGLEQLESIINFEKLTEWTSSNVMEERKIKVYLPRMKMEEKYNLTSVLMAM
GITDVFSSSANLSGISSAESLKISQAVHAAHAEINEAGTEVVGSAEAGVDAASVSEEFRA
DHPFLFCIKHIATNAVLFFGRCVSP
>CAC85911.1 Allergen Plo i 1; arginine kinase [Plodia interpunctella]
MVDAATLEKLEAGFSKLAASDSKSLLKKYLTREVFDALKNKKTSFGSTLLDSIQSGVENL
HSGVGIYAPDAEAYVVFADLFDPIIEDYHNGFKKTDKHPPKNWGDVETLGNLDPAGEFVV
STRVRCGRSMEGYPFNPCLTEAQYKEMEEKVSSTLSGLEGELKGTFFPLTGMSKETQQQL
IDDHFLFKEGDRFLQAANACRFWPSGRGIYHNENKTFLVWCNEEDHLRLISMQMGGDLKQ
VYKRLVRGVNDIAKRIPFSHNERLGFLTFCPTNLGTTVRASVHIKLPKLAADKAKLEEVA

SKYHLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYEAVKEMYDGIAELIKIEKSL
>AAL14077.1 Allergen Cyn d 1; beta expansin [Cynodon dactylon]
MLAVVAVVLASMVGGALCAMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGAC
GYKDVDKAPFDGMTGCGNEPIFKDGLACGSCYEIKCKEPAECSGEPVLIKITDKNYEHIA
AYHFDLSGKAFGAMAKKGEEDKLRKAGELMLQFRRVKCEYPSDTKIAFHVEKGSNPNYLA
LLVKYAAGDGNIVSVDIKSKGSDEFLPMKQSWGAIWRIDPPKPLKGPFTIRLTSESGGHV
EQEDVIPEDWKPDTVYKSKIQF
>AAL14078.1 Allergen acidic Cyn d 1 isoallergen isoform 3 precursor
[Cynodon dactylon]
MLAAVAVVLASMVGGAWCAMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGAC
GYKDVDKAPFDGMTGCGNEPIFKDGLGCGSCYEIKCKEPAECSGEPVLIKITDKNYEHIA
AYHFDLSGKAFGAMAKKGEEDKLRKAGELMLQFRRVKCEYPSDTKITFHVEKGSSPNYLA
LLVKYAAGDGNIVGVDIKPKGSDVFLPMKLSWGAIWRMDPPKPLKGPFTIRLTSESGGHV
EQEDVIPEDWKPDTVYKSKIQF
>AAL14079.1 Allergen acidic Cyn d 1 isoallergen isoform 4 precursor
[Cynodon dactylon]
MLAVVAVVLASMVGGALCAMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGAC
GYKDVDKAPFDSMTGCGNEPIFKDGLGCGSCYEIKCKEPAECSGEPVLIKITDKNYEHIA
AYHFDLSGKAFGAMAKKGEEDKLRKAGELMLQFRRVKCEYPSDTKIAFHVEKGSNPNYLA
LLVKYAAGDGNIVSVDIKSKGSDEFLPMKQSWGAIWRIDPPKPLKGPFTIRLTSESGGHV
EQEDVIPEDWKPDTVYKSKIQF
>CAD10374.1 Putative ypr10 [Castanea sativa]
MGVFTHENEITSAIPPGRLFKAFVLDADNLIPKLAPHAIKSAEIIEGNGGPGTIKKITFG
EGSQFKYVKHRIDEIDQANFTYCYSVIEGDVVNELLEKISYEIKIVASPDGGSILKNTSK
YHTKGEQEIKEEKVMAGKEKAAGLFKAVEAYLLAHSDAYN
>CAD10376.1 Allergen Cap a 2; profilin [Capsicum annuum]
MSWQTYVDDHLMCEIEGNRLTSAAIIGQDGSVWAQSATFPQFKPEEITAIMNDFAEPGTL
APTGLYLGGTKYMVIQGEAGAVIRGKKGPGGITVKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLIEQSL
>CAD10377.1 Allergen Sola l 1; profilin [Solanum lycopersicum]
MSWQTYVDEHLLCENEGNHLTSAAIIGQDGTVWAQSANFPQFKPEEITGIMNDFAVPGTL
APTGLYLGGTKYMVIQGEPEAVIRGKKGPGGITIKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLIEQSL
>BAB71741.1 glyoxalase I [Oryza sativa Japonica Group]
MASGSEAEKSPEVVLEWPKKDKKRVLHAVYRVGDLDRTIKCYTECFGMKLLRKRDVPEEK
YTNAFLGFGPEDTNFALELTYNYGVDKYDIGAGFGHFAIATEDVYKLAEKIKSSCCCKIT
REPGPVKGGSTVIAFAQDPDGYMFELIQRGPTPEPLCQVMLRVGDLDRSIKFYEKALGMK
LLRKKDVPDYKYTIAMLGYADEDKTTVIELTYNYGVTEYTKGNAYAQVAIGTEDVYKSAE
AVELVTKELGGKILRQPGPLPGLNTKIASFLDPDGWKVVLVDNADFLKELQ
>CAC34055.2 Allergen Cap a 1; thaumatin-like protein [Capsicum annuum]
MGYLRSSFVLFLLAFVTYTYAATFEVRNNCPYTVWAASTPVGGGRRLDRGQTWTINAPPG
TAMARIWGRTNCNFDGSGRGSCQTGDCGGVLQCTGWGKPPNTLAEYALNQFNNLDFWDIS
LVDGFNIPMTFAPTNPSGGKCHAIQCTANINGECPGSLRVPGGCNNPCTTFGGQQYCCTQ
GPCGPTELSKFFKKRCPDAYSYPQDDATSTFTCPSGSTNYRVVFCPNGVTGPNFPLEMPG
SDGVAK
>AAL29690.1 profilin [Solanum lycopersicum]
MSWQTYVDDHLMCDIEGNHLTSAAIIGQDGSVWAQSANFPQFKPEEITAIMNDFAEPGTL
APTGLHLGGTKYMVIQGEAGAVIRGKKGAGGITVKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYIIEQGL
>AAL37561.1 Allergen conglutin [Arachis hypogaea]
AKSTILVALLALVLVAHASAMRRERGRQGDSSSCERQVDRVNLKPCEQHIMQRIMGEQEQ
YDSYDIRSTRSSDQQQRCCDELDQMENTERCMCEALQQIMENQCDRLQDRQMVQQFKREL
MNLPQQCNFRAPQRCDLDVSGGRC
>BAB79444.1 Putative BW8KD allergen protein [Fagopyrum esculentum]

MKLFLILAAASLLIVASHADSQMRSKCRKQMRMMEPQLEQCEGYMTMDMMDDDSMRGREC
RSEESCMRGCCLAMKEMDDECMCEWMKMMVQQQRGEMGEEDMRMVMRKMKQLPNKCGMGH
MRCHMGIGTRDYE
>CAC81811.1 Allergen Mus a 2; chitinase / hevein-like protein (class 1)
[Musa acuminata]
MKALLLVIFTLASSLGAFAEQCGRQAGGALCPGGLCCSQYGWCGNTDPYCGQGCQSQCGG
SGGSGGGSVASIISSSLFEQMLKHRNDAACPGKGFYTYNAFIAAANSFSGFGTTGDDAKK
KREIAAFLAQTSHETTGGWATAPDGPYAWGYCFVQEQNPSSDYCVASSQWPCAAGKKYYG
RGPIQISFNYNYGPAGRAIGSDLLNNPDLVATDATISFKTALWFWMTPQSPKPSCHDVIT
GSWTPSNADQAAGRLPGYGVTTNIINGGLECGKGYDARVADRIGFYKRYCDLLGVSYGDN
LDCYNQRPFASTAATATF
>AAL49391.1 Allergen Fel d 3; cystatin A [Felis catus]
MIPGGLSEAKPATPEIQEIANEVKPQLEEKTNETYQKFEAIEYKTQVVAGINYYIKVQVD
DNRYIHIKVFKGLPVQDSSLTLTGYQTGKSEDDELTGF
>CAC83658.1 Allergen Cyp c 1; parvalbumin beta [Cyprinus carpio]
MAFAGILNDADITAALQGCQAADSFDYKSFFAKVGLSAKTPDDIKKAFAVIDQDKSGFIE
EDELKLFLQNFSAGARALTDAETKAFLKAGDSDGDGKIGVDEFAALVKA
>CAC83659.1 Allergen Cyp c 1; parvalbumin beta [Cyprinus carpio]
MAFAGVLNDADITAALEACKAADSFNHKTFFAKVGLTSKSADDVKKAFAIIDQDKSGFIE
EDELKLFLQNFKAGARALTDGETKTFLKAGDSDGDGKIGVDEFTALVKA
>AAL47677.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
DQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDANQNTKTAKIEIKASLDG
LEIDVPGIDTNACHFMKCPLVKGQQYDAKYTWNVPKIAPESENVVVTVKLVGDNGVLACA
IATHAKIRD
>CAD20405.1 Putative group 5 isoallergen [Dactylis glomerata]
ADAGYTPAAAATPAAAGGKAMTEEQKLIEDVNAGFKAAVAAASSAPPADKFKTFEATFTA
ACKANIAAAATKVPLFVAKLDAAYAVAYKTAAGPTPEAKYDAFVAALTEALRVIAGALEV
HAVKPAAEEVPAAKIPAGELQIVDKIDAAYKIAATAANAAPANDKFTVFEGAFNKAIKES
TGGAYESYKFIPTLEAAVKQAYAATVAAAPEVKYAVFEAALTKAITAMSEAQKVATPAAA
ATGAATAAASAATGAATAAAGGYKV
>CAD20406.1 Allergen Group 1 allergen-like [Dactylis glomerata]
MASSSSSVLLVVALFAVFLGSAHGIPKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPKD
NGGACGYKDVDKAPFNGMTGCGNTPIFKDGRGCGSCFEIKCTKPESCSGEAVTVHITDDN
EEPIAPYHFDLSGHAFGSMAKKGEEQKLRSAGELELQFRRVKCKYPEGTKVTFHVEKGSN
PNYLALLVKYVDGDGDVVAVDIKEKGKDKWIALKESWGAIWRVDTPDKLTGPFTVRYTTE
GGTKSEVEDVIPEGWKADTSYEAK
>Q91483.3 Allergen Parvalbumin beta 2 (Major allergen Sal s 1) [Salmo
salar]
MSFAGLNDADVAAALAACTAADSFNHKAFFAKVGLASKSSDDVKKAFYVIDQDKSGFIEE
DELKLFLQNFSASARALTDAETKAFLADGDKDGDGMIGVDEFAAMIKG
>CAC86258.1 Allergen Fra a 3; lipid transfer protein (LTP) type 1
[Fragaria x ananassa]
MASSTAMKLSLVALLCIVVALPIAQAITCGQVASNISPCLTYVKSGGAVPAACCSGIRNL
NGMAKTTADRQAACNCLKQAAGGIKGLNPNLAAGLPGKCGVSVPYKISTTTNCAAVK
>AAL73404.1 Allergen Cor a 9; 11S globulin/ legumin like protein [Corylus
avellana]
MAKLILVSFSLCLLVLFNGCLGINVGLRRQQQRYFGECNLDRLNALEPTNRIEAEACQIE
SWDHNDQQFQCAGVAVIRRTIEPNGLLLPQYSNAPELIYIERGRGITGVLFPGCPETFED
PQQQSQQGQRQGQGQSQRSEQDRHQKIRHFREGDIIALPAGVAHWCYNDGDSPVVTVSLL
HTNNYANQLDENPRHFYLAGNPDDEHQRQGQQQFGQRRRQQQHSHGEQGEQEQQGEGNNV
FSGFDAEFLADAFNVDVDTARRLQSNQDKRRNIVKVEGRLQVVRPERSRQEWERQERQER
ESEQERERQRRQGGRGRDVNGFEETICSLRLRENICTRSRADIYTEQVGRINTVNSNTLP
VLRWLQLSAERGDLQREGLYVPHWNLNAHSVVYAIRGRARVQVVDDNGNTVFDDELRQGQ

VLTIPQNFAVAKRAESEGFEWVAFKTNDNAQISPLAGRTSAIRALPDDVLANAFQISREE
ARRLKYNRQETTLVRSSRSSSERKRRSESEGRAEA
>AAL75449.1 Allergen Sola l 2; beta-fructorfuranosidase [Solanum
lycopersicum]
MATQCYDPENSASRYTLLPDQPDSGHRKSLKIISGIFLSVFLLLSVAFFPILNNQSPDLQ
IDSRSPAPPSRGVSQGVSDKTFRDVAGASHVSYAWSNAMLSWQRTAYHFQPQKNWMNDPN
GPLYHKGWYHLFYQYNPDSAIWGNITWGHAVSKDLIHWLYLPFAMVPDQWYDINGVWTGS
ATILPDGQIMMLYTGDTDDYVQVQNLAYPANLSDPLLLDWVKFKGNPVLVPPPGIGVKDF
RDPTTAWTGPQNGQWLLTIGSKIGKTGVALVYETSNFTSFKLLDGVLHAVPGTGMWECVD
FYPVSTKKTNGLDTSYNGPGVKHVLKASLDDNKQDHYAIGTYDLGKNKWTPDNPELDCGI
GLRLDYGKYYASKTFYDPKKERRVLWGWIGETDSESADLQKGWASVQSIPRTVLYDKKTG
THLLQWPVEEIESLRVGDPTVKQVDLQPGSIELLRVDSAAELDIEASFEVDKVALQGIIE
ADHVGFSCSTSGGAASRGILGPFGVIVIADQTLSELTPVYFYISKGADGRAETHFCADQT
RFAFLSGTINLSL
>AAL75450.1 Allergen Sola l 2; beta-fructorfuranosidase [Solanum
lycopersicum]
MATQCYDPENSASRYTLLPDQPDSGHRKSLKIISGIFLSVFLLLSVAFFPILNNQSPDLQ
IDSRSPAPPSRGVSQGVSDKTFRDVAGASHVSYAWSNAMLSWQRTAYHFQPQKNWMNDPN
GPLYHKGWYHLFYQYNPDSAIWGNITWGHAVSKDLIHWLYLPFAMVPDQWYDINGVWTGS
ATILPDGQIIMLYTGDTDDYVQVQNLAYPANLSDPLLLDWVKFKANPVLVPPPGIGVKDF
RDPITAWTGPQNGQWLLTIGSKIGKTGVALVCETSNFTSFKLLDGVLHAVPGTGMWECVD
FYPVSTKKTNGLDTSYNGPGVKHVLKASLDDNKQDHYAIGTYDLGKNKWTPDNPELDCGI
GLRLDYGKYYASKTFYDPKRERRVLWGWIGETDSESADLQKGWASVQSIPRTVLYDKKTG
THLLQWPVEEIESLRVGDPTVKQVDLQPGSIELLRVDSAAELDIEASFEVDKVALQGIIE
ADHVGFSCSTSGGAASRGILGPFGVIVIADQTLSELTPVYFYISKGADGRAETHFCADQT
RSSEAPGVGKQVYGSSVPVLDGEKHSMRLLVDHSIVESFAQGGRTVITSRIYPTKAVNGA
ARLFVFNNATGASVTASVKIWSLESANIQSFPLQDL
>AAL76932.1 Allergen Dau c 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Daucus carota]
MGVQKTEVEAPSTVSAEKMYQGFLLDMDTVFPKVLPQLIKSVEILEGDGGVGTVRLVHLG
EATEYTTMKQKVDVIDKAGLGYTYTTIGGDILVEGLESVVNQFVVVPTDGGCIVKNTTIY
NTKGDAVLPEDKVKEATEKSALAFKAVEAYLLAN
>AAL76933.1 Allergen Dau c 4; profilin [Daucus carota]
MSWQTYVDDHLMCEVDGNPGQQLSAAAIIGHDGSVWAQSSTFPKFKPEEITGIMKNFDEP
GHLAPTGLYLGGTKYMVIQGEPIAVIRGKKGSGGVTIKKTGQALVFGVYDEPVTPGQCNL
IVERLGDYLIEQGL
>CAC37790.2 Allergen putative allergen Cup a 1 [Cupressus arizonica]
MASPCLVAVLVFLCAIVSCYSDNPIDSCWRGDSNWDQNRMKLADCVVGFGSLTMGGKGGE
IYTVTSSDDNPVNPTPGTLRYGATREKALWIIFSQNMNIKLQMPLYVAGYKTIDGRGADV
HLGNGGPCLFMRTASHVILHGLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVT
NAWIDHNSLSDCSDGLIDVTLGSTGITISNNHFFNHHKVMLLGHDDTYDDDISMKVTVAF
NQFGPNAGQRMPRARYGLVHVANNNYDQWNIYAIGGSSNPTILSEGNSFTAPSESYKKEV
TKRIGCESTSACANWVWRFTRDAFTNGAYFVSSGKAEETNIYNSNEAFKVENGNAAPQLT
QNAGVVT
>CAA09887.4 Allergen Mala s 9; unknown [Malassezia sympodialis]
MSNVIKKVFNTDKAEAEGSKVADAPQEAGHKGEGFLHDAKDRLQGFAGHGHHNAQNAASG
VAGSAGAGGAPSVPSANVDVTNPVNDASVQGGVEAPRSWSTQLPQSQSVADTTGATSAGR
NNLTQTTSTGSGVNVAAGNVDQDVQHLAPVTRHVHHRHEIEELLREREHHIHQHHIQHHV
QPVVDSEHLAEQIHSRVVPQTTVREVHANTDKDAALMRAVAGNPKDTFTQAAIDRSVIDK
GETVREIVHHHIHNIVQPIIEKETHEYHRIRTTIPTTHITHEAPIVHESTAHQPIRKEDF
LKGGGVLTSTTRSIEEVGLLNLGNNQRTVEGETYTGGLPLSQ
>AAL86701.1 Allergen tropomyosin [Periplaneta fuliginosa]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANLRAEKAEEEARSLQKKIQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAA

DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEAYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKFICDDLDMTFTELIGN
>AAL86739.1 Allergen Cor a 11; 7S globulin/ vicilin-like protein [Corylus avellana]
MLPKEDPELKKCKHKCRDERQFDEQQRRDGKQICEEKARERQQEEGNSSEESYGKEQEEN
PYVFQDEHFESRVKTEEGRVQVLENFTKRSRLLSGIENFRLAILEANPHTFISPAHFDAE
LVLFVAKGRATITMVREEKRESFNVEHGDIIRIPAGTPVYMINRDENEKLFIVKILQPVS
APGHFEAFYGAGGEDPESFYRAFSWEVLEAALKVRREQLEKVFGEQSKGSIVKASREKIR
ALSQHEEGPPRIWPFGGESSGPINLLHKHPSQSNQFGRLYEAHPDDHKQLQDLDLMVSFA
NITKGSMAGPYYNSRATKISVVVEGEGFFEMACPHLSSSSGSYQKISARLRRGVVFVAPA
GHPVAVIASQNNNLQVLCFEVNAHGNSRFPLAGKGNIVNEFERDAKELAFNLPSREVERI
FKNQDQAFFFPGPNKQQEEGGRGGRAFE
>AAK27264.1 Putative isoflavone reductase-like protein CJP-6 [Cryptomeria japonica]
MGGSRVLIIGGTGYIGRHVTNASLAQGHPTFLLVREITPSNPEKAQLLESFTSKGATLVQ
GSIDDHASLVAALKKVDVVISTLGAPQIADQFNLIKAIKEVGTIKRFFPSEFGNDVDKHH
AVEPMKSMFDLKIKLRRTIEAEGIPHTYVVPHCFAGYFLTNLAQLGLAAPPRDKIVIYGD
GTTKAVYMKEEDIGTFTIKAVDDPRTLNKTLYLKPPANTISTNDLVALWEAKIGKTLEKV
YLSEEQVLKLLQDTPFPGTFMVSIFHTIYVKGDQTNFQIGPDGVEASALYPDVKYTTVEE
YISAFV
>AAL79930.1 Allergen Fus c 1; ribosomal protein P2 [Fusarium culmorum]
MKHLAAYLLLGLGGNTSPSAADVKAVLTSVGIDADEDRLNKLISELEGKDIQQLIAEGSE
KLASVPSGGAGGASGGAAAAGGAAEEAKEEEKEEEKEESDEDMGFGLFD
>AAL79931.1 Allergen Fus c 2; thioredoxin [Fusarium culmorum]
MVHHITSNDELQKLLSSTTYVVVDFFADWCPPCKAIAPVYEQLSTKHSVPDVLAFAKVNV
DHVQDAAQQYGITAMPTFMFFKEGKQVAVNGQAVIKGADPRTLGAAAEKLGGLAQKRVAG
A
>BAB88129.1 Allergen pathogenesis-related protein-like protein 1 [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNVLPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTLRTDGLDKKNCTIDYSYIDGDILMGFIEKIENHLSVVPNADGGSTTKTTAIF
HTKGDAVVPEENIKYAEEQNTMLFKAVEAYLIAN
>AAL25839.1 Allergen Hev b 12; lipid transfer protein (LTP) type 1 [Hevea brasiliensis]
MAALKMVSFLVLCMLVAAPMTAQAITCGQVQSALVPCLSYLKTTGPTPPATCCNGVRTIN
NAAKTTADRRTACQCLKSAAGSVKGLNPTTVAGLPGKCGVNIPYKISLSTNCATVK
>P20347.3 Allergen Sola t 3; cysteine protease inhibitor [Solanum tuberosum]
MKSINILSFLLLSSTLSLVAFARSFTSENPIVLPTTCHDDDNLVLPEVYDQDGNPLRIGE
RYIINNPLLGAGAVYLYNIGNLQCPNAVLQHMSIPQFLGEGTPVVFVRKSESDYGDVVRV
MTVVYIKFFVKTTKLCVDQTVWKVNDEQLVVTGGKVGNENDIFKIMKTDLVTPGGSKYVY
KLLHCPSHLGCKNIGGNFKNGYPRLVTVDDDKDFIPFVFIKA
>P02762.2 Allergen Mus m 1; lipocalin, major urinary protein [Mus musculus]
MKMLLLLCLGLTLVCVHAEEASSTGRNFNVEKINGEWHTIILASDKREKIEDNGNFRLFL
EQIHVLENSLVLKFHTVRDEECSELSMVADKTEKAGEYSVTYDGFNTFTIPKTDYDNFLM
AHLINEKDGETFQLMGLYGREPDLSSDIKERFAQLCEEHGILRENIIDLSNANRCLQARE
>AAM21322.1 Allergen Der p 14; apolipophorin [Dermatophagoides pteronyssinus]
LLTACLLGLGQAQHCEVACPRSIPQLINPKAQSTYVYSLDAKTVLTPRDSQKVTIKGDAE
VAFVSDCEAVLRLQNVAIDGVPNGAELAAELAAKPFAFGYFNGRILGVCPADDDQDWSLN
VKKAIVSSLQALSDGNVEKAEEIDFSGRCPTEYRKIRSQDDNTVVIEKRKDLNLCDDRRI
DLRQTPDQALGQLKELMRHYMHPMDSDLSCRMTLKDKVVTEVDCEERHVLVHRSNKPVHM

SYVKMMLKQNKDGVAADLGPTNAQPKRPYLSFDHKHKNPTETDVVEVLKKLCSEITEPQA
SIETSFTFQKLVDKLRYLSAEETASVDESVKTSVCPAHAHRLRELFLDASAFAASDGSIR
TLVKAHENQELSITRSTALFTVAAIKAAPNKETVQVLLPVIASEKTIRPMLLGFSVLVRR
YCEKTNDCATNSGVKDARDAYLARLAVARDASERMTIVRALENLNVNTDGVDNMVNAMDE
IIKSTDAEPAMRAAAVNALPNDASHMDRYKSLVMDESMPNEARIAAFQKMMKNGGMSHIK
DLFAVKGECMKNYVLTYVDNLKKSKNDLRRQTVGEDVELPEKPKREIGITRNIAREYGPY
TFEYDVIYPETHENVTRSINGRLIRSKNDQLKELVEFQVTQSGFDRELNNAMSLLEKKSF
QSVMQFLRDMLKMLSQIRKNADDNHHMKITVQINGKNVYFTDLFQDTKKMKELLMKRVEK
IINDKKVDRSIGGVLLDSKLVLPTITGLPLMYKFGDNLVVRYDGEFSGEKGDRNIRMNGG
VVAGLYGKMKLMVKDHKMGYEYDAKASYTPMIDMNVQKQEHSLLVRFNMKDMDQHTVMRF
KQSLREKRATGEEKDYENEITPDARSDRCFSFFLLDYCRKASHIKGLMLPNVEYYVVKPE
KEVTALELMLKSETQDKTRRYIAEMTAVGSPSNKQAKAELEVTKGEQYRVSVKLPEHEFN
TEFTINADKNNLKMHMDLPNVLQADLTGSFEHDKENNVRKNRLNLQYKFAGDEKPHTVDY
ENEFLFNLKRSSKEKNSAVEYRAKYMSSHFPILNHKVNVQFKYRPFKVNELNLEGEFGRE
LQHKFRLMRNSQMEVEEVRPFKMHGNSDIKLMANDLDIDYDLKSEFKYESNKGTPIELQY
KVSGKDRSKRAAEMNAEDVEGVIDYKNSGSPIDSKMHAHLKVKGNNYGYDSELKQTEPQQ
YEGKMTLSKNDKKIFITHKTEMTKPTSTFLLKTDADVSYSESDMKKHYHMEFKKENDIYT
LRSTVERDGQLFYENYLTVHKGGKLNLNYRRNDRKILLDLDNALSPREGTMKLNIKDREY
NFVLKRDPMRYRDITVEGNENAYVKNGKLHLSLIDPSTLSLVTKADGQIDMTVDLISPIT
KRASLKVDSKKYNLFHEGELSASLVNPRLSWHQYTKRDSREYKTDVDLSLRSSDIAVKIT
MPDYNSKIHYSRQNDQISMDIDGTLIEGHAKGTIKEGKIHIKGRQSDFEIESNYRYEDGK
MLIEPVKSENGKLEGVLSRKVPSHLTLETPRVKMNMQYDRHSPVKMFKLDYDGIHLEKHT
DLLYEPGVQYKIIGNGKIKDDGSHYSIDIQGKPRKAFKLDADMMNFKLNVNKPEDSNKAQ
FSYTFNDYTETEEYEFDPHRAYYINWISSIRKYIQNFIVEDH
>CAC84590.2 Allergen Lep s 1; tropomyosin [Lepisma saccharina]
MEAIKKKMQAMKLEKDNAMDKADALEAQARDANRKADKILEEVQDLKKKPSQVETDFTTT
KENLATANKNLEDKEKTLTNTESEVASLNRKVQMIEENLERSEERLGTALTKLGEASHAA
DEASRMCKVLENRSQQDEERMDQLTNQLKEARMLAEDADGKSDEVSRKMAQVEDDLEVAE
DRVKSGDSKIMELEEELKVVGNSLKSLEVSEEKANQRVEEYKRQIKTLTVKLKEAEARAE
YAEKYVKKLQKEVDRLEDELGINKDRYRALADEMDQTFAELSGY
>CAC84593.2 Allergen troposmyosin [Lepisma saccharina]
MEAIKKKMQAMKLEKDNAVDRARQNEQEAKDANLRAEKAEEEARSLQKKIQTIENELDQT
QEQLMQVNAKLEEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATQKLAEASQAA
DESERMRKVLENRSLADEERMDALENQLKEARFLAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREEEYKQQIKTLTTRLKEAEARAC
WLL
>CAC83046.1 Allergen Ran e 1; parvalbumin alpha [Rana esculenta]
MPMTDLLAAGDISKAVSAFAAPESFNHKKFFELCGLKSKSKEIMQKVFHVLDQDQSGFIE
KEELCLILKGFTPEGRSLSDKETTALLAAGDKDGDGKIGVDEFVTLVSES
>CAC83047.1 Putative parvalbumin alpha [Rana sp. CH-2001]
MPMTDVLAACDISKAMAAFPAAEPFNHKKFFELCGLKGKSQDDMKKVFHMLDKDQSGFIE
KDELALILKGFTPEGRDLSDKETTALLAAGDKDGDGKIGVDEFVKLVSEC
>CAC95152.1 Allergen Ran e 2; parvalbumin beta [Rana esculenta]
MSITDIVSEKDIDAALESVKAAGSFNYKIFFQKVGLAGKSAADAKKVFEILDRDKSGFIE
QDELGLFLQNFRASARVLSDAETSAFLKAGDSDGDGKIGVEEFQALVKA
>CAC95153.1 Putative parvalbumin beta protein [Rana sp. CH-2001]
MSITDIVSEKNIEAALESVKAEGSFEYKCFFQKVGLAGKSADDAKKVFEILDRDKSGYIE
KDELCLFLQNFKSSARALNDAETSAFLKAGDSDGDGKIGVEEFQALVKA
>AAM33821.1 Allergen alkaline serine protease [Penicillium chrysogenum]
MGFLKLLSTSLATLAVVNAGKLLTANDGDEVVPSSYIVVMNDGVSTAQFETHRNWAANVH
ARTRSLKGGESGPGKHFDINGMKGYSASFDDRTVKDIASDPTVKYVEPDMVVNATANVVQ
RNAPSWGLSRISSKKSGATDYVYDSTAGEGIVIYGVDTGIDIGHADFGGRAEWGTNTADN
DDTDGNGHGTHTASTAAGSKFGVAKKASVVAVKVLGADGSGTNSQVIAGMDWAVKDSKSR
GATGKSVMNMSLGGAYSRAMNDAAANVVRSGVFLSVAAGNEAQDASNSSPASAPNVCTIA

ASTNSDGSASFTNFGSVVDLYAPGKDITAAYPGGGSKTLSGTSMAAPHVAGAAAYLMALE
GVTSDKACARIVELAISSISSAPSGTTSKLLYNGINAQ
>CAD32313.1 Allergen Lep d 2; NPC2-like protein [Lepidoglyphus destructor]
MMKFIALFALVAVASAGKMTFKDCGHGEVTELDITGCSGDTCVIHRGEKMTLEAKFAANQ
DTAKVTIKVLTKVAGTTIQVPGLETDGCKFIKCPVKKGEALDFIYSGTIPAITPKVKADV
TAELIGDHGVMACGTVHGQVE
>CAD32314.1 Allergen Lep d 2; NPC2-like protein [Lepidoglyphus destructor]
MMKFIALFALVAVASAGKMTFKDCGHGEVTELDISGCSGDTCVIHRGQKMTLDAKFAANQ
DTNKVTIKVLAKVAGTTIQVPGLETDGCKVLKCPIKKGEALDFNYGMTIPAITPKIKVDV
TAELVGDHGVMACGTIHGQVE
>AAM43909.1 Allergen Asp f 23; L3 ribosomal protein [Aspergillus fumigatus]
MSHRKYEAPRHGSLAFLPRKRAARHRGKVKSFPKYDPKKPVHLTASMGYKAGMTTVVRDL
DRPGAKMHKKEIVEAVTIIETPPLVAVGVVGYIETPRGLRSLTTVWAEHLSDEVKRRFYK
NWYKSKKKAFTKYAKKHAEENGASITRELERIKKYCTVVRVLAHTQIRKTPLKQKKAHLM
EIQVNGGSVADKVDFARNLFEKPIEIDSIFEKDEMIDVIAVTKGHGFQGVTSRWGTKKLP
RKTHKGLRKVACIGAWHPSHVQWTVARAGQMGYHHRTSCNHKVFRIGKGSDEGNASTDFD
ISKKQITPMGGFVRYGEVKNDYIMVKGSVPGVKKRVMTLRKTLYPQTSRRATEKVELKWI
DTSSKFGHGAFQTPEEKRAFMGTLKKDLVTSA
>AAM46958.1 Arah3/Arah4 [Arachis hypogaea]
MGKLLALSVCFCFLVLGASSISFRQQPEENACQFQRLNAQRPDNRIESEGGYIETWNPNN
QEFECAGVALSRLVLRRNALRRPFYSNAPQEIFIQQGRGYFGLIFPGCPSTYEEPAQQGR
RHQSQRPPRRFQGQDQSQQQQDSHQKVHRFDEGDLIAVPTGVAFWMYNDHDTDVVAVSLT
DTNNNDNQLDQFPRRFNLAGNHEQEFLRYQQQSRRRSLPYSPYSPQTQPKQEDREFSPRG
QHGRRERAGQEQENEGGNIFSGFTPEFLAQAFQVDDRQILQNLRGENESDEQGAIVTVRG
GLRILSPDRKRRQQYERPDEEEEYDEDEYEYDEEERQQDRRRGRGSRGSGNGIEETICTA
SFKKNIGRNRSPDIYNPQAGSLKTANELQLNLLILRWLGLSAEYGNLYRNALFVPHYNTN
AHSIIYALRGRAHVQVVDSNGDRVFDEELQEGHVLVVPQNFAVAGKSQSENFEYVAFKTD
SRPSIANLAGENSFIDNLPEEVVANSYGLPREQARQLKNNNPFKFFVPPSEQSLRAVA
>CAD10390.1 Allergen Pho d 2; profilin [Phoenix dactylifera]
MSWQAYVDEHLMCEIDGHHLTAAAILGHDGSVWAQSSSFPQFKSEEITNIMNDFNEPGSL
APTGLYLGSTKYMVIQGEPGAVIRGKKGSGGVTVKKTNQALIFGIYEEPMTPGQCNMVVE
RLGDYLIEQGM
>1KTJ_A Allergen Chain A, X-Ray Structure Of Der P 2, The Major House Dust Mite Allergen [Dermatophagoides pteronyssinus]
SEVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEAVFEANQNTKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVMGDDGVLACA
IATHAKIRD
>AAM55492.1 Putative allergenic-related protein Pt2L4 [Manihot esculenta]
MATAEVVTAQTALPEEKPAEEVKVSEIVTEEAAPAVEPVAEEPKEAEPVAVSEEPKEADD
APAEVAVETKEVVEVEEAKTVTEEPTVEKTEEEEETPKEETPEPVVVKETPKEEPAAETV
VVEAPKETTEAATEAEAPAPESAPASASETPAEEEVPKEEEGDEKKSEAEVEAEKTE
>AAM64112.1 Allergen Der f 16; gelsolin-like protein [Dermatophagoides farinae]
MAAHDKNFDVIPIGHTFFFIWRIKQFELVPVPKEDYGKFYKGDCYIVACCTENPTGGHSK
MESKPILNGHGYCHIHFWIGSESTKDEAGVAAIKSVELDDFLGGYPVQHREIEEFESRQF
SSYFKNGIIYLKGGYESGFTKMIDELKPSLLHVKGKKRPIVYECAEISWKVMNNGDVFIL
LVPNFVFVWTGKHSNRMERTTAIRVANDLKSELNRFKLSSVILEDGKEVEQTSGAEYDAF
NKALSLDKKDIDLKQMPKGYDYAASDKSFESHERSFVTLYKCFEGTETIDISFVKNGPLS
RADLDTNDTFIVENGSEGLWVWVGKKATQKERQSAIKYAMELINKKKYPNNTPVTKVLEG
DESVEFKSLFESWQMSEQEKITSARLFRVSRNGIFKQVANYEPDDLEEDNIMILDVMDKI
YVWIGNQFAERIADEAHVDKVAQRFIQEDKSGRKFQPNQIIKLKQGSEDGAFKSYFPKWN

>AAM73729.1 Allergen Ana o 1; 7S globulin/ vicilin-like protein [Anacardium occidentale]
PPTKFSFSLFLVSVLVLCLGFALAKIDPELKQCKHQCKVQRQYDEQQKEQCVKECEKYYK
EKKGREREHEEEEEEWGTGGVDEPSTHEPAEKHLSQCMRQCERQEGGQQKQLCRFRCQER
YKKERGQHNYKREDDEDEDEDEAEEEDENPYVFEDEDFTTKVKTEQGKVVLLPKFTQKSK
LLHALEKYRLAVLVANPQAFVVPSHMDADSIFFVSWGRGTITKILENKRESINVRQGDIV
SISSGTPFYIANNDENEKLYLVQFLRPVNLPGHFEVFHGPGGENPESFYRAFSWEILEAA
LKTSKDTLEKLFEKQDQGTIMKASKEQVRAMSRRGEGPKIWPFTEESTGSFKLFKKDPSQ
SNKYGQLFEAERIDYPPLEKLDMVVSYANITKGGMSVPFYNSRATKIAIVVSGEGCVEIA
CPHLSSSKSSHPSYKKLRARIRKDTVFIVPAGHPFATVASGNENLEIVCFEVNAEGNIRY
TLAGKKNIIKVMEKEAKELAFKMEGEEVDKVFGKQDEEFFFQGPEWRKEKEGRADE
>CAD32318.1 Allergen Mal d 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Malus domestica]
GVYTYENEYTSEIPPPRLFKAFVLDADNLIPKIAPQAIKHAEILEGDGGPGTIKKITFGE
GSQYGYVKHKIDSVDEANYSYAYTLIEGDALTDTIEKVSYETKLVASGSGSIIKSISHYH
TKGDVEIMEEHVKAGKEKAHGLFKLIESYLKDHPDAYN
>CAD38361.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPEGIEYIQHNGVVQESYYRYVAQEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQEDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38362.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPQGIEYIQHNGVVQESYYRYVAEEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGETIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38363.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMETVTPIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPQGIEYIQHNGVVQESYYRYVAQEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGETIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38364.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMQTVTPIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPEGIEYIQHNGVVQESYYRYVAEEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38365.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCANQHGCHGDTIPRGIEYIQHNGVVQESYYRYVAEEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38366.1 Allergen Cysteine protease-like protein product [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMETVTPIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCANQHGCHGDTIPRGIEYIQHNGVVQESYYRYVAEEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQEDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38367.1 Allergen Cysteine protease-like protein product [Dermatophagoides pteronyssinus]

TNACSINGNAPAEIDLRQMQTVTPIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCANQHGCHGDTIPRGIEYIQHNGVVQESYYRYVAQEQSCRRPNAQRFGISNYCQIY
PPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGETIIQEDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38368.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPASIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPEGIEYIQHNGVVQESYYRYVAQEQSCRRPNADRFGISNYCQIY
PPNVNKIEEALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQEDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38369.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPASIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPQGIEYIQHNGVVQESYYRYVAEEQSCRRPNADRFGISNYCQIY
PPNVNKIQEALAQTHSAIAVIIGIKDLDAFRHYDGETIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38370.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPASIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPEGIEYIQHNGVVQESYYRYVAQEQSCRRPNADRFGISNYCQIY
PPNVNKIEEALAQTHSAIAVIIGIKDLDAFRHYDGQTIIQEDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSFDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38371.1 Allergen Cysteine protease-like [Dermatophagoides pteronyssinus]
TNACSINGNAPASIDLRQMRTVTTIRMQGGCGSCWAFSGVAATESAYLAVRNQSLDLAEQ
ELVDCASQHGCHGDTIPQGIEYIQHNGVVQESYYRYVAEEQSCRRPNADRFGISNYCQIY
PPNVNKIQEALAQTHSAIAVIIGIKDLDAFRHYDGETIIQQDNGYQTNYHAVNIVGYSNA
QGVDYWIVRNSFDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>CAD38372.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIGRGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIRD
>CAD38373.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIGRGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPKSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38374.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIGRGKPFQLEALFEANQNSATAKIEIKASIDG
LEVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38375.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIGRGKPFQLEALFEANQNSKTAKIEIKASIDG
LSVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38376.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGSEPCIIGRGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD

>CAD38377.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGNEPCIIGRGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACHYMNCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38378.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACNYMKCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIRD
>CAD38379.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACNYMKCPLVNGQQYDIKYTWNVPKIAPKSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38381.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDG
LEVDVPGIDPNACNYMKCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38382.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKEVLVPGCHGSEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACNYMKCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38383.1 Allergen mite allergen Der f II-like [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGNEPCIIHSGKPFQLEALFEANQNSATAKIEIKASIDG
LSVDVPGIDPNACNYMKCPLVNGQQYDIKYTWNVPKIAPNSENVVVTVKVLGDNGVLACA
IATHAKIQD
>CAD38384.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38385.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKINAGFKAALAAAAGVP
PADKYNTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38386.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSEALSIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38387.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP

PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSEALRKIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38388.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANHKFTVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38389.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKFTVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAGEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38390.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIGALEAAVKQAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38391.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYNFIPALEAAVKQAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38392.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKINAGFKAALAAAAGVP
PADKYNTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSEALSIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38393.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKINAGFKAALAAAAGVP
PADKYNTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSEALRKIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKITVFEAAFNDAIKASTGGAYESYKFIPALEAAVKKAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38394.1 Allergen Group V allergen-like protein product [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANHKFTVFEAAFNDAIKASTGGAYESYKFIGALEAAVKQAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38395.1 Allergen Group 5 allergen-like [Phleum pratense]

ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANHKFTVFEAAFNDAIKASTGGAYESYNFIPALEAAVKQAYAATVATAPEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38396.1 Allergen Group 5 allergen-like [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKFTVFEAAFNDAIKASTGGAYESYKFIGALEAAVKQAYAATVATAGEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38397.1 Allergen Group 5 allergen-like [Phleum pratense]
ADLGYGPATPAAPAAGYTPATPAAPAGAEPAGKATTEEQKLIEKKNAGFKAALAAAAGVP
PADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATP
EAKYDAYVATVSSALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAAN
AAPANDKFTVFEAAFNDAIKASTGGAYESYNFIPALEAAVKQAYAATVATAGEVKYTVFE
TAEKKAITAMSEAKKAAKPAAAATATATAAVGAATGAATAATGGYKV
>CAD38166.1 putative nuclear transport factor 2 [Cladosporium herbarum]
MSDFNAIAQQFTEFYYKTFDTDRAQLAPLYRENSMLTFEQSPFLGTANIVGKLQELPFQR
IEHQVATVDAQPSNESGGILVVVSGALLVEEERRPMSYTQTFQLLPADGAYYVFNDVFRL
VYPAA
>CAD38167.1 Allergen putative nuclear transport factor 2 [Alternaria alternata]
MSDFNAIAQQFVEFYYKTFDGNRAGLGALYKEHSMLTFEAQGTQGSAAIVEKLQNLPFQE
IQHRTDTVDAQPSADDGILVLVTGALLLGGESKPMSFTQAFQLKNAEGNWFVLNDVFRLV
YPAA
>CAC84116.1 Allergen Bet v 7; cyclophilin [Betula pendula]
MASNPKVFFDMEVGGQPVGRIVMELYADTTPRTAENFRALCTGEKGNGRSGKPLHYKKSS
FHRVIPGFMCQGGDFTAGNGTGGESIYGAKFADENFIKKHTGPGILSMANAGPGTNGSQF
FICTAKTEWLDGKHVVFGQVVEGLDIVKAIEKVGSSSGRTSKPVVVADCGQLS
>AAM77471.1 Allergen major allergen alt a1 [Alternaria alternata]
MQFTTIASLFAAAGLAAAAPLESRQDNASCPVTTKGDYVWKISEFYGRKPEGTYYNSLGF
NIKATNGGTLDFTCSAQADKLEDHKWYSCGENSFMDFSFDSDRSGLLLKQKVSDE
>AAM73730.2 Allergen Ana o 1; 7S globulin/ vicilin-like protein [Anacardium occidentale]
MGPPTKFSFSLFLVSVLVLCLGFALAKIDPELKQCKHQCKVQRQYDEQQKEQCVKECEKY
YKEKKGREREHEEEEEEWGTGGVDEPSTHEPAEKHLSQCMRQCERQEGGQQKQLCRFRCQ
ERYKKERGQHNYKREDDEDEDEDEAEEEDENPYVFEDEDFTTKVKTEQGKVVLLPKFTQK
SKLLHALEKYRLAVLVANPQAFVVPSHMDADSIFFVSWGRGTITKILENKRESINVRQGD
IVSISSGTPFYIANNDENEKLYLVQFLRPVNLPGHFEVFHGPGGENPESFYRAFSWEILE
AALKTSKDTLEKLFEKQDQGTIMKASKEQIRAMSRRGEGPKIWPFTEESTGSFKLFKKDP
SQSNKYGQLFEAERIDYPPLEKLDMVVSYANITKGGMSVPFYNSRATKIAIVVSGEGCVE
IACPHLSSSKSSHPSYKKLRARIRKDTVFIVPAGHPFATVASGNENLEIVCFEVNAEGNI
RYTLAGKKNIIKVMEKEAKELAFKMEGEEVDKVFGKQDEEFFFQGPEWRKEKEGRADE
>AAM83103.1 Allergen Blo t 11; paramyosin [Blomia tropicalis]
MAARSAKYMYQSSRAGHGGDISIEYGTDLGALTRLEDKIRLLSEDLESERELRQRVEREK
SDITVQLMNLTERLEETEGSSESVTEMNKKRDSELAKLRKLLEDVHMESEETAHHLRQKH
QAAIQEMQDQLDQVQKAKNKSDKEKQKFQAEVFELLAQVETANKDKLVAQKTVEKLEYTV
HELNIKIEEINRTVVEVTAHRQRLSQENSELIKEVHEYKISLDNANHLKGQIAQQLEDTR
HRLEDEERKRSSLENHAHTLEVELESLKVQLEEESEARLELERQLTKANGDAASWKSKYE
AELQAHVDEVEELRRKMAQKISEYGEQLEALLNKCSALEKQKARLQSEVEVLIMDLEKAT
AHAQALEKRVSQLEKINLDLKSKLEEVSMLLEQTQKDLRVKIADLQKLQHEYEKLRDQKE
ALARENKKLADDLAEAKSQLNDAHRRIHEQEIEIKRLENEREELAAAYKEAETLRKQEEA
KNQRLTAELAQTRHDYEKRLAQKEEEIEALRKQYQIEIEQLNMRLAEAEAKLKTEVARLK

KKYQAQITELELSLDAANKANIDLQKTIKKQALQITGLQAHYDEVHRQLQQAVDQLGVTQ
RRCQALTAELEEMRVNLEQALRAKRAAEQMHEEAVVRVNELTTINVNLASAKSKLETEFS
ALQNDYDEVHKELRISDERVQKLTIEVKSTKDLLESETERVTKLETIKKSLETEVRNLQI
RIEEVEANALAGGKRVIAKLESRIRDVEIEVEEERRRHAETEKMLRKKDHRVKELLLQNE
EDHKQIQLLQEMSDKLNEKVKVYKRQMQEQEGMSQQNLTRVRRFQRELEAAEDRADQAES
NLSFIRAKHRSWVTTSQVPGGTRQVFVTEQESSNF
>P81430.2 Allergen Ole e 7; lipid transfer protein / partial [Olea europaea]
APSQSTVTALLTSCVSYIDDQ
>AAL07319.1 Allergen Che a 1; Ole e 1 -like protein/ trypsin inhibitor [Chenopodium album]
MAKCQAVFLLVGALCVLSLAGVANAAENHFKVQGMVYCDTCRIQFMTRISTIMEGATVKL
ECRNITAGTQTFKAEAVTDKVGQYSIPVNGDFEDDICEIELVKSPNSECSEVSHDVYAKQ
SAKVSLTSNNGEASDIRSANALGFMRKEPLKECPEVLKELDLYDVKAN
>AAM93157.1 Allergen trypsin inhibitor [Arachis hypogaea]
NYLHMLLALSVCFCFLVLGASSISFRQQPEENACQFQRLNAQRPDNRIESEGGYIETWNP
NNQEFECAGVALSRLVLRRNALRRPFYSNAPQEIFIQQGRGYFGLIFPGCPSTYEEPAQQ
GRRHQSQRPPRRFQGQDQSQQQQDSHQKVHRFDEGDLIAVPTGVAFWMYNDHDTDVVAVS
LTDTNNNDNQLDQFPRRFNLAGNHEQEFLRYQQQSRRRS
>BAC10663.1 Allergen Can f 3; serum albumin [Canis familiaris]
MKWVTFISLFFLFSSAYSRGLVRREAYKSEIAHRYNDLGEEHFRGLVLVAFSQYLQQCPF
EDHVKLAKEVTEFAKACAAEESGANCDKSLHTLFGDKLCTVASLRDKYGDMADCCEKQEP
DRNECFLAHKDDNPGFPPLVAPEPDALCAAFQDNEQLFLGKYLYEIARRHPYFYAPELLY
YAQQYKGVFAECCQAADKAACLGPKIEALREKVLLSSAKERFKCASLQKFGDRAFKAWSV
ARLSQRFPKADFAEISKVVTDLTKVHKECCHGDLLECADDRADLAKYMCENQDSISTKLK
ECCDKPVLEKSQCLAEVERDELPGDLPSLAADFVEDKEVCKNYQEAKDVFLGTFLYEYAR
RHPEYSVSLLLRLAKEYEATLEKCCATDDPPTCYAKVLDEFKPLVDEPQNLVKTNCELFE
KLGEYGFQNALLVRYTKKAPQVSTPTLVEVSRKLGKVGTKCCKKPESERMSCAEDFLSVV
LNRLCVLHEKTPVSERVTKCCSESLVNRRPCFSGLEVDETYVPKEFNAETFTFHADLCTL
PEAEKQVKKQTALVELLKHKPKATDEQLKTVMGDFGAFVEKCCAAENKEGCFSEEGPKLV
AAAQAALV
>CAD42710.1 hydrophobin [Cladosporium herbarum]
MAFIKSLLIASVAAVAFAAPQGGASDNNKKVEIDGQDSAPVCGNGQKVACCNSGEDLIGL
NCLSIPILAIPIQKACGSNIAACCQTGDSEGNLLNLEANCLAIPL
>AAN32987.1 Allergen Phl p 11; Ole e 1-like protein [Phleum pratense]
DKGPGFVVTGRVYCDPCRAGFETNVSHNVQGATVAVDCRPFNGGESKLKAEATTDGLGWY
KIEIDQDHQEEICEVVLAKSPDTTCSEIEEFRDRARVPLTSNNGIKQQGIRYANPIAFFR
KEPLKECGGILQAYDLRDAPETP
>BAC19997.1 allergen RA5B precursor [Oryza sativa Japonica Group]
MASNKVVFSVLLLAVVSVLAATATMAEYHHQDQVVYTPGPLCQPGMGYPMYPLPRCRALV
KRQCVGRGTAAAAEQVRRDCCRQLAAVDDSWCRCEAISHMLGGIYRELGAPDVGHPMSEV
FRGCRRGDLERAAASLPAFCNVDIPNGGGGVCYWLARSGY
>BAC20650.1 putative allergenic protein [Oryza sativa Japonica Group]
MAFIKVVFSVLLPVVVSMLVATTTMADHRGQVVYTPGQLCAAGRGYPMYPLPRCRALAKR
QCAGGAVDEQVRQDCCRQLAAIDDSFCRCPALSHMLVGMYKELGAPAKGQPMDEVFPGCR
RGDMKRVAASLPAFCNVDIPIGIGGVCYWLSYPMNPATGH
>BAC20657.1 allergen RA16 [Oryza sativa Japonica Group]
MASNKVVISALLVVVVSVLAATTTMADHHQEQVVYTPGQLCQPGIGYPTYPLPRCRAFVK
RQCVAPGTVDEQVRRGCCRQLAAIDSSWCRCDALNHMLRIIYRESGAADAGHPMAEVFRG
CRRGDIERAAASLPAFCNVDIPNGVGGVCYWLPGTGY
>CAD23374.1 Allergen tri s 4 allergen [Trichophyton schoenleinii]
MAAAKWLIASLAFASSGLAFTPEDFISAPRRGEAIPDPKGELAVFHVSKYNFDKKDRPSG
WNLLNLKNGDISVLTTDSDVSEITWLGDGTKVVYVNGTDSVEGGVGIWISDAKNFGNAYK
AGSVNGAFSGLKLAKAGDKINFVGYGQSTTKGDLYNEAAAKEAVSSARIYDGLFVRHWDT

YVGTQFNAVFSGSLTKNGDKYSFDGKLKNLVQPVKYAESPYPPFGGSGDYDLSSDGKTVA
FMSKAPELPKANLTTSYIFLVPHDGSRVAEPINKRNGPRTPQGIEGASSSPVFSPDGKRI
AYLQMATKNYESDRRVIHIAEVGSNKPVQRIASSWDRSPEAVKWSSDGRTLYVTAEDHAT
GKLFTLPADARDNHKPSVVKHDGSVSSFYFIGSSKSVLISGNSLWSNALYQVATPGRPNR
KLFYANEHDPELKGLGPKDIEPLWVDGARTKIHSWIVKPTGFDKNKVYPLAFLIHGGPQG
SWGDSWSTRWNPRVWADQGYVVVAPNPTGSTGFGQKLTDDITNDWGGAPYKDLVKIWEHV
RDHIKYIDTDNGIAAGASFGGFMVNWIQGQDLGRKFKALVSHDGTFVGSSKIGTDELFFI
EHDFNGTFFEARQNYDRWDCSKPELVAKWSTPQLVIHNDSDFRLSVAEGVGLFNVLQEKG
IPSRFLNFPDETHWVTKPENSLVWHQQVLGWINKWSGINKSNPKSIKLSDCPIEVIDHEA
HSYFDY
>CAD23611.1 Allergen tri m 4 allergen [Arthroderma benhamiae]
MAAAKWLIASLAFASSGLAFTPEDFISAPRRGEAIPDPKGELAVFHVSKYNFDKKDRPSG
WNLLNLKNGDISVLTTDSDVSEITWLGDGTKVVYVNGTDSVEGGVGIWISDAKNFGNAYK
AGSVNGAFSGLKLAKAGDKINFVGYGQSTTKGDLYNEAAAKEAVSSARIYDGLFVRHWDT
YVGTQFNAVFSGSLTKNGDKYSFDGKLKNLVQPVKYAESPYPPFGGSGDYDLSSDGKTVA
FMSKAPELPKANLTTSYIFLVPHDGSRVAEPINKRNGPRTPQGIEGASSSPVFSPDGKRI
AYLQMATKNYESDRRVIHIAEVGSNKPVQRIASSWDRSPEAVKWSSDGRTLYVTAEDHAT
GKLFTLPADARDNHKPSVVKHDGSVSSFYFIGSSKSVLISGNSLWSNALYQVATPGRPNR
KLFYANEHDPELKGLGPKDIEPLWVDGARTKIHSWIVKPTGFDKNKVYPLAFLIHGGPQG
SWGDSWSTRWNPRVWADQGYVVVAPNPTGSTGFGQKLTDDITNDWGGAPYKDLVKIWEHV
RDHIKYIDTDNGIAAGASFGGFMVNWIQGQDLGRKFKALVSHDGTFVGSSKIGTDELFFI
EHDFNGTFFEARQNYDRWDCSKPELVAKWSTPQLVIHNDFDFRLSVAEGVGLFNVLQEKG
IPSRFLNFPDETHWVTKPENSLVWHQQVLGWINKWSGINKSNPKSIKLSDCPIEVIDHEA
HSYFDY
>CAD23613.1 Allergen tri m 2 allergen [Arthroderma benhamiae]
NHDDVDYIEPDFVVRTSTNGTNLTRQENVPSWGLARVGSKKAGGTTYYYDSSAGKGVTAY
IIDTGIDINHEDFGGRAKWGKNFVDKMDEDCNGHGTHVAGTVGGTKYGLAKGVTLVAVKV
LDCDGSGSNSGVIEGMEWAMREASGGGNGTAKAAGKAVMNMSLGGPRSQASNDAAKAISD
AGIFMAVAAGNENMDAQHSSPASEPSVCTVAASTEDDGKAEFSNYGAVVDVYAPGKDITS
LKPGGSTDTLSGTSMASPHVCGLGAYLIGLGKQGGPGLCDTIKEMANEAIQR
>CAD23614.1 Allergen tri m 2 allergen [Arthroderma benhamiae]
FITKAIPIVLAALSAVNGAKILEAGPHAETIPNKYIVVMKKDVSDEAFSTHTTWLSQNLN
RRLMRRSGSSKAMAGMQNKYSLGGIFRAYSGEFDDAMIKDISNHDDVDYIEPDFVVRTST
NGTNLTRQENVPSWGLARVGSKQAGGTTYYYDSSAGKGVTAYVIDTGIDIEHEDFGGRAK
WGKNFVDQRDEDCNGHGTHVAGTVGGTKYGLAKSVSLVAVKVLDCDGSGSNSGVIRGMEW
AMREASGGNGTAKAAGKSVMNMSLGGPRSQASNDAARAISEAGIFMAVAAGNENMDAQHS
SPASEPSVCTVAASTEDDGKAEFSNYGAVVDVYAPGKDITSLKPGGSTDTLSGTSMASPH
VCGLGAYLIGLGKQGGPGLCDTIKQMANEAIQRPGEGTTGKLIY
>P00630.3 Allergen Api m 1; phospholipase A2 [Apis mellifera]
MQVVLGSLFLLLLSTSHGWQIRDRIGDNELEERIIYPGTLWCGHGNKSSGPNELGRFKHT
DACCRTHDMCPDVMSAGESKHGLTNTASHTRLSCDCDDKFYDCLKNSADTISSYFVGKMY
FNLIDTKCYKLEHPVTGCGERTEGRCLHYTVDKSKPKVYQWFDLRKY
>AAL91662.1 Allergen Pru du 4; profilin [Prunus dulcis]
MSWQQYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSATFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEAGAVIRGKKGSGGITVKKTNQALIIGIYDEPLTPGQCNMIVE
RLGDYLIEQGL
>AAL91665.1 Allergen Ana o 3; 2S albumin [Anacardium occidentale]
MAKFLLLLSAFAVLLLVANASIYRAIVEVEEDSGREQSCQRQFEEQQRFRNCQRYVKQEV
QRGGRYNQRQESLRECCQELQEVDRRCRCQNLEQMVRQLQQQEQIKGEEVRELYETASEL
PRICSISPSQGCQFQSSY
>P83340.1 Allergen Epi p 1; serine protease [Epicoccum nigrum]
ADGIVAVELDTYRGSFXK
>BAC23082.1 Allergen Cry j 2 [Cryptomeria japonica]
MAMKFIAPMAFVAMQLIIMAAAEDQSAQIMLDSDIEQYLRSNRSLRKVEHSRHDAINIFN

VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKNINLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAC23083.1 Allergen Cry j 2 [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAVEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>BAC23084.1 Allergen Cry j 2 [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLRLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>P83181.1 Allergen Sal k 1; pectin methylesterase [Salsola kali]
PTITIGGPEYRTIFFDAYLGTSYVIVIKEPAEEFTTISDAVK
>P83332.1 Allergen RecName: Full=Thaumatin-like protein 1; AltName:
Full=PpAZ44; Flags: Precursor [Prunus persica]
MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFELATG
ISRSVDAPSPWSGRFFGRTRCSTDASGKFTCATADCGSGQVSCNGNGAAPPATLVEITIA
SNGGQDFYDVSLVDGFNLPMSVAPQGGTGKCKASTCPADINKVCPAPLQVKGSDGSVIAC
KSACLAFNQPKYCCTPPNDKPETCPPPDYSKLFKTQCPQAYSYAYDDKSSTFTCSGRPAY
LITFCP
>P83335.1 Allergen RecName: Full=Thaumatin-like protein 2; AltName:
Full=PpAZ8; Flags: Precursor [Prunus persica]
MMKTLGAVLSLSLTLLSFGGAHAATMSFKNNCPYTVWPASFGNPQLSTTGFELASQASFQ
LDTPVPWSGRFWARTRCSTDASGKFVCETADCDSGQLMCNGKTGIPPATLAEFTIAAGGG
QDFYDVSLVDGFNLPMSVTPQGGTGTCKMGSCAANVNLVCPSELQKIGSDGSVVACLSAC
VKFGEPQYCCTPPQETKEKCPPTNYSQIFHEQCPDAYSYAFDDNKGLFTCSGGPNYLITF
CP
>P83377.1 Allergen Pol g 5; unknown function, antigen 5 [Polistes
gallicus]
NDYCKIKCSSGVHTVCQYGESTKPSKNCAGKVIKSVGPTEEEKKLIVEEHNRFRQKVAQG
LETRGNPGPQPAASNMNNLVWNDEQAKIAQVWASQCQILVHDKCRNTEKYQVGQNIAYAG
SSNHFPSVTKLIQLWENEVKDFNYNTGITNKNFGKVGHYTQMVWGNTKEVGCGSLKYVEK
NMKIHYLICNYGPAGNYLGQPIYTKK
>AAN73248.1 Putative helix-loop-helix protein [Fusarium culmorum]
MAGDHAGDQSFYDFLIEEPEMIAPTPPGQFPHQQPISSPNRTSRNTPLRPESTEIETHHH
ANHPPALPVLGMQLPVPGTVPESSRAQSRASLNLDIDLDLHAPSHPSHLSHGAPHEQEHA
HEIQRHRAHSAQSSAGLPPTGFASHLPPASSGPVSLGWNMYHVPPNLHLNANQFNFEVPG

HMNVSGHPTHLEHSSTNPNSFHYEHNIVSPSSIHPSTAHFDGEVPSQWDDSLGHGASTPK
VRTPSHHVSSNPWAEINEPTGGDNDNLAPVTRPRKPARARRQKKEPRKLSDASQGARSSS
TGGTAHSVSDAASPSSTSHQSRASLTSKSASMTSAASTASSRKSKLRSASRTSKNTLDKP
NDTAEDRRTRASHNLVEKQYRNRLNAQFESLLHALPEQIRHGDNGGGNGNVDNESEQAND
LDRRVSKGEVLEMARRHIEALERERNQLGT
>CAD12861.1 Allergen Art v 4; profilin [Artemisia vulgaris]
MSWQTYVDDHLMCDIEGTGQHLTSAAIFGTDGTVWAKSASFPEFKPNEIDAIIKEFNEAG
QLAPTGLFLGGAKYMVIQGEAGAVIRGKKGAGGICIKKTGQAMVFGIYDEPVAPGQCNMV
VERLGDYLLDQGM
>CAD12862.1 Allergen Art v 4; profilin [Artemisia vulgaris]
MSWQTYVDDHLMCDIEGTGQHLTAAAILGLDGTVWAKSDKFPEFKPEEMKGIINEFNEVG
TLAPTGLFLGGAKYMVLQGEAGAVIRGKKGAGGICIKKTGQAMVMGIYDEPVAPGQCNMI
VERLGDYLVDQNM
>AAM10779.1 Allergen Blo t 3; trypsin [Blomia tropicalis]
MKVLVLFCLVSLAAAGPLKDALNKAQVDAFYAEGYIVGGSNAADGDAPYQVSLQRTSHFC
GGSIIADNYILTAAHCIQGLSASSLTTRYNTLRHNSGGLTVKASRIIGHEKYDSNTIDND
IALIQTASKMSTGTTNAQAIKLPEQGSDPKASSEVLITGWGTLSSGASSLPTKLQKVTVP
IVDRKTCNANYGAVGAEITDNMFCAGILNVGGKDACQGDSGGPVAANGVLVGAVSWGYGC
AQAKYPGVYTRVGNYISWIKGKGVPV
>AAN76862.1 Allergen Ana o 2; 11S globulin, glycinin, cupin [Anacardium
occidentale]
LSVCFLILFHGCLASRQEWQQQDECQIDRLDALEPDNRVEYEAGTVEAWDPNHEQFRCAG
VALVRHTIQPNGLLLPQYSNAPQLIYVVQGEGMTGISYPGCPETYQAPQQGRQQGQSGRF
QDRHQKIRRFRRGDIIAIPAGVAHWCYNEGNSPVVTVTLLDVSNSQNQLDRTPRKFHLAG
NPKDVFQQQQQHQSRGRNLFSGFDTELLAEAFQVDERLIKQLKSEDNRGGIVKVKDDELR
VIRPSRSQSERGSESEEESEDEKRRWGQRDNGIEETICTMRLKENINDPARADIYTPEVG
RLTTLNSLNLPILKWLQLSVEKGVLYKNALVLPHWNLNSHSIIYGCKGKGQVQVVDNFGN
RVFDGEVREGQMLVVPQNFAVVKRAREERFEWISFKTNDRAMTSPLAGRTSVLGGMPEEV
LANAFQISREDARKIKFNNQQTTLTSGESSHHMRDDA
>CAD20556.1 Allergen Pla a 1; invertase inhibitor [Platanus x acerifolia]
MKLSFSLCIFFFNLLLLLQAVISADIVQGTCKKVAQRSPNVNYDFCVKSLGADPKSHTAD
LQGLGVISANLAIQHGSKIQTFIGRILKSKVDPALKKYLNDCVGLYADAKSSVQEAIADF
KSKDYASANVKMSAALDDSVTCEDGFKEKKGIVSPVTKENKDYVQLTAISLAITKLLGA
>AAN77576.1 Allergen Ara h 2; 2S albumin, conglutin [Arachis hypogaea]
MAKLTILVALALFLLAAHASARQQWELQGDRRCQSQLERANLRPCEQHLMQKIQRDEDSY
GRDPYSPSQDPYSPSQDPDRRDPYSPSPYDRRGAGSSQHQERCCNELNEFENNQRCMCEA
LQQIMENQSDRLQGRQQEQQFKRELRNLPQQCGLRAPQRCDLEVESGGRDRY
>AAN86249.1 Putative recombinant Ib pronapin precursor [Brassica napus]
QPQKCQREFQQEQHLRACQQWIRQQLAGSPFSENQWGPQQGPSLREQCCNELYQEDQVCV
CPTLKQAAKSVRVQGQHGPFQSTRIYQIAKNLPNVCNMKQIGTCPFIAI
>AAO15607.1 glutathione S-transferase [Sarcoptes scabiei]
MSSKPTLGYWDLRGLGQSIRILLTYAGVDFVDKRYKIGSAPDFDRGEWLNDKFNLGLDFP
NLPYYIEGDVKLTQSIAILRYLGRKHKLDGQNEQEWRRITLCEQQIMDLLMALARICYDP
NFEKLKLDLVAKLPDDLKLFSKFLGDHQFVAGTNISYIDFLVYEYLIRVKIFAPEIFTKF
PNLNSYITRIESMPKISAYIKQQEPQLFNGPMAKWNTKY
>AAO15613.1 major allergen 1 [Sarcoptes scabiei]
FVELKKDKDLYSMKSNVKRNNEIFYENNMDLEKNGKMNWYYKRNDRTWNMDLDNAFNPRD
GTMKLQVKDRIYDIKLKREPFRYGDLHIEGNENALIKKGDLHMSLVDPLTLNVLTKNDGI
VDMTLDLVSPNTKKAALKINSKKYDLDHDGEITVSIFNPRMTWKHHTRKGDMELNIDADI
TRKGSLITYSRKEPDDSTKVRYSRQGNQVSMEVDSKLIEGHANGTLTDGKIHVKGRESDF
EIESTYKVEDGKLMIEPTKTQNGKLEGLLSRKVPSHLVLETPRVKMNMKYDRFAPVKILK
LDYDGLNYEKHIDAEYEPSNHYKYFTDGKS
>AAO15713.1 Allergen Pen m 2; arginine kinase [Penaeus monodon]
MADAAVIEKLEAGFKKLEAATDCKSLLKKYLSKAVFDQLKEKKTSLGATLLDVIQSGVEN

LDSGVGIYAPDAEAYTLFSPLFDPIIEDYHVGFKQTDKHPNKDFGDVNTFVNVDPEGKYV
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LIDDHFLFKEGDRFLQAANACRYWPAGRGIYHNDNKTFLVWVNEEDHLRIISMQMGGDLG
QVFRRLTSAVNEIEKRIPFSHHDRLGFLTFCPTNLGTTARASVHIKLPKLAANREKLEEV
AGKYNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILELIKMEKEM
>CAD24068.1 Allergen Hev b 11; chitinase (class I) [Hevea brasiliensis subsp. brasiliensis]
EQCGRQAGGALCPGGLCCSQYGWCANTPEYCGSGCQSQCDGGVGGEGGCVDLGSIISRST
FEEMLKHRNNAACPAKGFYTYDAFISAAKAFPAFGTTGDVDTCKREIAAFFGQTSHATTG
GWPTAPDGPYAWGYCHKEELNQASSYCSPSPAYPCAPGKKYYGRGPIQLSWNYNYGQCGQ
ALGLDLLNNPDLVATDRVISFKAAIWFWMTPQFPKPSCHDVITGQWSPTGHDISAGRAPG
YGVITNIINGGLECGSGWDARVEDRIGFYKRYCDMFGVGYGSNLDCYNQTPFGLG
>CAD37201.1 Allergen Pru p 4; profilin [Prunus persica]
MSWQAYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSATFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEAGAVIRGKKGSGGITVKKTNQALIIGIYDEPLTPGQCNMIVE
RLGDYLIEQGL
>CAD37202.1 Allergen Pru p 4; profilin [Prunus persica]
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APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKSTLALLIGIYDEPMTPGQCNMIVE
RLGDYLVEQGL
>BAC53948.1 Allergen Der f 1; cysteine protease [Dermatophagoides farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>AAM19082.1 Allergen Der f 18; chitin-binding protein [Dermatophagoides farinae]
MTRFSLTVLAVLAACFGSNIRPNVATLEPKTVCYYESWVHWRQGEGKMDPEDIDTSLCTH
IVYSYFGIDAATHEIKLLDEYLMKDLHDMEHFTQHKGNAKAMIAVGGSTMSDQFSKTAAV
EHYRETFVVSTVDLMTRYGFDGVMIDWSGMQAKDSDNFIKLLDKFDEKFAHTSFVMGVTL
PATIASYDNYNIPAISNYVDFMNVLSLDYTGSWAHTVGHASPFPEQLKTLEAYHKRGAPR
HKMVMAVPFYARTWILEKMNKQDIGDKASGPGPRGQFTQTDGFLSYNELCVQIQAETNAF
TITRDHDNTAIYAVYVHSNHAEWISFEDRHTLGEKAKNITQQGYAGMSVYTLSNEDVHGV
CGDKNPLLHAIQSNYYHGVVTEPTVVTLPPVTHTTEHVTDIPGVFHCHEEGFFRDKTYCA
TYYECKKGDFGLEKTVHHCANHLQAFDEVSRTCIDHTKIPGC
>NP_776945.1 Allergen collagen alpha-2(I) chain precursor [Bos taurus]
MLSFVDTRTLLLLAVTSCLATCQSLQEATARKGPSGDRGPRGERGPPGPPGRDGDDGIPG
PPGPPGPPGPPGLGGNFAAQFDAKGGGPGPMGLMGPRGPPGASGAPGPQGFQGPPGEPGE
PGQTGPAGARGPPGPPGKAGEDGHPGKPGRPGERGVVGPQGARGFPGTPGLPGFKGIRGH
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VGPAGPIGSAGPPGFPGAPGPKGELGPVGNPGPAGPAGPRGEVGLPGLSGPVGPPGNPGA
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PGAVGQPGPPGPSGEEGKRGSTGEIGPAGPPGPPGLRGNPGSRGLPGADGRAGVMGPAGS
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KGEQGPAGPPGFQGLPGPAGTAGEAGKPGERGIPGEFGLPGPAGARGERGPPGESGAAGP
TGPIGSRGPSGPPGPDGNKGEPGVVGAPGTAGPSGPSGLPGERGAAGIPGGKGEKGETGL
RGDIGSPGRDGARGAPGAIGAPGPAGANGDRGEAGPAGPAGPAGPRGSPGERGEVGPAGP
NGFAGPAGAAGQPGAKGERGTKGPKGENGPVGPTGPVGAAGPSGPNGPPGPAGSRGDGGP
PGATGFPGAAGRTGPPGPSGISGPPGPPGPAGKEGLRGPRGDQGPVGRSGETGASGPPGF
VGEKGPSGEPGTAGPPGTPGPQGLLGAPGFLGLPGSRGERGLPGVAGSVGEPGPLGIAGP

PGARGPPGNVGNPGVNGAPGEAGRDGNPGNDGPPGRDGQPGHKGERGYPGNAGPVGAAGA
PGPQGPVGPVGKHGNRGEPGPAGAVGPAGAVGPRGPSGPQGIRGDKGEPGDKGPRGLPGL
KGHNGLQGLPGLAGHHGDQGAPGAVGPAGPRGPAGPSGPAGKDGRIGQPGAVGPAGIRGS
QGSQGPAGPPGPPGPPGPPGPSGGGYEFGFDGDFYRADQPRSPTSLRPKDYEVDATLKSL
NNQIETLLTPEGSRKNPARTCRDLRLSHPEWSSGYYWIDPNQGCTMDAIKVYCDFSTGET
CIRAQPEDIPVKNWYRNSKAKKHVWVGETINGGTQFEYNVEGVTTKEMATQLAFMRLLAN
HASQNITYHCKNSIAYMDEETGNLKKAVILQGSNDVELVAEGNSRFTYTVLVDGCSKKTN
EWQKTIIEYKTNKPSRLPILDIAPLDIGGADQEIRLNIGPVCFK
>NP_776953.1 Allergen Bos d 10; alphaS2-casein [Bos taurus]
MKFFIFTCLLAVALAKNTMEHVSSSEESIISQETYKQEKNMAINPSKENLCSTFCKEVVR
NANEEEYSIGSSSEESAEVATEEVKITVDDKHYQKALNEINQFYQKFPQYLQYLYQGPIV
LNPWDQVKRNAVPITPTLNREQLSTSEENSKKTVDMESTEVFTKKTKLTEEEKNRLNFLK
KISQRYQKFALPQYLKTVYQHQKAMKPWIQPKTKVIPYVRYL
>AAO24900.1 Allergen Art v 1; defensin [Artemisia vulgaris]
MAKCSYVFCAVLLIFIVAIGEMEAAGSKLCEKTSKTYSGKCDNKKCDKKCIEWEKAQHGA
CHKREAGKESCFCYFDCSKSPPGATPAPPGAAPPPAAGGSPSPPADGGSPPPPADGGSPP
VDGGSPPPPSTH
>NP_776719.1 Allergen Bos d 12; kappa-casein [Bos taurus]
MMKSFFLVVTILALTLPFLGAQEQNQEQPIRCEKDERFFSDKIAKYIPIQYVLSRYPSYG
LNYYQQKPVALINNQFLPYPYYAKPAAVRSPAQILQWQVLSNTVPAKSCQAQPTTMARHP
HPHLSFMAIPPKKNQDKTEIPTINTIASGEPTSTPTTEAVESTVATLEDSPEVIESPPEI
NTVQVTSTAV
>AAO25113.1 Allergen Mal d 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Malus domestica]
MGVFTYESEFTSVIPPARLFNAFVLDADNLIPKIAPQAVKSAEILEGDGGVGTIKKINFG
EGSTYSYVKHRIDGVDKENFVYKYSVIEGDAISETIEKISYETKLVASGSGSVIKSTSHY
HTKGDVEIKEEHVKAGKEKASHLFKLIENYLLEHPDAYN
>AAO32314.1 Allergen Car i 1; 2S albumin [Carya illinoinensis]
MARVAALLVALLFVANAAAFRTTITTMEIDEDIDNPRRRGESCREQIQRQQYLNRCQDYL
RQQCRSGGYDEDNQRQHFRQCCQQLSQMEEQCQCEGLRQAVRQQQQEEGIRGEEMEEMVQ
CASDLPKECGISSRSCEIRRSWF
>1NLX_N Allergen Chain N, Crystal Structure Of Phl P 6, A Major Timothy Grass Pollen Allergen Co-Crystallized With Zinc [Phleum pratense]
MGKATTEEQKLIEDVNASFRAAMATTANVPPADKYKTFEAAFTVSSKRNLADAVSKAPQL
VPKLDEVYNAAYNAADHAAPEDKYEAFVLHFSEALRIIAGTPEVHAVKPGA
>CAD20981.3 Allergen Mala s 10; heat shock protein 70 [Malassezia sympodialis]
MSSVVGLDIGNSSSKIGVARARGVDIVSNEVSNRSTPSLVSFGQKARLLGEGAATAQTSN
FKNTVGSLKRLIGRTFQDESIQTYEKPFVNAELVDAKGEVGVKVRFQNEEHIFSATQLLA
MYLGKLLDTTQNELGGSGVSDVVLSVPIWFTDAQRRAMLHAAEIANLNPLRVMNEPTATA
LGYGITKTDLPEPDSPRNVIFVDIGHSSYQVSVVAFCKGQLTVLGAWADPNFGGRNFDRV
LMEHFAEEFKGKYKIDVFFNPKATFRLAAGCERLKKVLSANTLAQLNVESLMNDIDAASQ
LKRDEFESLIAPYLERVNGPLDAALSQSGLTKDEIHSVELVGGSSRVPALKERIAAWYGK
PLSYTLNQDEAIVRGCTLACATLSPVFRVREFSVHDISSYPIKVSWEPAPDVPDEENELV
VFNTNNPVPSTKILTFYRKEPFSLDATYADASTLPKGTNPWLGRVTIKNVAPNEKGEHSI
VKVKARLNLHGVLNVESAYTVDEIEKEEEVPVVDPNAAEDAEPKTEKKIVKKLQRKDDLP
IVSGIGLLDPTLLAELKEREGQMYAADKLVADTEDRKNALEEYIYDTRSKLDERYATFVQ
SEEKEKLLAMLAESEDWLYTEEGEDATKSAYVSRLETLQKVGAPIHFRWKEHEERPKAAA
QLREVVNKYMSVFENEPEKYDHLSDDDKTKVIEKAATVGKWLDDYMYKQSELPKNVDPKL
TSEEILKKKDDVIYVCTPILTKPKPRVPVDTSKPEENAQTSNENEKQGDMDVD
>CAD68071.1 Allergen Mala s 11; Mn superoxide dismutase [Malassezia sympodialis]
PFYPIPSALPFPLPIHSLFSRRTRLFRFSRTAARAGTEHTLPPLPYEYNALEPFISADIM
MVHHGKHHQTYVNNLNASTKAYNDAVQAQDVLKQMELLTAVKFNGGGHVNHALFWKTMAP

QSQGGGQLNDGPLKQAIDKEFGDFEKFKAAFTAKALGIQGSGWCWLGLSKTGSLDLVVAK
DQDTLTTHHPIIGWDGWEHAWYLQYKNDKASYLKQWWNVVNWSEAESRYSEGLKASL
>AAO45607.1 Allergen Zea m1; beta-expansin 9 protein [Zea mays]
MGSLANNIMVVGAVLAALVVGGSCGPPKVPPGPNITTNYNGKWLTARATWYGQPNGAGAP
DNGGACGIKNVNLPPYSGMTACGNVPIFKDGKGCGSCYEVRCKEKPECSGNPVTVFITDM
NYEPIAPYHFDLSGKAFGSLAKPGLNDKLRHCGIMDVEFRRVRCKYPAGQKIVFHIEKGC
NPNYVAVLVKFVADDGDIVLMEIQDKLSAEWKPMKLSWGAIWRMDTAKALKGPFSIRLTS
ESGKKVIAKDIIPANWRPDAVYTSNVQFY
>AAO45608.1 Putative beta-expansin 1 protein [Zea mays]
MGSLANNIMVVGAVLAALVAGGSCGPPKVPPGPNITTNYNGKWLTARATWYGQPNGAGAP
DNGGACGIKNVNLPPYSGMTACGNVPIFKDGKGCGSCYEVRCKEKPECSGNPVTVYITDM
NYEPIAPYHFDLSGKAFGSLAKPGLNDKIRHCGIMDVEFRRVRCKYPAGQKIVFHIEKGC
NPNYLAVLVKYVADDGDIVLMEIQDKLSAEWKPMKLSWGAIWRMDTAKALKGPFSIRLTS
ESGKKVIAKDVIPANWRPDAVYTSNVQFY
>CAD69036.1 Allergen Der p 5-like protein product [Dermatophagoides
pteronyssinus]
MKFIIAFFVATLAVMTVSGEDKKHDYQNEFDFLLMERIHEQIKKGELALFYLQEQINHFE
EKPTKEMKDKIVAEMDTIIAMIDGVRGVLDRLMQRKDLDIFEQYNLEMLKKSGDILERDL
KKEEARVKNIEV
>CAD46559.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDHLMCDIDGHHLTAAAILGHDGSVWAHSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTGQALVFGIYEEPLTPGQCNMIVE
RLGDYLIDQGL
>CAD46560.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHDGSVWAQSATFPQLKPEEVTGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGPGGVTVKKSTMASLIGIYDEPMTPGQCNMVVE
RLGDYLIEQGL
>CAD46561.1 Allergen Mal d 4; profilin [Malus domestica]
MSWQAYVDDHLMCDIDGYRLTAAAILGQDGSVWSQSASFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPVTPGQCNIVVE
RLGDYLIEQGL
>1L3P_A Allergen Phl p 5; ribonuclease [Phleum pratense]
IPAGELQIIDKIDAAFKVAATAAATAPADDKFTVFEAAFNKAIKETTGGAYDTYKCIPSL
EAAVKQAYAATVAAAPQVKYAVFEAALTKAITAMSEVQKVSQ
>CAD80019.1 Putative Group 1 allergen-like [Plantago lanceolata]
MVKLTQVAAILLIGAFFLIASTSIATQTSHPAKFHVEGEVYCNVCHSRNLINELSERMAG
AQVQL
>AAO65960.1 Allergen Cor a 13; oleosin [Corylus avellana]
MAEHPRQLQDPAHQPRSHQVVKAATAATAGGSLLVPSGLILAGTVIALTLATPLFVIFSP
VLVPAVITVSLIIMGFLASGGFGVAAVTVLSWIYRYVTGRHPPGADQLDHARMKLASKAR
EMKDRAEQFGQQHVTGSQGS
>CAD82911.1 Allergen precursor Can f II [Canis familiaris]
STFCLGLALICGLQAQEGNHEEPQGGLEELSGRWHSVALASNKSDLIKPWGHFRVFIHSM
SAKDGNLHGDILIPQDGQCEKVSLTAFKTATSNKFDLEYWGHNDLYLAEVDPKSYLILYM
INQYNDDTSLVAHLMVRDLSRQQDFLPAFESVCEDIGLHKDQIVVLSDDDRCQGSRD
>CAD82912.1 Allergen precursor Can f II [Canis familiaris]
QLLLLTVGLALICGLQAQEGNHEEPQGGLEELSGRWHSVALASNKSDLTKPWGHFRVFIH
SMSAKDVNLHGDILIPQDGQCEKVSLTAFKTATSNKFDLEYWGHNDLYLAEVDPKSYLIL
YMINQYNDDTSLVAHLMVRDLSRQQDFLPAFESVCEDIGLHKDQIVVLSDDDRCQGSRD
>CAD56944.1 Allergen Api m 12; vitellogenin [Apis mellifera]
MLLLLTLLLFAGTVAADFQHNWQVGNEYTYLVRSRTLTSLGDLSDVHTGILIKALLTVQA
KDSNVLAAKVWNGQYARVQQSMPDGWETEISDQMLELRDLPISGKPFQIRMKHGLIRDLI
VDRDVPTWEVNILKSIVGQLQVDTQGENAVKVNSVQVPTDDEPYASFKAMEDSVGGKCEV
LYDIAPLSDFVIHRSPELVPMPTLKGDGRHMEVIKIKNFDNCDQRINYHFGMTDNSRLEP

GTNKNGKFFSRSSTSRIVISESLKHFTIQSSVTTSKMMVSPRLYDRQNGLVLSRMNLTLA
KMEKTSKPLPMVDNPESTGNLVYIYNNPFSDVEERRVSKTAMNSNQIVSDNSLSSSEEKL
KQDILNLRTDISSSSSSISSSEENDFWQPKPTLEDAPQNSLLPNFVGYKGKHIGKSGKVD
VINAAKELIFQIANELEDASNIPVHATLEKFMILCNLMRTMNRKQISELESNMQISPNEL
KPNDKSQVIKQNTWTVFRDAITQTGTGPAFLTIKEWIERGTTKSMEAANIMSKLPKTVRT
PTDSYIRSFFELLQNPKVSNEQFLNTAATLSFCEMIHNAQVNKRSIHNNYPVHTFGRLTS
KHDNSLYDEYIPFLERELRKAHQEKDSPRIQTYIMALGMIGEPKILSVFEPYLEGKQQMT
VFQRTLMVGSLGKLTETNPKLARSVLYKIYLNTMESHEVRCTAVFLLMKTNPPLSMLQRM
AEFTKLDTNRQVNSAVKSTIQSLMKLKSPEWKDLAKKARSVNHLLTHHEYDYELSRGYID
EKILENQNIITHMILNYVGSEDSVIPRILYLTWYSSNGDIKVPSTKVLAMISSVKSFMEL
SLRSVKDRETIISAAEKIAEELKIVPEELVPLEGNLMINNKYALKFFPFDKHILDKLPTL
ISNYIEAVKEGKFMNVNMLDTYESVHSFPTETGLPFVYTFNVIKLTKTSGTVQAQINPDF
AFIVNSNLRLTFSKNVQGRVGFVTPFEHRHFISGIDSNLHVYAPLKISLDVNTPKGNMQW
KIWPMKGEEKSRLFHYSVVPFVSNHDILNLRPLSMEKGTRPMIPDDNTSLALPKNEGPFR
LNVETAKTNEEMWELIDTEKLTDRLPYPWTMDNERYVKVDMYMNLEGEQKDPVIFSTSFD
SKVMTRPDTDSENWTPKMMAVEPTDKQANSKTRRQEMMREAGRGIESAKSYVVDVRVHVP
GESESETVLTLAWSESNVESKGRLLGFWRVEMPRSNADYEVCIGSQIMVSPETLLSYDEK
MDQKPKMDFNVDIRYGKNCGKGERIDMNGKLRQSPRLKELVGATSIIKDCVEDMKRGNKI
LRTCQKAVVLSMLLDEVDISMEVPSDALIALYSQGLFSLSEIDNLDVSLDVSNPKNAGKK
KIDVRAKLNEYLDKADVIVNTPIMDAHFKDVKLSDFGFSTEDILDTADEDLLINNVFYED
ETSCMLDKTRAQTFDGKDYPLRLGPCWHAVMTTYPRINPDNHNEKLHIPKDKSVSVLSRE
NEAGQKEVKVLLGSDKIKFVPGTTSQPEVFVNGEKIVVSRNKAYQKVEENEIIFEIYKMG
DRFIGLTSDKFDVSLALDGERVMLKASEDYRYSVRGLCGNFDHDSTNDFVGPKNCLFRKP
EHFVASYALISNQCEGDSLNVAKSLQDHDCIRQERTQQRNVISDSESGRLDTEMSTWGYH
HNVNKHCTIHRTQVKETDDKICFTMRPVVSCASGCTAVETKSKPYKFHCMEKNEAAMKLK
KRIEKGANPDLSQKPVSTTEELTVPFVCKA
>BAC66618.1 Putative parvalbumin [Scomber japonicus]
MAFASVLKDAEVTAALDGCKAAGSFDHKKFFKACGLSGKSTDEVKKAFAIIDQDKSGFIE
EEELKLFLQNFKAGARALSDAETKAFLKAGDSDGDGKIGIDEFAAMIKG
>AAL92578.1 Allergen Ole e 10; beta-1,3-glucanase [Olea europaea]
MRGTAGVPDQPVPTPTPSVPTSSSPVPKPPTQGNKKWCVPKAEATDAQLQSNIDYVCSQS
GMDCGPIQANGACFNPNTVRAHASYAMNSWYQSKGRNDFDCDFSGTGAITSSDPSNGSCS
FLS
>AAL92870.1 Allergen Che a 2; profilin [Chenopodium album]
MSWQTYVDDHLMCDIEGNHLSSAAILGHDGTVWAQSPSFPQLKPEEVSAIMKDFNEPGSL
APTGLHLGGTKYMVIQGEPGDVIRGKKGPGGVTIKKTNQALIIGIYGEPMTPGQCNMVVE
RIGDYLVEQGM
>AAL92871.1 Allergen Che a 3; calcium-binding protein, polcalcin
[Chenopodium album]
MAAEDTPQDIADRERIFKRFDTNGDGKISSSELGDALKTLGSVTPDEVRRMMAEIDTDGD
GFISFDEFTDFARANRGLVKDVSKIF
>CAD87529.1 Allergen Phl p 5; unknown function [Phleum pratense]
ADLGYGPATPAAPAAGYTPAAPAGAEPAGKATTEEQKLIEKINAGFKAALAAAAGVPPAD
KYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKAALTSKLDAAYKLAYKTAEGATPEAK
YDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIPAGELQVIEKVDAAFKVAATAANAAP
ANDKFTVFEAAFNNAIKASTGGAYESYKFIPALEAAVKQAYAATVATAPEVKYTVFETAL
KKAITAMSEAQKAAKPAAAATATATSAVGAATGAATAATGGYKV
>CAD87730.1 Allergen Len c 1; 7S globulin/ vicilin-like protein [Lens
culinaris]
SRSDQENPFIFKSNRFQTIYENENGHIRLLQRFDKRSKIFENLQNYRLLEYKSKPHTIFL
PQFTDADFILVVLSGKAILTVLNSNDRNSFNLERGDTIKLPAGTIAYLANRDDNEDLRVL
DLAIPVNRPGQLQSFLLSGTQNQPSFLSGFSKNILEAAFNTEYEEIEKVLLEEQEQKSQH
RRSLRDKRQEITNEDVIVKVSREQIEELSKNAKSSSKKSVSSESEPFNLRSRNPIYSNKF
GKFFEITPEKNPQLQDLDIFVNSVEIKEGSLLLPNYNSRAIVIVTVNEGKGDFELVGQRN

ENQQEQREENDEEEGQEEETTKQVQRYRARLSPGDVLVIPAGHPVAINASSDLNLIGFGI
NAKNNQRNFLAGEEDNVISQIQRPVKELAFPGSSREVDRLLTNQKQSHFANAQPLQIE
>CAD87731.1 Allergen Len c 1; 7S globulin/ vicilin-like protein [Lens culinaris]
SRSDQENPFIFKSNRFQTIYENENGHIRLLQKFDKRSKIFENLQNYRLLEYKSKPHTLFL
PQYTDADFILVVLSGKAVLTVLNSNDRNSFNLERGDTIKLPAGTIAYLANRDDNEDLRVL
DLAIPVNNPGQLESFLLSGTQNQPSFLSGFNKSILEAAFNTDYEEIEKVLLEDQEQEPQH
RRSLRDRRQEINKENVIVKVSREQIKELSKNAKSSSKKSVSSESEPFNLRSRNPIYSNKF
GKFFEITPEKNPQLQDLDIFVNSVEIKEGSLLLPNYNSRAIVIVTVNEGKGYFELVGQRN
ENQREENDDEEEQEEETSTQVQRYRAKLSPGDVFVVPAGHPVAINASSDLNLIGFGINAK
NNQRNFLAGEEDNVISQIQRPVKELAFPGSSREVDRLLTNQKQSHFANAQPLQIE
>O23878.1 Putative 13S globulin seed storage protein 1 precursor (Legumin-like protein 1) [Fagopyrum esculentum]
MSTKLILSFSLCLMVLSCSAQLLPWRKGQRSRPHRGHQQFHHQCDVQRLTASEPSRRVRS
EAGVTEIWDNDTPEFRCAGFVAVRVVIQPGGLLLPSYSNAPYITFVEQGRGVQGVVVPGC
PETFQSESEFEYPQSQRDQRSRQSESEESSRGDQRTRQSESEEFSRGDQRTRQSESEEFS
RGDQRTRQSESEEFSRGDQRTRQSESEEFSRGDQHQKIFRIRDGDVIPSPAGVVQWTHND
GDNDLISITLYDANSFQNQLDGNVRNFFLAGQSKQSREDRRSQRQTREEGSDRQSRESDD
DEALLEANILTGFQDEILQEIFRNVDQETISKLRGDNDQRGFIVQARDLKLRVPEEYEEE
LQRERGDRKRGGSGRSNGLEQAFCNLKFKQNVNRPSRADVFNPRAGRINTVNSNNLPILE
FIQLSAQHVVLYKNAILGPRWNLNAHSALYVTRGEGRVQVVGDEGRSVFDDNVQRGQILV
VPQGFAVVLKAGREGLEWVELKNDDNAITSPIAGKTSVLRAIPVEVLANSYDISTKEAFR
LKNGRQEVEVFLPFQSRDEKERERF
>O23880.1 Putative 13S globulin seed storage protein 2 precursor (Legumin-like protein 2) [Fagopyrum esculentum]
MSTKLILSFSLCLMVLSCSAQLWPWQKGQGSRPHHGRQQHQFQHQCDIQRLTASEPSRRV
RSEAGVTEIWDHDTPEFRCTGFVAVRVVIQPGGLLLPSYSNAPYITFVEQGRGVQGVVIP
GCPETFQSDSEFEYPQSQRGRHSRQSESEEESSRGDQHQKIFRIREGDVIPSPAGVVQWT
HNDGNDDLISVTLLDANSYHKQLDENVRSFFLAGQSQRETREEGSDRQSRESDDDEALLG
ANILSGFQDEILHELFRDVDRETISKLRGENDQRGFIVQAQDLKLRVPQDFEEEYERERG
DRRRGQGGSGRSNGVEQGFCNLKFRRNFNTPTNTYVFNPRAGRINTVNSNSLPILEFLQL
SAQHVVLYKNAIIGPRWNLNAHSALYVTRGEGRVQVVGDEGKSVFDDKVQRGQILVVPQG
FAVVLKAGREGLEWVELKNSGNAITSPIGGRTSVLRAIPVEVLANSYDISTKEAYKLKNG
RQEVEVFRPFQSRDEKERERFSIV
>Q9XFM4.1 Putative 13S globulin seed storage protein 3 precursor (Legumin-like protein 3) (Allergen Fag e 1) [Fagopyrum esculentum]
MSTKLILSFSLCLMVLSCSAQLLPWQKGQRSRPHHGHQQFQHQCDIQRLTASEPSRRVRS
EAGVTEIWDHDTPEFRCAGFVAVRVVIQPGGLLLPSYSNAPYITFVEQGRGVQGVVVPGC
PETFQSGSEFEYPRSQRDQRSRQSESGESSRGDQRSRQSESEESSRGDQRSRQSESEEFS
RGDQHQKIFRIRDGDVIPSPAGVVQWTHNNGDNDLISITLYDANSFQNQLDENVRNFFLA
GQSKQSREDRRSQRQTREEGSDRQSRESQDDEALLEANILSGFEDEILQEIFRNVDQETI
SKLRGENDQRGFIVQARDLKLRVPEEYEEELQRERGDRKRGGSGRSNGLEQAFCNLKFRQ
NVNRPSRADVFNPRAGRINTVDSNNLPILEFIQLSAQHVVLYKNAILGPRWNLNAHSALY
VTRGEGRVQVVGDEGRSVFDDNVQRGQILVVPQGFAVVLKAGREGLEWVELKNDDNAITS
PIAGKTSVLRAIPVEVLANSYDISTKEAFRLKNGRQEVEVFRPFQSRDEKERERFSIV
>AAP06493.1 Putative hypothetical protein, putative Profilin/allergen [Schistosoma japonicum]
MSADSWDNHCVTYVANNKCLKNLCMTAIDGSHLGTSNPDFRIPPELILQLKSILDGGLDT
SIFFMGEKYIVLQHDSSCLVSRCGKKSLIFYATGKICLVGQTVDDDQNNCTQGNFAISRM
RDHYERMGY
>AAP13554.1 Allergen major allergen Per a 1.0105 [Periplaneta americana]
NSARGEHGLDVADFLNEIHSIIGLPPFVPPSRRHARRGVGINGLIDDVIAILPVDELKAL
FQEKLETSPDFKALYDAIRSPEFQSIISTLNAMPEYQDLLQNLRDKGVDVDHFIELIRSL
FGLP

>AAO38859.1 Allergen Ber e 2; 11S globulin / legumin-like protein [Bertholletia excelsa]
MAKLFLLSLGIFLLFHCCLAIEYEQEELYECRIQRLTAQEPQYRLEAEAGVSEVWDYTDQ
QFRCAGVAALRNTIRPQGLLLPVYTNAPKLYYVTQGRGILGVLMPGCPETFQSMSQFQGS
REQEEERGRFQDQHQKVHHLKKGDIIAIPAGVALWCYNDGDEDLVTVLVQHTASDLNQLD
QNPRHFFLAGNIQRSQKQRGERYGLRGGQQILADNVFKGFNMEALADVLGFGMDTETARK
VRGEDDQRGHIVRVEQGLKVIRPPRIREELEQQEGGGYNGLEETICSATFIQNIDNPAEA
DFYNPRAGRLTTVNSLKVPILTFLQLSAMKGVLYENAMMAPLWRLNANSVVYAVRGEARV
QIVDHRGETVFDDNLREGQMVVVPQNFVVVKQAGSRGFEWVVFNTNDNALFSTAAGRTSP
LRGIPVGVLANAYRLSQEEARRIKLNRDEAVLFQPGSRSRGRASA
>AAP30720.1 Allergen Rho m 1; enolase [Rhodotorula mucilaginosa]
MAISKIHSRYVYDSRGNPTVEVELTTEKGTFRSIVPSGASTGVHEALELRDGDKSKWLGK
GVLKAVANVNDTIAPALIEANIDVADQAKIDEFLLKLDGTPNKAKLGANAILGVSLAAAK
AGAAQKDVPLYKHIADISKAKEGKFVLPVPFQNVLNGGSHAGGDLAFQEFMIVPSGAPSF
SEGLRIGSEVYHHLKSLTKKKYGQSAGNVGDEGGVAPDIKTAKEALDLIVSAIEAAGYTG
QVDIAMDVASSEFYKDGLYDLDFKNPNSDKSKWITGPQLAELYEQLLNEYPIVSIEDPFA
EDDWEAWSHFFSKVEGKTQIVGDDLTVTNPIRIKKAIETKAADALLLKVNQIGTLTESIQ
AANDSYAAGWGVMVSHRSGETEDTFIADLSVGIRSGQTKTGAPARSERLAKLNQILRIEE
ELGDKAIYAGKDFHKAHSL
>BAC76688.1 Allergen Tri a 27; thiol reductase [Triticum aestivum]
GDVATGRGSEKVHVAIYYESLCPYSVRFVANHLFKAYRDGLLDAANLTLVPYGNAVVRND
GTISCQHGPEECLLNTVEACAIDAWPDVKVHLGFIYCVSDLVLKNKHREWESCFQKQGLD
PKPVTECYKGERGHNLSLEYGRQTAELVPPHQFVPWVVVDGKPLYNDYGNFKAYICKAYK
GYPLLEACRSLGLEAHDDVYGRL
>NP_851341.1 Putative lactotransferrin [Bos taurus]
MKLFVPALLSLGALGLCLAAPRKNVRWCTISQPEWFKCRRWQWRMKKLGAPSITCVRRAF
ALECIRAIAEKKADAVTLDGGMVFEAGRDPYKLRPVAAEIYGTKESPQTHYYAVAVVKKG
SNFQLDQLQGRKSCHTGLGRSAGWIIPMGILRPYLSWTESLEPLQGAVAKFFSASCVPCI
DRQAYPNLCQLCKGEGENQCACSSREPYFGYSGAFKCLQDGAGDVAFVKETTVFENLPEK
ADRDQYELLCLNNSRAPVDAFKECHLAQVPSHAVVARSVDGKEDLIWKLLSKAQEKFGKN
KSRSFQLFGSPPGQRDLLFKDSALGFLRIPSKVDSALYLGSRYLTTLKNLRETAEEVKAR
YTRVVWCAVGPEEQKKCQQWSQQSGQNVTCATASTTDDCIVLVLKGEADALNLDGGYIYT
AGKCGLVPVLAENRKSSKHSSLDCVLRPTEGYLAVAVVKKANEGLTWNSLKDKKSCHTAV
DRTAGWNIPMGLIVNQTGSCAFDEFFSQSCAPGADPKSRLCALCAGDDQGLDKCVPNSKE
KYYGYTGAFRCLAEDVGDVAFVKNDTVWENTNGESTADWAKNLNREDFRLLCLDGTRKPV
TEAQSCHLAVAPNHAVVSRSDRAAHVKQVLLHQQALFGKNGKNCPDKFCLFKSETKNLLF
NDNTECLAKLGGRPTYEEYLGTEYVTAIANLKKCSTSPLLEACAFLTR
>NP_851372.1 Allergen Bos d 9; alphaS1-casein [Bos taurus]
MKLLILTCLVAVALARPKHPIKHQGLPQEVLNENLLRFFVAPFPEVFGKEKVNELSKDIG
SESTEDQAMEDIKQMEAESISSSEEIVPNSVEQKHIQKEDVPSERYLGYLEQLLRLKKYK
VPQLEIVPNSAEERLHSMKEGIHAQQKEPMIGVNQELAYFYPELFRQFYQLDAYPSGAWY
YVPLGTQYTDAPSFSDIPNPIGSENSEKTTMPLW
>AAP37482.1 Allergen Bet v 1x [Betula pendula]
MRVFNYKGETTSLIPLARLFK
>AAP37470.1 Allergen Hev b 13; esterase [Hevea brasiliensis]
MEFPETNNNPIITLSFLLCMLSLAYASETCDFPAIFNFGDSNSDTGGKAAAFYPLNPPYG
ETFFHRSTGRYSDGRLIIDFIAESFNLPYLSPYLSSLGSNFKHGADFATAGSTIKLPTTI
IPAHGGFSPFYLDVQYSQFRQFIPRSQFIRETGGIFAELVPEEYYFEKALYTFDIGQNDL
TEGFLNLTVEEVNATVPDLVNSFSANVKKIYDLGARTFWIHNTGPIGCLSFILTYFPWAE
KDSAGCAKAYNEVAQHFNHKLKEIVAQLRKDLPLATFVHVDIYSVKYSLFSEPEKHGFEF
PLITCCGYGGKYNFSVTAPCGDTVTADDGTKIVVGSCACPSVRVNWDGAHYTEAANEYFF
DQISTGAFSDPPVPLNMACHKTESLRTLASV
>AAP37412.1 Allergen Pol d 4; serine protease [Polistes dominula]
MNCGKIILLFITIIGVAKSREENCKCGWDNPSRIVNGVETEINEFPMVARLIYPSPGMYC

GGTIITPQHIVTAAHCLQKYKRTNYTGIHVVVGEHDYTTDTETNVTKRYTIAEVTIHPNY
NSHNNDIAIVKTNERFEYSMKVGPVCLPFNYMTRNLTNETVTALGWGKLRYNGQNSKVLR
KVDLHVITREQCETHYGAAIANANLLCTFDVGRDACQNDSGGPILWRSPTTDNLILVGVV
NFGRTCADDAPGGNARVTSFMEFIHNATIGETYCKAD
>AAM54365.1 Allergen Jug n 1; 2S albumin [Juglans nigra]
RHEARKCIFHTFSLTMARLATLAALLVALLFVANAAAFRTTITTMEIDEDIDNPRRRGEG
CQEQIQRQQNLNHCQYYLRQQSRSGGYDEDNQRQHFRQCCQQLSQIEEQCQCEGLRQAVR
RQQQQQGLRGEEMEEMVQSARDLPKECGISSQRCEIRRSWF
>AAM54366.1 Allergen Jug n 2; 7S globulin/vicilin-like protein [Juglans nigra]
GRDRQDPQQQYHRCQRRCQIQEQSPERQRQCQQRCERQYKEQQGRERGPEASPRRESKGR
EEEQQRHNPYYFHSQSIRSRHESEEGEVKYLERFAERTELLRGIENYRVVILDANPNTFM
LPHHKDAESVIVVTRGRATLTLVSQETRESFNLECGDVIRVPAGATEYVINQDSNERLEM
VKLLQPVNNPGQVREYYAAGAKSPDQSYLRVFSNDILVAALNTPRDRLERFFDQQEQREG
VIIRASQEKLRALSQHAMSAGQRPWGRRSSGGPISLKSERPSYSNQFGQFFEACPEEHRQ
LQEMDVLVNYAEIKRGAMMVPHYNSKATVVVYVVEGTGRYEMACPHVSSQSFEDQGRREQ
EEEESTGRFQKVTARLARGDIFVIPAGHPIAITASQNENLRLLGFGINGENNQRNFLAGQ
NSIINQLEREAKELSFNMPREEIEEIFESQMESYFVPTERQSRRGQGRDHPLASILGFAF
F
>AAM78596.1 Allergen Ara h 2 isoform [Arachis hypogaea]
LTILVAPALFLLAAHASARQQWELQGDRRCQSQLERANLRPCEQHLMQKIQRDEDSYGRD
PYSPSQDPYSPSQDPDRRDPYSPSPYDRRGAGSSQHQERCCNELNEFENNQRCMCEALQQ
IMENQSDRLQGRQQEQQFKRELRNLPQQCGLRAPQRCDLEVESGGRDRY
>AAP47226.1 Allergen Hel a 3; lipid transfer protein (LTP) type 1 [Helianthus annuus]
MKGTSMGVAILAMIVMAQLMVHPSVAITCNDVTGNLTPCLPYLRSGGKPTPACCAGAKKL
LGATRTQADRRTACKCAKTAAPQLKVRPDMASSLPGKCGISTSIPINPNVNCNTIP
>CAD92666.1 Allergen profilin [Cucumis melo]
MSWQAYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSATFPAFRLEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEAGAVIRGKKGSGGITVKKTNQALIIGIYDEPLTPGQCNMIVE
RLGDYLIEQGL
>P80207.1 Allergen Bra j 1; 2S albumin, conglutin [Brassica juncea]
AGPFRFPRCRKEFQQAQHLRACQQWLHKQAMQSGSGPQPQGPQQRPPLLQQCCNELHQEE
PLCVCPTLKGASKAVKQQIRQQGQQQGQQGQQLQHEISRIYQTATHLPRVCNIPRVSICP
FQKTMPGPS
>P81729.1 Allergen Bra r 2; chitin-binding protein [Brassica rapa]
QAGGQTCAGNICCSQYGYCGTTADYCSPDNNCQATYHYYNPAQNNWDLRAVSAYCSTWDA
DKPYSWRYGWTAFCGPAGPRCLRTNAAVTVR
>P82946.1 Allergen Dac g 4; FAD-containing oxidase [Dactylis glomerata]
DIYNYMEPYVSKVDPTDYFGNEQARTAWVDSGAQLGELSYGVLFNIQYVNYWFAP
>P83507.1 Allergen Cav p 1; lipocalin [Cavia porcellus]
SEINGDWNTIALSAD
>AAP87281.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASLGITDAQVGVCYGMQGNNLPPVSEVIALYK
QSNIKRMRIYDPNRAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
LFRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLANIYPYFTYAGNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHNATILFLKSDM
>AAP94213.1 Allergen Hum j 1; unknown [Humulus japonicus]
MKNLQHHNKIITFKTPDDSTTLELNSHISLPYHWEQCLDLKTGEIYYINWRNGMKAKEDP
RTTITEYNSNGSNGDYYYSEEDSSYDSEESSSESSPPPATTSRESQYRGAEKDHVLVVGG
CKSCFMYFMVPKQVQECPKCCGQPLHFDRSQSGSQ

>AAP96759.1 Allergen group 1 allergen Dac g 1.01 precursor [Dactylis glomerata]
IPKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPKDNGGACGYKDVDKAPFNGMTGCGNT
PIFKDGRGCGSCFEIKCTKPESCSGEAVTVHITDDNEEPIAPYHFDLSGHAFGSMAKKGE
EQKLRSAGELELQFRRVKCKYPEGTKLTFHVEKGSNPNYLALLVKYVDGDGDVVAVDIKE
KGKDKWIALKESWGAIWRVDTPDKLTGPFTVRYTTEGGTKSEVEDVIPEGWKADTSYEAK
>P81943.3 Allergen Api g 5; FAD-containing oxidase [Apium graveolens]
LPNPSGFVTCLSSISKSVYTPAINLKAVIADPVAKTAVVQAGATLGEVYYXIIYARVLWV
GNTTQKLEWIRSLHDYQSSFFPFFSA
>AAQ08190.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
IRTVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDITFTEVGYTRAEGLYSMLVERDH
KNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQ
VYNKLGMYPPNM
>AAQ08947.1 Allergen Fra e 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Fraxinus excelsior]
EDVPQPPVSLFYVQGQVYCDTCRAGFITELSEFIQGAGVRLQCKDKENGKVTFTEVGYTR
AEGLYSMVIERDHKNEFCEIVLLSSSRKDCDEIPTEGWVKPSLKFILNTVNGTTRTINPL
GFFKKEVLPKCPQVYNKLGMYPPNM
>AAQ10268.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
ILTVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDITFTEVGYTRAEGLYSMLVERDH
KNEFCEITLISSGRKDCDEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQ
VYNKLGMYPPNM
>AAQ10271.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
IWTVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDITFTEVGYTRAEGLYSMLVERDH
KNEFCEITLISSGRKDCDEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQ
VYNKLGMYPPNM
>AAQ10274.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
WTVSCDTCRAGFITELSEFIPGASVRLQCKDKENGDITFTEVGYTRAEGLYSMLVERDHK
NEFCEITLISSGRKDCDEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQV
YNKLGMYPPNM
>AAQ10276.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
SYCDTCRAGFITELSEFIPGAGVRLQCKDGENGNITFTEVGYTRAEGLYSMLVERDHKNE
FCEITLISSGRKDCDEIPTEGWVKPSLKFILNTVNGTTRTINPLGFFKKEALPKCAQVYN
KLGMYPPNM
>AAQ10277.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
QAVYCDTCRAGFITELSEFIPGASVRLQCKDRENGDITFTEVGYTRAEGLYSMLVERDHK
NEFCEITLISSGRKDCDEIPTEGWVKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQV
YNKLGMYPPNM
>AAQ10278.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
QDSYRDTCRAGFITELSEFIPGASVRLQCKDRENGDITFTEVGYTRAEGLYSMLVERDHK
NEFCEITLISSGRKDCDEIPTEGWVKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQV
YNKLGMYPPNM
>AAQ10279.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
IRTVSQDTCCARFITELSEFIPGAGVRLQCKDGENGNVTFTEVGYTRAEGLYSMLIERDH
KNEFCEITLLSSSRKDCDEIPVEGWVKPSLKFMLNTVNGTTRTINPLGFFKKEALPKCPQ
VFNKLGMYPPDM
>AAQ10280.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
IRTVFRVTCRARFITELSEFIPGAGVRLQCKDGENGNVTFTEVGYTRAEGLYSMLIERDH
KNEFCEITLLSSSRKDCDEIPVEGWVKPSLKFMLNTVNGTTRTINPLGFFKKEALPKCPQ
VFNKLGMYPPDM
>AAQ10281.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
QDSYSGHCRARFITELSEFIPGAGVRLQCKDGENGNVTFTEVGYTRAEGLYSMLIERDHK
NEFCEITLLSSSRKDCDEIPVEGWVKPSLKFMLNTVNGTTRTINPLGFFKKEALPKCPQV
FNKLGMYPPDM

>AAQ24541.1 Allergen Blo t 1; cysteine protease [Blomia tropicalis]
MKFLLVAALCALVAIGSCKPTREEIKTFEQFKKVFGKVYRNAEEEARREHHFKEQLKWVE
EHNGIDGVEYAINEYSDMSEQEFSFHLSGGGLNFTYMKMEAAKEPLINTYGSLPQNFDWR
QKARLTRIRQQGSCGSCWAFAAAGVAESLYSIQKQQSIELSEQELVDCTYNRYDSSYQCN
GCGSGYSTEAFKYMIRTGLVEEENYPYNMRTQWCNPDVEGQRYHVSGYQQLRYQSSDEDV
MYTIQQHGPVVIYMHGSNNYFRNLGNGVLRGVAYNDAYTDHAVILVGWGTVQGVDYWIIR
NSWGTGWGNGGYGYVERGHNSLGINNFVTYATL
>AAQ24542.1 Allergen Blo t 3; trypsin [Blomia tropicalis]
MKVLVLFCLVSLAAAGPLKDALNKAQVDAFYAEGYIVDGSNAADGDAPYQVSLQRTSHFC
GGSIIADNYILTAAHCIQGLSASSLTIRYNTLRHNSGGLTVKASRIIGHEKYDSNTIDND
IALIQTASKMSTGTTNAQAIKLPEQGSDPKASSEVLITGWGTLSSGASSLPTKLQKVTVP
IVDRKTCNANYGAVGADITDNMFCAGILNVGGKDACQGDSGGPVAANGVLVGAVSWGYGC
AQAKYPGVYTRVGNYISWIKGKGVPV
>AAQ24543.1 Allergen Blo t 4; alpha amylase [Blomia tropicalis]
MIVELIVFSLALTIPYQTLASSPYSDPHFQHNRKVITHLMQWKFVDIADECERFLGPYGY
GGVQVSPVNEHASLDRHPWYELYQPVSYRIVSRSGTESQFRDMVHRCNKAGVRIYVDVVL
NHMTGPQSGVGIDGTHYDGNSMQYPGIPFGPNDFHGHESCPTSNLDIQNYDDPTQARNCR
LSGLRDLKQSADYVRTKQADFLNHLIDIGVAGFRFDASKHMWPGDLQAIYSKLHHLNEKY
FPSNSNPFIYHEVIYSNNNAISISDYTKLGRSIEFHYYHELCNVIRGNNKLKWLHNFGQP
WGMVPNDDALIMVDSHDLQRGHTGQLGLNINYFESRLLKVATAFMLAWPYGIPRVMSSYR
WNQKIVNGKDENDWIGPPADGSGSILSVKPNSDLTCNQEWICEHRWKQIYNMVQFRNTAG
DEPVKNWWDNGDYQIAFSRGAKTFIAINLQNGQHLKQNLHTGLPSGNYCNLVTGNVHNGK
CSGQMVHVDGSGHAMISIGANADDHL
>AAQ54603.1 Putative Gly d 2.03 [Glycyphagus domesticus]
MMKFIVLFALVAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ55550.1 Allergen Lep d 12 [Lepidoglyphus destructor]
MKSVLIFLVAIALFSANIVSADEQTTRGRHTEPDDHHEKPTTHATHEETTSTQHHHEEVT
TQTPHHEEKTTTEETHHSDDLIVHEGGKTYHVVCHEEGPIPHPGNVHKYIICSKSGSLWY
ITVMPCSIGTKFDPISRNCVLDN
>AAQ73484.1 Putative type 2 allergen Lep d 2.013 [Lepidoglyphus
destructor]
MMKFIVLFALIAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73486.1 Putative type 2 allergen Lep d 2.023 [Lepidoglyphus
destructor]
MMKFIVLFALDAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73487.1 Putative type 2 allergen Lep d 2.024 [Lepidoglyphus
destructor]
MKFIVLFALVAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGQSVTLDAKFVANQD
SAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEVT
AELIGDHGILACGTVNGQVE
>AAQ73488.1 Putative type 2 allergen Lep d 2.025 [Lepidoglyphus
destructor]
MMKFIVLFALVAVASAGNMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73489.1 Putative type 2 allergen Lep d 2.031 [Lepidoglyphus
destructor]
MMKFIVLFALVAVASAGKMKFKDCGKGEVTELDITDCSGGFCVLHRGKSVTLDAKFVANQ

DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73490.1 Putative type 2 allergen Lep d 2.035 [Lepidoglyphus destructor]
MMKFIVLFALNAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73491.1 Putative type 2 allergen Lep d 2.039 [Lepidoglyphus destructor]
MMKFIVLFALVAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVAGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGQVE
>AAQ73492.1 Putative type 2 allergen Lep d 2.042 [Lepidoglyphus destructor]
MMKFIVLFALVAVASAGKMKFKDCGKGEVTELDITDCSGDFCVLHRGKSVTLDAKFVANQ
DSAKATIKVLAKVVGTQIQVPGFDTDGCKIIKCPIKKGDPIDFKYSGTIPAITPKIKAEV
TAELIGDHGILACGTVNGTVE
>AAQ73493.1 Allergen Lep d 5; unknown function [Lepidoglyphus destructor]
MTGVKTHLEHELKRTDLNFLEKFNLDEITATLNVLTKELTEVQKHVKAVESDEVDVAIPN
PDEFRNEFDRLLIHMTEEQFAKLEQALAHLSHQVTELEKSKSKELKAQILREISIGLDFI
DSAKGHFERELKRADLNLAEKFNFESALSTGAVLHKDLTALATKVKAIETK
>AAQ73494.1 Allergen Lep d 5; unknown function [Lepidoglyphus destructor]
MTGVKTHLQHELKRTDLNFLEKFNLDEITAPLNVLTKELTEVQKHVKAVESDEVAIPNPD
EFRNEFDRLLIHMTEEQFAKLEQALAHLSHQVTELEKSKSKELKAQILREISIGLDFIDS
AKGHFERELKRADLNLAEKFNFESALSTGAVLHKDLTALATKVKAIETK
>AAP15199.1 Putative profilin-like protein [Humulus scandens]
MSWQAYVDDHLMCEIDGQHLTAAAIIGHDGSVWAQSSTFPQFKPEEIAAIMKDFEEPGSL
APTGLHLGGIKYMVIMGEQGAVIRGKKGAGGITVKKTGAAMIIGIYDEPLTPGQCNMIVE
RLGDYLIDQNL
>AAP15200.1 Putative profilin-like protein [Humulus scandens]
MSWQAYVDDHLMCEIDGNHLSAAAIIGHDGSVWAQSAAFPQLKPEEVTGIMNDFNEPGTL
APTGLYLGGTKYMVIQGEPGAVIRGKKGAGGVTIKKTSQALIIGVYDEPMTPGQCNMIVE
RLGDYLIDQGL
>AAP15201.1 Allergen profilin-like protein [Ambrosia artemisiifolia]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHDGVVWAQSATFPQVKPEEITGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTIKKTTMALIIGIYDEPMAPGQCNMIVE
RLGDYLLEQGF
>AAP15202.1 Allergen profilin-like protein [Ambrosia artemisiifolia]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHDGVVWAQSATFPQVKPEEITGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTIKKTTMSLIIGIYDEPMTPGQCNMLVE
RPGDYLLEQGF
>AAP15203.1 Allergen profilin-like protein [Ambrosia artemisiifolia]
MSWQAYVDEHLMCDIEGTGHHLTSAAILGHDGTVWAQSSNFPQFKPEEMKGIITEFDQAG
TLAPTGMFIAGAKYMVLQGEQGAVIRGKKGAGGICIKKTGQALVMGIYDEPVAPGQCNMV
VERLGDYLIDQGM
>AAQ83588.1 Allergen Fra e 1; Ole e 1-like protein [Fraxinus excelsior]
MEDVPQPPVSQFHIQGQVYCDTCRARFITKLSEFITGASVRLQCRDKENGDVTFTEIGYT
RGEGLYSMFVERDHKNEFCEITLLSSGRKDCNEIPIEGWVKPSLKFILNTVNGTTRTINP
LGFFKKEALPQCAQVYNKLGMYPPNM
>AAQ91847.1 Allergen Ara h 8; pathogenesis related protein, PR-10, Bet v 1-like protein [Arachis hypogaea]
MGVFTFEDEITSTVPPAKLYNAMKDADSITPKIIDDVKSVEIVEGNGGPGTIKKLTIVED
GETKFILHKVESIDEANYAYNYSVVGGVALPPTAEKITFETKLVEGPNGGSIGKLTLKYH
TKGDAKPDEEELKKGKAKGEGLFRAIEGYVLANPTQY

>AAN11300.1 Allergen Cand a 3; peroxysomal protein [Candida albicans]
MVKVLLALTSYNETFYSDGKKTGVFVVEALHPFEVFRKKGYEIQLASETGTFGWDDHSVV
PDFLNGEDKEIFDNVNSEFNVALKNLKKASDLDPNDYDIFFGSAGHGTLFDYPHAKDLQK
IATTVYNKGGVVSAVCHGPAIFENLNDPKTGEPLIKGKKITGFTDIGEDILGVTDIMKKG
NLLTIKQVAEKEGATYIEPEGPWDNFTVTDGRIVTGVNPQSAVKTAEDVIAAFECN
>AAN18044.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
IGQVYCDTCRAGFITELSEFIPGASVRLQCKDKENGDITFTEVGYTRAEGLYSMLVERDH
KNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQ
VYNKLGMYPPNM
>AAO22132.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
SDSYCDTCRAGFITELSEFIPGASLRLQCKDKENGDVTFTEVGYTRAEGLYSMLVERDHK
NEFCEITLISSGRKDCNEIPTEGWVKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQV
YNKLGMYPPTWNVTI
>AAO22133.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
RTVTGYCRAGFITELSEFIPGASLRLQCKDKENGDVTFTEVGYTRAEGLYSMLVERDHKN
EFCEITLISSGRKDCNEIPTEGWVKPSLKFILNTVNGTTRTVNPLGFFKKEALPKCAQVY
NKLGMYPPNHGMSR
>AAO33897.1 Allergen Ole e 3 allergen [Olea europaea]
EHERIFKRFDAKGDGKISSSELGETLKPLGSVTLEEIQRMMAEIDTDGDGFL
>AAO73464.1 Allergen Der p 11; paramyosin [Dermatophagoides
pteronyssinus]
MSARTAKYMYRSSGAGASGDISVEYGTDLGALTRLEDKIRLLSDDLESEREMRQRIEREK
AELQIQVMSLSERLEEAEGSSESVTEMNKKRDSELAKLRKLLEDVHMESEETAHHLRQKH
QAAVHEMQDQLDQLQKAKNKSDKEKQKFQAEVFELLSQLETANKEKLTALKSVEKLEYTV
HELNIKIEEINRTVIELTSHKQRLTQENTELIKEVHEVKLQLDNANHLKQQIAQQLEDTR
HRLEEEERKRSSLENHAHTLEVELESLKVQLDDESEARLELERQLTKANGDAASWKSKYE
AELQAHADEVEELRRKMAQKISEYEEQLEALLNKCSSLEKQKSRLQSEVEVLIMDLEKAA
AHAQQLEKRVAQLEKINLDLKDKLEEVTMLMEQAQKELRIKIGELQKLQHEYEKVRDQRD
QLARENKKLTDDLAEAKSQLNDAHRRIHEQEIEIKRLENERDELSAAYKEAETLRKQEEA
KNQRLIAELAQVRHDYEKRLAQKDEEIEALRKQYQIEIEQLNMRLAEAEAKLKTEIARLK
KKYQAQITELELSLDAANKANIDLQKTIKKQALQITELQAHYDEVHRQLQQAVDQLGVTQ
RRCQALQAELEEMRIALEQASRAKRQAEQLHEEAVVRVNELTTINVNLASAKSKLESEFS
ALQADYDEVHKELRISDERVQKLTIELKSTKDLLIEEQERLVKLETVKKSLEQEVRTLHV
RIEEVEANALAGGKRVIAKLESRIRDVEIEVEEERRRHAETEKMLRKKDHRVKELLLQNE
EDHKQIQLLQEMTDKLNEKVKVYKRQMQEQEGMSQQNLTRVRRFQRELEAAEDRADQAES
NLSFIRAKHRSWVTTSQVPGGTRQVFTTQEETTNY
>AAO91800.1 Allergen Alt a 8; mannitol dehydrogenase [Alternaria
alternata]
MPITVPQATELKDLFSLKGKVVIVTGASGPTGIGTEAARGCAEYGADLAITYNSRAEGAE
KNAKEMSEKYGVKVKAYKCQVNEYAQCEKLVQDVIKDFGKVDVFIANAGKTADNGILDAT
VEQWNEVIQTDLTGTFNCARAVGLHFRERKTGSLVITSSMSGHIANFPQEQASYNVAKAG
CIHLAKSLANEWRDFARVNSISPGYIDTGLSDFVPQDIQKLWHSMIPMGRDAKATELKGA
YVYFASDASSYCTGSDLLIDGGYCVR
>AAO91801.1 Allergen Cla h 8; NADP-dependent Mannitol dehydrogenase
[Cladosporium herbarum]
MPGQQATKHESLLDQLSLKGKVVVVTGASGPKGMGIEAARGCAEMGAAVAITYASRAQGA
EENVKELEKTYGIKAKAYKCQVDSYESCEKLVKDVVADFGQIDAFIANAGATADSGILDG
SVEAWNHVVQVDLNGTFHCAKAVGHHFKERGTGSLVITASMSGHIANFPQEQTSYNVAKA
GCIHMARSLANEWRDFARVNSISPGYIDTGLSDFVPKETQQLWHSMIPMGRDGLAKELKG
AYVYFASDASTYTTGADLLIDGGYTTR
>AAP57094.1 Putative arginine kinase [Dermatophagoides farinae]
MVDQAVIDKLEAGFQKLQSSAECHSLLKKYLTRNVLDACKGRKTGMGATLVDVVQSGFEN
LDSGVGLYAPDAESYTLFKELFDPVIEDYHKGFKPTDKHPQTDFGDVNTLCNVDPNNEFV
ISTRVRCGRSLQGYPFNPCLTEAQYKEMEEKVKGQLNSFEGELKGTYYPLLGMDKATQQQ

LIDDHFLFKEGDRFLQAANACRFWPVGRGIFHNDNKTFLIWVNEEEHLRIISMQKGGDLK
QVFSRLINGVNHIEKKLPFSRDDRLGFLTFCPTNLGTTIRASVHIKLPKLAADRKXLEEV
AGKYNLQVRGTAGEHTESVGGVYDISNKRRMGLTEYQAVKEMQDGILELIKIEKSM
>AAP35065.1 Allergen Der f 29; cyclophilin [Dermatophagoides farinae]
MALPRVFFDIAADNQPLGRIVIELRSDVVPKTAENFRALCTGEKGFGFKSSSFHRIIPNF
MIQGGDFTNHNGTGGKSIYGNKFADENFTLQHTGPGIMSMANAGPNTNGSQFFITTVKTT
WLDGKHVVFGSVVEGMDIVKKVESYGSQSGKPSKKVTIANCGQL
>AAP35069.1 Putative Blo t 8 allergen [Blomia tropicalis]
MAPLKIGYWDIRGFAEPIRMLLKHLNIEFEETRYGFGNDSEESFPNRDEWLAEKFTLGFE
FPNLPYLFDGDFKMTESVAILKRLARANGMIATTEPALSYSEMIEAMVIDIRNRLVYVIY
AENSGTPEEFEQKLADLRERLETSLGQLEAFFQKHGSQWVAGDKLTYVDFLAYEYLDWYR
VFVKSTPIFEKFAKVSDYMKRFEELPSLKEYIASDEHRSASCLSPFARIGHRWAKE
>AAP35073.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MVSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDANQNTKT
AKIEIKASLDGLEIDVPGIDTNACHFMKCPLVKGQQYDAKYTWNVPKIAPKSENVVVTVK
LVGDNGVLACAIATHGKIRD
>AAP35075.1 Allergen Der f 1 allergen [Dermatophagoides farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDLS
>AAP35077.1 Allergen Der f 7 allergen [Dermatophagoides farinae]
MMKFLLIAAVAFVAVSADPIHYDKITEEINKAIDDAIAAIEQSETIDPMKVPDHADKFER
HVGILDFKGELAMRNIEARGLKQMKRQGDANVKGEEGIVKAHLLIGVHDDIVSMEYDLAY
KLGDLHPTTHVISDIQDFVVALSLEIPDEGNITMTSFEVRQFANVVNHIGGLSILDPIFG
VLSDVLTAIFQDTVRKEMTKVLAPAFKRELEKN
>AAP35078.1 Allergen Der f 13; fatty acid-binding protein
[Dermatophagoides farinae]
MASIEGKYKLEKSEKFDEFLDKLGVGFMVKTAAKTLKPTFEVAIENDQYIFRSLSTFKNT
EAKFKLGEEFEEDRADGKRVKTVIQKEGDNKFVQTQFGDKEVKIIREFNGDEVVVTASCD
GVTSVRTYKRI
>AAP35082.1 Allergen Der f Gal d 2 allergen [Dermatophagoides farinae]
MKFFLLSFVLMVVAATATYAAHVGSGSRDNNNNKPVPAEGFAKASNEFGFHLLKEVIQHR
SSSGSRGSSENVLFSPYSVAVALSMVHQGTQGSTAEQFKRVLYYDRVQQLNGGEYQTVAN
SVKQIQNQINQSDQSNQFDWGNMLMVDQQMPVKDQYKKIIEQYYDGQVMSVDFRKESKNV
MERINQFVSNKTHGLIDRMLEQPPSADTGLALINAVYFKGEWLKPFDSMRTEQSVFYGHH
GQEYKNVQYINGQGPYGYVEVPQWNSDLIQLPYKGEDIAFYGVLPRERNYDLDKIRQSIN
STFVDEIVGQITGSQSSTVYFPKIELSTSYQLPEILKSMGLQDVFTESADLSGITDKKPM
KIDDAIHKAKLILNEQGTEAGAGTYIQMAVLSALETSHTFRFDHPFMYFIRHLPTGQILF
LGEIHDF
>AAR17475.1 Allergen Pen c 24; elongation factor 1 beta [Penicillium
citrinum]
MGFTDFVSDAGLSLANNYLATRSYIVGHAPSQADVVTYKAFTASPDAEKYPHVARWYKHI
ASYESEFPTLPGDASKAFTAYGPEGSEASANPKDKPAEEEEEDLFASDSEDEDPAVVAE
RNKNLEEYKKKKAAKGPKPAAKSLVTLEVKPWDDETNLEELEANVRAIEMDGLVWGASKF
VAVGFGIKKLQINLVVEDEKVSTDELQAQIEEDEDHVQSTDVAAMQKL
>AAR21071.1 Putative PR5 allergen Jun r 3.1 precursor [Juniperus rigida]
MARVSELALLLVATLAISLHMQEAGAVKFDIKNQCGYTVWAAGLPGGGKRLDQGQTWTLN
LAAGTASARFWGRTGCTFDASGKGSCKTGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDV
SLVDGFNIPLAINPTNAQCTAPACKADINAVCPSELKVEGGCNSACNVFQTDQYCCRNAY
VDNCPATNYSKIFKNQCPQAYSYAKDDTATFACASGTDYSIVFCP
>AAR21072.1 Putative PR5 allergen Jun r 3.2 precursor [Juniperus rigida]

MARVSELALLLVATLAISLHMQEAGAVKFDIRNQCGYTVWAAGLPGGGKRLDQGQTWTLN
LAAGTASARFWGRTGCTFDASGKGSCKTGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDV
SLVDGFNIPLAINPTNAQCTAPACKADINAVCPSELKVEGGCNSACNVFQTDQYCCRNAY
VDNCPATNYSKIFKNQCPQAYSYAKDDTATFACASGTDYSIVFCP
>AAR21073.1 Allergen Cup s 3; thaumatin-like protein [Cupressus sempervirens]
MARVSELALLLVATSAISLHMQEAGAVKFDIKNQCRYTVWAAGLPGGGKRLDQGQTWTVN
LAAGTASARFWGRTGCTFDASGKGSCRSGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDV
SLVDGFNIPLAINPTNTKCTAPACKADINAVCPSELKVDGGCNSACNVLQTDQYCCRNAY
VDNCPATNYSKIFKNQCPQAYSYAKDDTATFACASGTDYSIVFCP
>AAR21074.1 Allergen Cup s 3; thaumatin-like protein [Cupressus sempervirens]
MARVSELALLLVATLAISLHMQEAGAVKFDIKNQCGYTVWAAGLPGGGKRLDQGQTWTVN
LAAGTASARFWGRTGCTFDASGKGSCRSGDCGGQLSCTVSGAVPATLAEYTQSDKDYYDV
SLVDGFNIPLAINPTNTKCTAPACKADINAVCPSELKVDGGCNSACNVLQTDQYCCRNAY
VDNCPATNYSKIFKNQCPQAYSYAKDDTATFACASGTDYSIVFCP
>AAR22488.1 allergen Mal d 3 [Malus domestica]
MACSAVIKLALVVALCMAVSVAHAITCGQVTSSLAPCIGYVRSGGAVPPACCNGIRTING
LARTTADRQTACNCLKNLAGSISGVNPNNAAGLPGKCGVNVPYKISTSTNCATVK
>1LLT_A Allergen Chain A, Birch Pollen Allergen Bet V 1 Mutant E45s [Betula pendula]
GVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENISGNGGPGTIKKISFPE
GLPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNKY
HTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>CAD21706.2 Putative Cu /Zn super-oxide dismutase [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>AAR92223.1 Allergen Act d 4; phytocystatin [Actinidia deliciosa]
MVPKPLSLLLFLLLALSAAVVGGRKLVAAGGWRPIESLNSAEVQDVAQFAVSEHNKQAND
ELQYQSVVRGYTQVVAGTNYRLVIAAKDGAVVGNYEAVVWDKPWMHFRNLTSFRKV
>P83542.1 Allergen Pol g 1; phospholipase A1 [Polistes gallicus]
GITPDCTFNEKDIELHVYSRDKRNGIILKKEILKNYDLFKES
>AAS02108.1 Putative FAD-linked oxidoreductase BG60 [Cynodon dactylon]
MARSRAFAFALLICAVAASCHVALSAPPPYAKQVERDFLTCLTKDIPPRQLYAKSSPAYA
SVWSSTVRNIKFLSDKTVKPLYIITPTNASHIQAAVVCGRRHGMRIRVRSGGHDYEGLSY
RSEKPEPFAVVDMNKMRAVSIDGKAATAWVDSGAQLGDLYYGIAKASPKLGFPAGVCTTI
GVGGHFSGGGFGMLLRKYGTAADNVIDAKVVDAQGRLLDRKAMGEDHFWAIRGGGGESFG
IVASWQVKLLPVPPKVTVFQVHKGIKEGAIDLVTKWQTVAPALPDDLMIRIMAMGQGAMF
EALYLGTCKDLVLLMTARFPELGMNATHCKEMTWIESVPYIPMGPKGTVRDLLNRTSNIK
AFGKYKSDYVLEPIPKSDWEKIFTWLVKPGAGVMIMDPYGGGIASVPESATPFPRRSGVL
FNIQYVVYWFGEGAAALPTQWTRDIYDFMTPYVSKNPRQAYVNYRDLDLGVNQVVGNVST
YASGKVWGEKYFKGNFERLARTKGKIDPEDYFRNEQSIPPLL
>CAE85467.1 Allergen putative latex allergen hev b 7.02 [Hevea brasiliensis]
ATGSTTLTQGKKITVLSIDGGGIRGIIPGIILASLESKLQDLDGPDARIADYFDIIAGTS
TGGLITTMLTAPNEDKKPMYQAKDIKDFYLENCPKIFPKESRDNYDPIHSIGPIYDGEYL
RELCNNLLKDLTVKDTLTDVIIPTFDIKLLLPVIFSSDDAKCNALKNARLADVCISTSAA
PVLLPAHSFTTEDDKNIHTFELIDGGVAATNPTLLALTHIRNEIIRQNPRFIGANLTESK
SRLVLSLGTGKSEYKEKYNADMTSKWRLYNWALYNGNSPAVDIFSNASSDMVDFHLSALF
KSLDCEDYYLRIQDDTLTGEESSGHIATEENLQRLVEIGTRLLEKQESRINLDTGRLESI
PGASTNEAAITKFAKLLSEERKLRQLK
>CAF25232.1 Allergen Pis s 1; 7S globulin/ vicilin-like protein [Pisum sativum]

SRSDQENPFIFKSNRFQTLYENENGHIRLLQKFDKRSKIFENLQNYRLLEYKSKPHTLFL
PQYTDADFILVVLSGKATLTVLKSNDRNSFNLERGDAIKLPAGTIAYLANRDDNEDLRVL
DLAIPVNKPGQLQSFLLSGTQNQPSLLSGFSKNILEAAFNTNYEEIEKVLLEQQEQEPQH
RRSLKDRRQEINEENVIVKVSREQIEELSKNAKSSSKKSVSSESGPFNLRSRNPIYSNKF
GKFFEITPEKNQQLQDLDIFVNSVDIKEGSLLLPNYNSRAIVIVTVTEGKGDFELVGQRN
ENQGKENDKEEEQEEETSKQVQLYRAKLSPGDVFVIPAGHPVAINASSDLNLIGFGINAE
NNERNFLAGEEDNVISQVERPVKELAFPGSSHEVDRLLKNQKQSYFANAQPLQRE
>CAF25233.1 Allergen Pis s 1; 7S globulin/ vicilin-like protein [Pisum sativum]
SRSDQENPFIFKSNRFQTLYENENGHIRLLQKFDKRSKIFENLQNYRLLEYKSKPRTLFL
PQCTDADFILVVLSGKATLTVLKSNDRNSFNLERGDTIKLPAGTIAYLANRDDNEDLRVL
DLTIPVNKPGQLQSFLLSGTQNQPSLLSGFSKNILEAAFNTNYEEIEKVLLEQQEQEPQH
RRSLKDRRQEINEENVIVKVSREQIEELSKNAKSSSKKSVSSESGPFNLRSRNPIYSNKF
GKFFEITPEKNQQLQDLDIFVNSVDIKEGSLLLPNYNSRAIVIVTVTEGKGDFELVGQRN
ENQGKENDKEEEQEEETSKQVQLYRAKLSPGDVFVIPAGHPVAINASSDLNLIGFGINAE
NNERNFLAGEEDNVISQVERPVKELAFPGSSHEVDRLLKNQKQSYFANAQPLQRE
>Q9NJA9.1 Allergen Ani s 2; paramyosin [Anisakis simplex]
MSDTLYRSPSMAIRSSTADMGALTSMSVADLGSLTRLEDKIRLLQDDFESERELRNRIER
ERADLSVQLIALTDRLQDAECATDSQIESNRKREVELSKLRKLLEESQLENEDAMNVLRK
KHQDVCLDYTEQIEQLQKKNSKIDRERQRLQHEVIELTATIDQLQKDKHVAEKMAQKFEQ
QTIELSNKVEDLNKHVNDLAQQRQRLQAENSDLLAEIHDQKVQLDNLQHVKYQLAQQLEE
SRRRLEDAERERSQMQAQLHQVQLELDSVRVALDEESAARVEAEHKLSLANTEITQWKSK
FDAEVALHHEEVEDLRKKMMQKQAEYEEQIEIMLQKVSQLEKAKARLQSEVEVLIVDLEK
AQNTIAILERAKEQLEKQVLEMKSRIDELLVELEAAQREARAALAELQKMKQLYEKAVEQ
KEALARENKKLQDDLHEANEALADANRKLHELDLENARLAGEIRDLQVALKESEAARRDA
EARAQRALAELQQVRIEMERRLQEKEEEMEALRKSMQFEIDRLTAALADAEARMKAEIAR
LRKKYQAEIAELEMTVDNLNRANLEAQKTIKKQSEQIIQLQANLEDTQRQLQQTLDQYAL
AQRKISALSAELEECKTALDNAIRARKQAEADLEEAHVRISDLTSINSNLTAIKNKLETE
LSTAQADLDEVTKELHAADERANRALADAARAVQELHEEQEHSMKIDALRKSLEEQVKQL
QVQIQEAEAAALLGGKRVIAKLETRIRDLEVALDEETRRHKETQSALRKKDRRIKEVQMQ
IDEEHKMFVMAQDTADRMLEKLNIQKRQLGEAEAMTMQNLQRVRRYQRELEDAEGRADQA
ESSLNLIRAKHRGTVAVGKATDVYVVEED
>Q25632.1 Allergen RecName: Full=Tropomyosin; AltName: Full=MOv-14; AltName: Full=Ov-tmy-1 [Onchocerca volvulus]
MDAIKKKMQAMKIEKDNALDRADAAEEKVRQMTEKLERIEEELRDTQKKMMQTENDLVKA
QEDLSVANTNLEDKEKKVQEAEAEVAALNRRMTLLEEELERAEERLKIATDKLEEATHTA
DESERVRKVMENRSFQDEERANTVESQEKEAQLLAEEADRKYDEVARKLAMVEADLERAE
ERAEAGENEIVELEEELRVVGNNLKSLEVSEEKALQREDSYQEQIRTVSVRLKEAETRAE
FAERSVQKLQKKVDRLEDELVHEKERYKNISEELDQTFQELSGY
>AAS47035.1 Allergen Pru av 1; pathogenesis-related protein / PR-10 / Bet v 1-like protein [Prunus avium]
MGVFTYSDESTSVIPPPRLFKALVLEADTLIPKIAPQSVKTAEIVEGDGGVGTIKKISFG
EGSHYSYVKHRIDGLDKDNFVYNYTLVEGDALSDKIEKITYEIKLVASADGGSIIKSTSN
YHTTGDVEIKEEDVKAGKEKATGLFKLIENYLAANPDACN
>AAS47036.1 Allergen Pru av 1; pathogenesis-related protein / PR-10 / Bet v 1-like protein [Prunus avium]
MGVFTYADESTSVIPPPRLFKALVLEADTLIPKIAPQSVKSAEIVEGDGGVGTIKKISFG
EGSHYSYVKHRIDGLDKDNFVYSYSLVEGDALSDKVEKISYEIKLVASADGGSIIKSTSN
YHTTGDVEIKEEDVKAGKEKATGLFKLIENYLVANPDAYN
>AAS47037.1 Allergen Pru av 1; pathogenesis-related protein / PR-10 / Bet v 1-like protein [Prunus avium]
MGVFTYADESTSVITPPRLFKALVLEADTLIPKIAPQSVKGAEIVEGDGGVGTIKKISFG
EGSHYSYVKHRIDGLDKDNFVYSYSLVEGDALSDKVEKISYEIKLVASADGGSIIKSTSN
YHTTGDVEIKEEDVRAGKEKATGLFKLIENYLVANPDAYN

>CAF32566.2 Allergen Group 4 allergen-like [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPIYIVTPT
NASHIQSAVVCGRRHGVRIRVRSGGHDYEGLSYRSLQPEEFAVVDLSKMRAVWVDGKART
AWVDSGAQLGELYYAIHKASTVLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDANGTLHDKKSMGDDHFWAVRGGGGESFGIVVAWKVRLLPVPPTVTVFKIPKKASE
GAVDIINRWQVVAPQLPDDLMIRVIAQGPTATFEAMYLGTCQTLTPMMSSKFPELGMNAS
HCNEMSWIQSIPFVHLGHRDNIEDDLLNRNNTFKPFAEYKSDYVYEPFPKRVWEQIFSTW
LLKPGAGIMIFDPYGATISATPEWATPFPHRKGVLFNIQYVNYWFAPGAGAAPLSWSKEI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTFSSGLVWGQKYFKGNFQRLAITKGK
VDPTDYFRNEQSIPPLIKKY
>CAF32567.2 Allergen Group 4 allergen-like [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPIYIVTPT
NASHIQSAVVCGRRHGVRIRVRSGGHDYEGLSYRSLQPEEFAVVDLSKMRAVWVDGKART
AWVDSGAQLGELYYAIHKASPVLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDANGTLHDKKSMGDDHFWAVRGGGGESFGIVVAWKVRLLPVPPTVTVFKIPKKASE
GAVDIINRWQVVAPQLPDDLMIRVIAQGPTATFEAMYLGTCQTLTPMMSSKFPELGMNAS
HCNEMSWIQSIPFVHLGHRDNIEDDLLNRNNTFKPFAEYKSDYVYEPFPKEVWEQIFSTW
LLKPGAGIMIFDPYGATISATPEWATPFPHRKGVLFNIQYVNYWFAPGAGAAPLSWSKEI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTFSSGLVWGQKYFKGNFQRLAITKGK
VDPTDYFRNEQSIPPLIKKY
>AAS67041.1 Allergen Pol d 1; phospholipase A1 [Polistes dominula]
MNFKYSILFICFVKVLDNCYAADDLTTLRNGTLDRGITPDCTFNEKDIELHVYSRDKRNG
IILKKEILKNYDLFQKSQISHQIAILIHGFLSTGNNENFDAMAKALIEIDNFLVISVDWK
KGACNAFASTNDVLGYSQAVGNTRHVGKYVADFTKLLVEQYKVPMSNIRLIGHSLGAHTS
GFAGKEVQRLKLGKYKEIIGLDPAGPSFLTNKCPNRLCETDAEYVQAIHTSAILGVYYNV
GSVDFYVNYGKSQPGCSEPSCSHTKAVKYLTECIKRECCLIGTPWKSYFSTPKPISQCKR
DTCVCVGLNAQSYPAKGSFYVPVDKDAPYCHNEGIKL
>AAS67042.1 Allergen Pol d 1; phospholipase A1 [Polistes dominula]
ADDLTTLRNGTLDRGITPDCTFNEKDIELHVYSRDKRNGIILKKEILKNYDLFQKSQISH
QIAILIHGFLSTGNNENFDAMAKALIEIDNFLVISVDWKKGACNAFASTNDVLGYSQAVG
NTRHVGKYVADFTKLLVEQYKVPMSNIRLIGHSLGAHTSGFAGKEVQRLKLGKYKEIIGL
DPAGPSFLTNKCPNRLCETDAEYVQAIHTSAILGVYYNVGSVDFYVNYGKSQPGCSEPSC
SHTKAVKYLTECIKRECCLIGTPWKSYFSTPKPISQCKRDTCVCVGLNAQSYPAKGSFYV
PVEKDAPYCHNEGIKL
>AAS67043.1 Allergen Pol d 1; phospholipase A1 [Polistes dominula]
ADDLTTLRNGTLDRGITPDCTFNEKDIELHVYSRDKRNGIILKKEILKNYDLFQKSQISH
QIAILIHGFLSTGNNENFDAMAKALIEIDNFLVISVDWKKGACNAFASTNDVLGYSQAVG
NTRHVGKYVADFTKLLVEQYKVPMSNIRLIGHSLGAHTSGFAGKEVQRLKLGKYKEIIGL
DPAGPSFLTSKCPDRLCETDAEYVQAIHTSAILGVYYNVGSVDFYVNYGKSQPGCSEPSC
SHTKAVKYLTECIKRECCLIGTPWKSYFSTPKPISQCKRDTCVCVGLNAQSYPAKGSFYV
PVDKDAPYCHNEGIKL
>AAS67044.1 Allergen Pol d 1; phospholipase A1 [Polistes dominula]
ADDLTTLRNGTLDRGITPDCTFNEKDIELHVYSRDKRNGIILKKEILKNYDLFQKSQISH
QIAILIHGFLSTGNNENFDAMAKALIEIDNFLVISVDWKKGACNAFASTNDVLGYSQAVG
NTRHVGKYVADFTKLLVEQYKVPMSNIRLIGHSLGAHTSGFAGKEVQRLKLGKYKEIIGL
DPAGPSFLTSKCPDRLCETDAEYVQAIHTSAILGVYYNVGSVDFYVNYGKSQPGCSEPSC
SHTKAVKYLTECIKRECCLIGTPWKSYFSTPKSISQCKRDTCVCVGLNAQSYPAKGSFYV
PVEKDAPYCHNEGIKL
>AAS75297.1 Allergen Alt a 1; unknown function [Alternaria alternata]
MQFTTIASLFAAAGLAAAAPLESRQDTASCPVTTEGDYVWKISEFYGRKPEGTYYNSLGF
NIKATNGGTLDFTCSAQADKLEDHKWYSCGENSFMNFSFGSDRSGLLLKQKVSDDITYVA
TATLPNYCRAGGNGPKDFVCQGVADAYITLVTLPKSS
>BAD13150.1 putative polcalcin Phl p 7 (Calcium-binding pollen allergen
Phl p 7) (P7) [Oryza sativa Japonica Group]

MAAASSADMERIFKRFDTNGDGKISLSELTDALRTLGSTSADEVQRMMAEIDTDGDGFID
FNEFISFCNANPGLMKDVAKVF
>AAS75831.1 Putative group 2 allergen Sui m 2 [Suidasia medanensis]
MKFIILAMFVAVAAAGEMKFQDCGHGEVKKLLVSDCSGDYCIIHKGKKLSMEADFVANQD
SPTAVIKISAKVNGVELQVPGIETNGCHHMKCPLVKGQSYQFKYDLVIPQILPNVKADVT
ASLTGAHGLLACGTVHGEVQN
>AAS77253.1 Allergen Fel d 4; lipocalin [Felis catus]
MKLLLLCLGLILVCAHEEENVVRSNIDISKISGEWYSILLASDVKEKIEENGSMRVFVEH
IKALDNSSLSFVFHTKENGKCTEIFLVADKTKDGVYTVVYDGYNVFSIVETVYDEYILLH
LLNFDKTRPFQLVEFYAREPDVSQKLKEKFVKYCQEHGIVNILDLTEVDRCLQARGSEVA
QDSSVE
>CAG24374.1 Allergen Group 1 allergen-like [Phleum pratense]
IPKVPPGPNITATYGGKWLDAKSTWYGKPTAAGPKDNGGACGYKDVDKPPFSGMTGCGNT
PIFKSGRGCGSCFEIKCTKPEACSGEPVVVHITDDNEEPIAAYHFDLSGIAFGSMAKKGD
EQKLRSAGEVEIQFRRVKCKYPEGTKVTFHVEKGSNPNYLALLVKFVAGDGDVVAVDIKE
KGKDKWIALKESWGAIWRIDTPEVLKGPFTVRYTTEGGTKGEAKDVIPEGWKADTCYESK
>P83834.1 Allergen Cuc m 3; pathogenesis related protein, PR-1 [Cucumis
melo]
DFVDAHNAARAQVGVGPVHWTVDAYARQYANDRNLVHSATR
>AAS93669.1 Sar s 1 allergen Yv5032C08 [Sarcoptes scabiei]
MSFIRFFSIFLLCFVSFLVARIECDEFEIKTFEQFKARFNKTYSNYFIETYRRRVFYRTL
KYVEENKHRGVSINAHADLTVNEFSAKYLSKAPKTEDLLDEYKLFSCDKFEGVKLGELDL
RKEGRVTKIREQLACGSCWAFSVTANVESLLLGSNCTRWSTNDWLSPQQLVDCASDHGCN
GEKTSTGLEYVQHKGIVKEGVYPYKARVGVCKHPCGPYYHIKSFCGISPPDPDQVKIALS
KTRSALSASIIVYDVEHLKNYNGKLPLADDGKLIGEQLSHAINIVGYTQRNGVEVWIVRN
SWGETWGDHGYGYFKILPKRGVMGITRMVIVADLGKETVA
>AAS93674.1 Sar s 1 allergen SMIPP-C Yv4028C12 [Sarcoptes scabiei]
MERKQFNSLLYQLILSVAIITRGYYFETTPSIDDENVRLSDLDWIGEPDDSDFKLPDSFI
RKFKQDLMRDLNKKCRNHFSIIKLIHPGLQFCKVPKVYQALPTWFDLRNLELVTPTRDNS
TEKQCKASWAFGPIASLESAWLESHDRIASDAFSLSAQNLIDCAGYQGCNGGVDVIEAFN
YLQEKGVVKEENYKYKGKKHACRWRLFYRRYKIKSYCAICPATVETIKKFLFKHKTALTT
VISVRNLTAFKNIDDEILYEDEGPSVQRRLVVNIGGWRHDDATDRDYWVVKNSWGRKWGM
GGYGFVDAEENLFGILDQNYLLSVKDEVIPFEAEPDDS
>AAS93675.1 Sar s 1 allergen SMIPP-C Yv5009F04 [Sarcoptes scabiei]
MESKKFKSFLFQLIISAAIITRGYYFETTPSDAEENARLSDVRYTGEPDDPDFKLPDSFI
QKFKKDLMRELTRKCRKGFRQARLEHPELQFCKIPKVFQKLPKWFDLRNLEFVTPTRDNS
TESKCKASWAFGPVASMESAWLESHDRIASDSFFLSPQNLIDCAGYQGCDGGVDVIEAFN
YMKHKGIVKEEFYKYRAKKHRCRKRLRARRYKIRSYCAICPATIFTIKKFLFKHKTALTT
VISVRNLTAFKHIDDEILYEDEGTRVQRRLVVNIVGWRHDDATDRDYWVVKNSWGKKWGM
GGYGFVDAENNPLHILDHNYLVRVKEDVIPFENEPEDFE
>AAS93676.1 Sar s 1 allergen SMIPP-C Yv6018B11 [Sarcoptes scabiei]
LMRELTRKCRKGFRRARLEHPELQFCEIPKVFQKLPKWFDLRNLELVTPTRDNSTEKKCK
ASWAFGPVASMESAWLESHDRIASDSFFLSPQNLIDCAGYQGCDGGVDVIEAFNYMKHKG
IVKEEFYKYKAKKHHCRKRLRARRYKIRSYCAICPATIFTIKKFLFKLKTALTTVISVRN
LTAFKNIDDEILYEDEGPRVQRRLVVNIVGWRHDDATDRDYWVVKNSWGKKWGMGGYGFV
DAENNPFHILDHNYLVRVKEDVIPFENEPEDFE
>AAR98518.1 Allergen Hev b 4; lecithinase-like protein [Hevea
brasiliensis]
MASLAYSLFILSLFTFTLLNPVCTELDEYLFSFGDGLYDAGNAKFIYPDKYLPSYHHPYG
TTFFDYPTGRFSDGRTVVDFVAENVSLPRIPPFKNKEANFTYGANFASEGATASDSNPLI
DFRSQIRDFGELKLEWAVQLVNVTELARRLKKAVYLISFGADDYLNYEIPSEASREQLES
IVDVVLGNISDRIKELYDFGARKFVVENVAPLGLIPFIKQTSDNSTLFYELASLHAMKLP
QILEKIQDGYLFPEFNYTVFNYFGIIKEIIDAPGEHGFKYGDIACCGNSTYRGQACGFLD
YEFCVCGNKTEYLFFDGTHNTDAANNLLAELMWDKESGFISPYGVKDFFPSPTTIQTLLT

EATALG
>AAS98889.1 Putative allergen Pen m 2 [Fenneropenaeus chinensis]
YNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILELIKMEKEM
>AAS98890.1 Putative allergen Pen m 2 [Fenneropenaeus chinensis]
YNLQARGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMLDGILELIKMEKEM
>AAT00594.1 Allergen conarachin [Arachis hypogaea]
GNTLEAAFNAEFNEIRRVLLEENAGGEQEERGQRRRSTRSSDNEGVIVKVSKEHVQELTK
HAKSVSKKGSEEEDITNPINLRDGEPDLSNNFGRLFEVKPDKKNPQLQDLDMMLTCVEIK
EGALMLPHFNSKAMVIVVVNKGTGNLELVAVRKEQQQRGRREQEWEEEEDEEEEGSNRE
VRRYTARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHRIFLAGDKDNVIDQIEK
QAKDLAFPGSGEQVEKLIKNQRESHFVSARPQSQSPSSPEKEDQEEENQGGKGPLLSILK
AFN
>AAT00595.1 Allergen conarachin [Arachis hypogaea]
LEAAFNAEFNEIRRVLLEENAGGEQEERGQRRWSTRSSENNEGVIVKVSKEHVEELTKHA
KSVSKKGSEEEGDITNPINLREGEPDLSNNFGKLFEVKPDKKNPQLQDLDMMLTCVEIKE
GALMLPHFNSKAMVIVVVNKGTGNLELVAVRKEQQQRGRREEEEDEDQEEEGSNREVRRY
TARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHRIFLAGDKDNVIDQIEKQAKD
LAFPGSGEQVEKLIKNQRESHFVSARPQSQSPSSPEKEDQEEENQGGKGPLLSILKAFN
>AAT00596.1 Allergen conarachin [Arachis hypogaea]
GFDQRSRQFQNLQNHRIVQIEAKPNTLVLPKHADADNILVIQQGQATVTVANGNNRKSFN
LDEGHALRIPSGFISYILNRHDNQNLRVAKISMPVNTPGQFEDFFPASSRDQSSYLQGFS
RNTLEAAFNAEFNEIRRVLLEENAGGEQEERGQRRWSTRSSENNEGVIVKVSKEHVEELT
KHAKSVSKKGSEEGDITNPINLREGEPDLSNNFGKLFEVKPDKKNPQLQDLDMMLTCVEI
KEGALMLPHFNSKAMVIVVVNKGTGNLELVAVRKEQQQRGRREEEEDEDEEEEGSNREVR
RYTARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHRIFLAGDKDNVIDQIEKQA
KDLAFPGSGEQVEKLIKNQKESHFVSARPQSQSQSPSSPEKESPEKEDQEEENQGGKGPL
LSILKAFN
>Q7M4I5.1 Allergen Api d 1; phospolipase A2 [Apis dorsata]
IIYPGTLWCGHGNVSSSPDELGRFKHTDSCCRSHDMCPDVMSAGESKHGLTNTASHTRLS
CDCDDKFYDCLKNSSDTISSYFVGEMYFNILDTKCYKLEHPVTGCGKRTEGRCLNYTVDK
SKPKVYQWFDLRKY
>Q7M4I6.1 Allergen Bom p 1; phospholipase A2 [Bombus pensylvanicus]
IIYPGTLWCGNGNIANGTNELGLWKETDACCRTHDMCPDIIEAHGSKHGLTNPADYTRLN
CECDEEFRHCLHNSGDAVSAAFVGRTYFTILGTQCFRLDYPIVKCKVKSTILRECKEYEF
DTNAPQKYQWFDVLSY
>Q7Z1K3.1 Allergen Ani s 1; unknown function [Anisakis simplex]
MASMQHFSLAALLLAASICLGDADRTECQLPLDKGTPCTQEGGVKPSVAWWHDDKSGICL
SFKYTGCGGNANRFTTIKNCEQHCKMPDRGACALGKKPAEDSNGEQLVCAGMREDKCPNG
YQCKMMAFMGLCCPTKEEELFAREYEGVCKSGKPVKMDRGSGWMMTILGKSCDDQFCPED
AKCERGKLFANCCK
>Q7M1X5.1 Allergen Lol p 11; Ole e 1-like protein [Lolium perenne]
DKGPGFVVTGRVYCDPCRAGFETNVSHNVEGATVAVDCRPFDGGESKLKAEATTDKDGWY
KIEIDQDHQEEICEVVLAKSPDKSCSEIEEFRDRARVPLTSNXGIKQQGIRYANPIAFFR
KEPLKECGGILQAY
>Q7M1E7.1 Allergen Cha o 2; polygalacturonase [Chamaecyparis obtusa]
MGMKFMAAVAFLALQLIVMAAAEDQSAQIMLDSDIEQYLRSNRSLKKLVHSRHDAATVFN
VEQYGAVGDGKHDSTEAFATTWNAACKKASAVLLVPANKKFFVNNLVFRGPCQPHLSFKV
DGTIVAQPDPARWKNSKIWLQFAQLTDFNLMGTGVIDGQGQQWWAGQCKVVNGRTVCNDR
NRPTAIKIDYSKSVTVKELTLMNSPEFHLVFGECEGVKIQGLKIKAPRDSPNTDGIDIFA
SKRFHIEKCVIGTGDDCIAIGTGSSNITIKDLICGPGHGISIGSLGRDNSRAEVSHVHVN
RAKFIDTQNGLRIKTWQGGSGLASYITYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQGVTYKNIHGTSATAAAIQLMCSDSVPCTGIQLSNVSLKLTSGKPASCVDKNARGFYS
GRLIPTCKNLRPGPSPKEFELQQQPTTVMDENKGACAKGDSTCISLSSSPPNCKNKCKGC
QPCKPKLIIVHPNKPQDYYPQKWVCSCHNKIYNP

>AAT40866.1 Allergen Tyr p 10; tropomyosin [Tyrophagus putrescentiae]
MDAIKNKMQAMKLEEDNAIDRAEIAEQKARDANLKSEKTEEEVRALQKKIQQIENELDQV
QENLTQATTKLEEKEKALQTAEADVAALNRRIQLIEEDLERSEERLKVATAKLEEASHSA
DESERMRKMLEHRSITDEERMDGLESQLKEARLMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAYEQQIRIMTSKLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYESISDELDQTFAELTGY
>AAT45383.1 Allergen Lat c 1; parvalbumin beta [Lates calcarifer]
MAFSNVLSDSDVAAALDGCKDAGTFDHKKFFSACGLSNKTSDDVKKAFAIIDQDKSGFIE
EEELKLFLQNFKADARVLTDVETSTFLKAGDTDGDGKIGADEFTALVKP
>AAT66566.1 Putative major allergen alt a1 [Stemphylium vesicarium]
ALFAAAGLAAAAPFEARQADASCPVSTQGDYVWKISEFSGRKPEGTYYNSLSFNIKATNK
GTLDFTCSAQADKLEDDKFYSCGENSFMSFAFQSDRNGLLFRQDVSDEITYVATATLPNY
CHAGGNGPKDFVCQGVS
>AAT66567.1 Putative major allergen alt a1 [Stemphylium callistephi]
TLFAAAGLAAAAPLEAPQANTTCPVSTQGDYVWKISEFSGRKPEGTYYNNLSFNIKATNG
GTLDFTCSAQADKLEEDEFYSCGENSFISFAFQSDRSGLLLRQDVSDEITYLATATLPNY
CRAGGNGPNDFICQGVS
>CAE52833.1 Allergen Pla a 2; polygalacturonase [Platanus x acerifolia]
RGVQSSGSVFNVNDYGAKGAGDISQAVMKAWKAACASQGPSTVLIPKGNYNMGEVAMQGP
CKGSKIGFQIDGVVKAPADPSKFKSDGWVSFYRIDGLTVSGTGTLDGQGQTAWAKNNCDK
NPNCKHAAMNLRFDFLKHAMVRDITSLNSKMFHINVLECEDITFQHVTVTAPGTSINTDG
IHVGISKGVTITNTKIATGDDCISIGPGSQNVTITQVNCGPGHGISIGSLGRYNNEKEVR
GITVKGCTFSGTMNGVRVKTWPNSPPGAATDLTFQDLTMNNVQNPVILDQEYCPYGQCSR
QAPSRIKLSNINFNNIRGTSTGKVAVVIACSHGMPCSNMKIGEINLSYRGAGGPATSTCS
NVKPTFSGKQVPAIKCA
>AAO67349.2 Allergen Cor a 12; oleosin [Corylus avellana]
MADRPQQLQVHPQRGHGHYEGGIKNQRGGGPSAVKVMAVLAALPVGGTLLALAGLTLAGS
VIGLLVTSPLFIIFSPVLVPAAIVVGLAVASFLSSGALGLTGLSSLSWVLNYLRCASQSL
PREMDQAKRRMQDMAAFVGQKTREVGQEIQSRAQEGRRT
>CAH03799.1 Allergen Cit s 3; lipid transfer protein (LTP) type 1 [Citrus sinensis]
ITCGQVTGSLAPCIVYLRSGGPIPVPCCNGVRSLNAAARTTPDRQTACNCLKQAAGSIPN
LNPNNAVGLPRACGVSIPYKISISTDCSKVR
>AAT77152.1 Putative arginine kinase [Periplaneta americana]
MVDAAVLEKLEAGFAKLAASDSKSLLKKYLTKEVFDNLKTKKTPSFGSTLLDVIQSGLEN
HDSGVGIYAPDAEAYAVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYI
ISTRVRCGRSMQGYPFNPCLTEAQYKEMEDKVSSTLSGLEAELKGQFYPLTGMTKEVQQK
LIDDHFLFKEGDRFLQAANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVTAVNDIEKRIPFSHDDRLGFLTFCPTNLGTTVRASVHIKVPKLAADKAKLEEV
AGKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKEMNDGIAELIKLESSL
>AAT80649.1 Allergen Mal d 3; lipid transfer protein (LTP) type 1 [Malus domestica]
MASSAVTKLALVVALCMAVSVAHAITCGQVTSSLAPCIGYVRNGGAVPPACCNGIRTINS
LARTTADRQTACNCLKNLAGSISGVNPNNAAGLPGKCGVNVPYKISTSTNCATVK
>AAT80659.1 Allergen Mal d 3; lipid transfer protein [Malus domestica]
MASSAVIKLALVVALCMAVSVAHAITCGQVSSNLVPCFDYVRSGGPVPPACCNGIRTING
LAKTTPDRQAACNCLKSLAGSVSGVNPGNAESLPGKCGVNVPYKISTSTNCATVK
>AAT80662.1 lipid transfer protein precursor [Malus domestica]
MASSAVINLALVVALCMAVSVAHAITCGQVSSNLVPCFDYVRSGGPVPPACCNGIRTING
LAKTTPDRQAACNCLKSLAGSVSGVNPGNAESLPGKCGVNVPYKISTSTNCATVK
>AAT80664.1 Allergen Mal d 3; lipid transfer protein (LTP) type 1 [Malus domestica]
MASSAVINLALVVALCMAVSVAHAITCGQVSSNLVPCFDYVRSDGPVPPACCNGIRTING
LAKTTPDRQAACNCLKSLAGSVSGVNPGNAESLPGKCGVNVPYKISTSTNCATVK

>AAT80665.1 Allergen Mal d 3; lipid transfer protein (LTP) type 1 [Malus domestica]
MASSAVINLALVVALCMAVSVAHAITCGQVSSNLVPCFDYVRSGGPVPPACCNGIRTING
LAKTTPDRQAACNCLKSLAGSVSGVNPGNVESLPGKCGVNVPYKISTSTNCATVK
>AAT95008.1 Allergen Sol i 1; phospholipase A1 [Solenopsis invicta]
MRKFAAIFVVFFVQCTHLYSLAQARAEPDPGVVEYLKQSCVYGNSSYINVYLYNSRFQGK
NLGNQQSCQDINASLPVVFITHGFTSSAQVSTFKDLANAFVQKGHTAFIVDWSEAACTDG
LPGVQFAEYNAAASNTYDIGQLMAKYTVDLMNKCKIPLNNIQYVGHSLGSHVCGFAAKHV
KKLINKTMPYILALDPADPSFGSNKCGERICKSDAKRIVVFKTSILGIGENIIGHLLIVF
DGGKSQPACSWYDVPCSHSESIVYATGMVSGRCQHLAVPWTAQQRINPIQWKFWRVFTSN
IPAYPTSDTTNCVVLNTNVFKNDNTFEGEYHAFPDCARNLFKCRQQ
>AAT95009.1 Allergen Pol e 5; unknown function, antigen 5 [Polistes exclamans]
MEIGGLVYLVIVVAIIHSSQGVDYCKIRCPSGIHTVCQYGESTKPSKNCAGKVIKSVGPT
EEEKKLIVSEHNRFRQKVAQGLETRGNPGPQPAASDMNDLVWNDELAHIAQVWASQCQFL
VHDKCRNTAKYPVGQNIAYAGGSKLPDVVSLIKLWENEVKDFNYNTGITKQNFAKIGHYT
QMVWGKTKEIGCGSLKYMENKMQNHYLICNYGPAGNYLGQLPNTKK
>AAT95010.1 Allergen Pol d 5; unknown function, antigen 5 [Polistes dominula]
MKISCLICLVIVLTIIHLSQANDYCKIKCSSGVHTVCQYGESTKPSKNCAGKLIKSVGPT
EEEKKLIVEEHNRFRQKVAKGLETRGNPGPQPAASNMNNLVWNDELAKIAQVWASQCQIL
VHDKCRNTEKYQVGQNIAYAGSSNHFPSVTKLIQLWENEVKDFNYNTGITNKNFGKVGHY
TQMVWGNTKEVGCGSLKYVEKNMQIHYLICNYGPAGNYLGQPIYTKK
>BAD36780.1 Allergen Myr p 3; pilosulin [Myrmecia banksi]
MKLSCLLLTLAIIFVLTIVHAPNVKAKALADPESDAVGFADAVGEADPFDITKLNIKKLT
KATCKVISKGASMCKVLFDKKKQE
>AAT99258.1 Allergen Sal k 1; pectin methylesterase [Salsola kali]
MEEHVSMLLVGFVLINIAFTSIAQLIPPNPAELESWFQGAVKPVSEQKGLEPSVVQTESG
GVETIEVRQDGSGKFKTISDAVKHVKVGNTKRVIITIGPGEYREKVKIERLHPYITLYGI
DPKNRPTITFAGTAAEFGTVDSATVIVESDYSVGAHLIVTNSAPRPDGKRKGAQAGALRI
SGDRAAFYNCKFTGFQDTVCDDKGNHFFTDCYTEGTVDFIFGEARSLYLNTELHVVPGDP
MAMITAHARKNADGVGGYSFVHCKVTGTGGTALLGRAWFDAARVVFSYCNLSDAAKPEGW
SDNNKPEAQKTILFGEYKNTGPGAAPDKRAPYTKQLTEADAKTFTSLEYIEAAKWLLPPP
KV
>Q9LD79.2 Allergen Jun v 3; thaumatin-like protein [Juniperus virginiana]
AFLLAATLTISSHMQEAGAVKFDIKNQCGYTVWAAGLPGGGKRLDQGQTWTVNLAAGTAS
ARFWGRTGCTFDASGKGSCQTGDCGRQLSCTVSGAVPATLAEYTQSDQDY
>P15322.2 Allergen Sin a 1; 2S albumin, conglutin [Sinapis alba]
PAGPFRIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPSWTLDDEFDFEDDMENPQGPQQ
RPPLLQQCCNELHQEEPLCVCPTLKGASKAVKQQVRQQLGQQGQQGPHLQHVISRIYQTA
THLPKVCNIRQVSVCPFKKTMPGPS
>AAU11502.1 Allergen Tyr p 13; fatty acid-binding protein [Tyrophagus putrescentiae]
MVQLNGSYKLEKSDNFDAFLKELGVNFVTRNLAKSASPTVEVIVDGDSYTIKTSSTLKNS
EIKFKLGEEFEEDRADGKKVQTSVTKEGDNKLVQVQKGDKPVTIVREFSEEGLTVTATVN
GVTSVRFYKRQ
>AAU21500.1 Allergen Ara h 10; oleosin [Arachis hypogaea]
MTDRTQPHAVQVHTTAGRFGDTAAGTNRYADRGPSTSKVIAVITGLPIGGTLLLFAGLAL
AGTLLGLAVTTPLFILFSPVIVPATIVVGLSVAGFLTSGACGLTGLSSFSWVMNYIRQTH
GSVPEQLEMAKHRMADVAGYVGQKTKDVGQ
>P84159.1 Allergen Cit s 1; germin-like protein [Citrus sinensis]
TDPGHLQDVXVAINDPKXGVFVNRK
>P84160.1 Allergen Cit l 3; lipid transfer protein [Citrus limon]
ITCGQVTGSLAPXIPFLRTG

>P84161.1 Allergen Cit s 3; lipid transfer protein [Citrus sinensis]
ITXGQVTGSLAPXIAFLRTK
>P67875.1 Allergen Asp f 1; ribonuclease mitogillin [Aspergillus fumigatus]
MVAIKNLFLLAATAVSVLAAPSPLDARATWTCINQQLNPKTNKWEDKRLLYSQAKAESNS
HHAPLSDGKTGSSYPHWFTNGYDGNGKLIKGRTPIKFGKADCDRPPKHSQNGMGKDDHYL
LEFPTFPDGHDYKFDSKKPKEDPGPARVIYTYPNKVFCGIVAHQRGNQGDLRLCSH
>CAD54670.2 Allergen Phl p 4; berberine bridge enzyme [Phleum pratense]
SSCEVALSYYPTPLAKEDFLRCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVK
PIYIVTPTNASHIQSAVVCGRRHGVRIRVRSGGHDYEGLSYRSLQPEEFAVVDLSKMRAV
WVDGKARTAWVDSGAQLGELYYAIHKASPVLAFPAGVCPTIGVGGNFAGGGFGMLLRKYG
IAAENVIDVKLVDANGTLHDKKSMGDDHFWAVRGGGGESFGIVVAWKVRLLPVPPTVTVF
KIPKKASEGAVDIINRWQVVAPQLPDDLMIRVIAQGPTATFEAMYLGTCQTLTPMMSSKF
PELGMNASHCNEMSWIQSIPFVHLGHRDNIEDDLLNRNNTFKPFAEYKSDYVYEPFPKEV
WEQIFSTWLLKPGAGIMIFDPYGATISATPEWATPFPHRKGVLFNIQYVNYWFAPGAGAA
PLSWSKEIYNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTFSSGLVWGQKYFKGNFQ
RLAITKGKVDPTDYFRNEQSIPPLIQKY
>CAD54671.2 Allergen Phl p 4; berberine bridge enzyme [Phleum pratense]
SSCQVAFSYFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVK
PLYIITPTNVSHIQSAVVCGRRHSVRIRVRSGGHDYEGLSYRSLQPETFAVVDLNKMRAV
WVDGKARTAWVDSGAQLGELYYAIYKASPTLAFPAGVCPTIGVGGNFAGGGFGMLLRKYG
IAAENVIDVKLVDANGKLHDKKSMGDDHFWAVRGGGGESFGIVVAWQVKLLPVPPTVTIF
KISKTVSEGAVDIINKWQVVAPQLPADLMIRIIAQGPKATFEAMYLGTCKTLTPLMSSKF
PELGMNPSHCNEMSWIQSIPFVHLGHRDALEDDLLNRNNSFKPFAEYKSDYVYQPFPKTV
WEQILNTWLVKPGAGIMIFDPYGATISATPESATPFPHRKGVLFNIQYVNYWFAPGAAAA
PLSWSKDIYNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTYASGKVWGQKYFKGNFE
RLAITKGKVDPTDYFRNEQSIPPLIKKY
>AAV33670.1 Putative 18 kD winter accumulating protein A [Morus bombycis]
MGVFTFDDEFTSTVAPARFFKAAVLDADNLFPKVAPQAAKSAETVEGNGGPGTVKKITLP
DGKYVKQRLDSIDHDNFTYGHSIIEGDVLSADIEKISHVTKFVASPSGGSIIKVTTTFHT
VGDAPVDEAKAKEGKEKAEGLFKLVEGYLEANPSAYN
>AAV33672.1 Putative 18 kD winter accumulating protein C [Morus bombycis]
MGVSTHNDEFTSTVAPARLFKAAVLDADNLFPKIAPDAAKSAENIEGNGGPGTIKKITFP
DGKYVKQKLDAIDLDNYSYSHSIIEGDILSAELEKISHETKFVAAPGGGSVIKVTTTFHT
VGNATVDEAKAKEGKEKAAGLFKLVEGYLEANPSAYN
>AAT37679.1 Allergen Rho m 2; serine protease [Rhodotorula mucilaginosa]
TMELLEDLIEQVRQLPMVNFIEKNSLVHANEFTVAKGAPWGLARISHRDPLSLGSFDQYL
YDSNGGTGVTSYVIDTGVNVHHEQFEGRAKWGKTIPQGDEDEDGNGHGTHCAGTIGSNAY
GVAKNAEIVAVKVLRSNGSGSMSDVIKGVEFAVKSHQDSVKKGKNSFSTANMSLGGGKSP
ALDLAVNAAVKAGLHFAVAAGNENQDACNTSPASAENAITVGASTISDARAYFSNYGKCV
DIFAPGLNILSTYIGSDAATAYLSGTSMASPHIAGLLTYYLSLQPSSDSEFFIGAEGITP
AQLKKNLIAFGTPDVLADIPADTPNILAFNGAGQNLTKFWGH
>AAV40850.1 Allergen lipid transfer protein 1 precursor [Prunus persica]
MAYSAMTKLALVVALCMVVSVPIAQAITCGQASSSLAPCIPYVRGGGAVPPACCNGIRNV
NNLARTTPDRQAACNCLKQLSASVPGVNPNNAAALPGKCGVSIPYKISASTNCATVK
>P02604.3 Allergen Gal d 7; myosin light chain [Gallus gallus]
MAPKKDVKKPAAAAAPAPAPAPAPAPAPAKPKEPAIDLKSIKIEFSKEQQDDFKEAFLLF
DRTGDAKITLSQVGDIVRALGQNPTNAEINKILGNPSKEEMNAKKITFEEFLPMLQAAAN
NKDQGTFEDFVEGLRVFDKEGNGTVMGAELRHVLATLGEKMTEEEVEELMKGQEDSNGCI
NYEAFVKHIMSV
>CAH92627.1 Putative pollen allergen Sec c 4 [Secale cereale]
NYRAFALALLFCALSCQAAAAAYAPVPAKADFLGCLMKEIPARLLYAKSSPDYPTVLAQT
IRNSRWSSPQNVKPIYIITPTNASHIQSAVVCGRRHGIRLRVRSGGHDYEGLSYRSEKPE
TFAVVDLNKMRAVSVDGYARTAWVESGAQLGELYYAIAKNSPVLAFPAGVCPSIGVGGNF

AGGGFGMLLRKYGIAAENVIDVKVVDPNGKLLDKSSMSADHFWAVRGGGGESFGIVVSWQ
VKLLPVPPTVTVLKIPKTVQEGAIDLVNKWQLVGPALPGDLMIRIILAGNSATFEAMYLG
TCSTLTPLMSSKFPELGMNPSHCNEMSWIKSIPFIHLGKQNLDDLLNRNNTFKPFAEYKS
DYVYQPFPKPVWEQIFGWLVKPGAGIMIMDPYGATISATPEAATPFPHRQGVLFNIQYVN
YWFAESAGAAPLQWSKDIYKFMEPYVSKNPRQAYANYRDIDLGRNEVVNDISTYSSGKVW
GEKYFKGNFQRLAITKGKVDPQDYFRNEQSIPPLVEKY
>CAH92630.1 Putative pollen allergen Sec c 4 [Secale cereale]
NSRAFALVPLLICVLSCHAAVSYAAAPVPAKEDFFGCLVKEIPARLLYAKSSPAFPTVLA
QTIRNSRWSSPQSVKPLYIITPTNASHIQSAVVCGRRHGVRIRVRSGGHDYEGLSYRSER
PEAFAVVDLNKMRAVVVDGKARTAWVDSGAQLGELYYAIAKNSPVLAFPAGVCPTIGVGG
NFAGGGFGMLLRKYGIAAENVIDVKVVDANGTLLDKSSMSADHFWAVRGGGGESFGIVVS
WQVKLLPVPPTVTVFKIPKTVQEGAVELINKWQLVAPALPDDLMIRIIAFGGTAKFEAMY
LGTCKALTPLMSSRFPELGMNASHCNEMPWIKSVPFIHLGKQATLSDLLNRNNTFKPFAE
YKSDYVYQPVPKPVWAQIFVWLVKPGAGIMVMDPYGAAISATPEAATPFPHRKDVLFNIQ
YVNYWFDEAGGAAPLQWSKDMYRFMEPYVSKNPRQAYANYRDIDLGRNEVVNDISTYASG
KVWGEKYFKGNFQRLAITKGKVDPQDYFRNEQSIPPLLGK
>CAH92637.1 Allergen Lol p 4; FAD-containing oxidase [Lolium perenne]
AVVCGRRYDVRIRVRSGGHDYEGLSYRSLQPENFAVVDLNQMRAVLVDGKARTAWVDSGA
QLGELYYAISKYSRTLAFPAGVCPTIGVGGNLAGGGFGMLLRKYGIAAENVIDVKLVDAN
GKLHDKKSMGDDHFWAVRGGGGESFGIVVSWQVKLLPVPPTVTIFKIPKSVSEGAVDIIN
KWQLVAPQLPADLMIRIIAMGPKATFEAMYLGTCKTLTPMMQSKFPELGMNASHCNEMSW
IESIPFVHLGHRDSLEGDLLNRNNTFKPFAEYKSDYVYEPFPKSVWEQIFGTWLVKPGAG
IMIFDPYGATISATPEAATPFPHRKGVLFNIQYVNYWFAPGAGAAPLSWSKEIYNYMEPY
VSKNPRQAYANYRDIDLGRNEVVNGVSTYSSGKVWGQKYFKGNFERLAITKGKVDPTDYF
RNE
>CAI05848.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MISKILCLSLLVAAVVADQVDVKDCANHEIKKVMVDGCHGSDPCIIHRGKPFNLEAIFDA
NQNTKTAKIEIKANIDGLEVDVPGIDTNACHYIKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLVGDNGVLACAIATHAKIRD
>CAI05849.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKANINGLEVDVPGIDTNACHYIKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLIGDNGVLACAIATHAKIRD
>CAI05850.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKANIDGLEVDVPGIDTNACHYIKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLVGDNGVLACAIATHAKIRD
>CAI23765.1 Allergen Cit s 2; profilin [Citrus sinensis]
MSWQAYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSATFPAFRLEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEAGAVIRGKKGSGGIIVKKTNQALIIGIYDEPLTPGQCNMIVE
RLGDYLIEQGL
>AAV74343.1 Allergen Fra e 1; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Fraxinus excelsior]
EDVPQPPVSLFYVQGQVYCDTCRAGFITELSEFIQGAGVRLQCKEKENGKVTFTEVGYTR
AEGLYSMVIERDHKNEFCEIVLLSSSRKDCHEIPTEGWVKPSLKFILNTVNGTTRTINPL
GFFKKEALPKCPQVYNKLGMYPPNM
>P84296.1 Allergen Chi t 3; hemoglobin CTT-VIIB4 [Chironomus thummi
thummi]
MKFFAVLALCIVGAIASPLTADEASLVQSSWKAVSHNEVDILAAVFAAYPDIQAKFPQFA
GKDLASIKDTGAFATHATRIVSFLSEVIALSGNASNAAAVEGLLNKLGSDHKARGVSAAQ
FGEFRTALVSYLSNHVSWGDNVAAAWNKALDNTMAVAVAHL

>P84298.1 Allergen Chi t 3 ; hemoglobin CTT-VIIB-5/CTT-VIIB-9 [Chironomus thummi thummi]
MKFFAVLALCIVGAIASPLTADEASLVQSSWKAVSHNEVEILAAVFAAYPDIQNKFSQFA
GKDLASIKDTGAFATHATRIVSFLSEVIALSGNTSNAAAVNSLVSKLGDDHKARGVSAAQ
FGEFRTALVAYLQANVSWGDNVAAAWNKALDNTFAIVVPRL
>P02226.2 Allergen Chi t 3 ; hemoglobin CTT-VIIA1 [Chironomus thummi thummi]
MKFFAVLALCIVGAIASPLSADQAALVKSTWAQVRNSEVEILAAVFTAYPDIQARFPQFA
GKDVASIKDTGAFATHAGRIVGFVSEIIALIGNESNAPAVQTLVGQLAASHKARGISQAQ
FNEFRAGLVSYVSSNVAWNAAAESAWTAGLDNIFGLLFAAL
>BAD77932.1 Putative class IV chitinase [Cryptomeria japonica]
MQIMATQNSKSNIFWSSSASVVLVLLLLVDVGVCQNCGCNGLCCSQYGYCGSGEAYCGAG
CKEGPCSSSSPPSTGTGVGSIVSSDVFNSIVGGAASGCAGNGFYTYDSFISAANAFNGFG
TSGSSDVNKREIAAFFANAAHETGGFCYIEEQNPTSIYCDASNTQYPCASGKTYHGRGPL
QLSWNYNYGAAGSYIQFDGLNNPEIVGTDSTISFKTAVWFWMVNSNCHTAITSGQGFGAT
IRAINSMECDGGNAATVASRVNYYQKFCQQLNVDTGSNLQC
>AAV97933.1 Allergen Lat c 1; parvalbumin beta [Lates calcarifer]
MAFAGILNEADITAALAACQAADSFKHKDFFVKVGLAGKSDDDVKKAFAVIDQDKSGFIE
EDELKLFLQNFSASARALTDAETKEFLKAGDSDGDGKIGVDEFAALVKV
>AAW29810.1 Allergen Jug r 4; 11S globulin/legumin- like protein [Juglans regia]
MAKPILLSIYLFLIVALFNGCLAQSGGRQQQQFGQCQLNRLDALEPTNRIEAEAGVIESW
DPNNQQFQCAGVAVVRRTIEPNGLLLPQYSNAPQLVYIARGRGITGVLFPGCPETFEESQ
RQSQQGQSREFQQDRHQKIRHFREGDIIAFPAGVAHWSYNDGSNPVVAISLLDTNNNANQ
LDQNPRNFYLAGNPDDEFRPQGQQEYEQHRRQQQRQQRPGEHGQQQRGLGNNVFSGFDAD
FLADAFNVDTETARRLQSENDHRRSIVRVEGRQLQVIRPRWSREEQEREERKERERERES
ESERRQSRRGGRDDNGLEETICTLRLRENIGDPSRADIYTEEAGRISTVNSHTLPVLRWL
QLSAERGALYSDALYVPHWNLNAHSVVYALRGRAEVQVVDNFGQTVFDDELREGQLLTIP
QNFAVVKRARNEGFEWVSFKTNENAMVSPLAGRTSAIRALPEEVLATAFQIPREDARRLK
FNRQESTLVRSRPSRSRSSRSERRAEV
>AAP13533.2 profilin [Cucumis melo var. cantalupo]
MSWQVYVDEHLMCEIEGNHLTSAAIIGQDGSVWAQSQNFPQLKPEEVAGIVGDFADPGTL
APTGLYIGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTGMALVIGIYDEPMTPGQCNMIVE
RLGDYLIDQGL
>CAE17316.1 Putative villin 1 [Nicotiana tabacum]
EGGGKIEVWRINGSAKTPVPGDDIGKFYSGDCYIVLYTYHCNDRKEDYYLCWWIGKDSVE
EDQNMAAKLASTMCNSLKARPVLGRVYQGKEPPQFVAIFQPMLVLKGGLSSGYKSYIADK
GLNDETYTADSVALIRLSGTSVHNNKAVQVDAVATSLNSNECFLLQSGSSVFSWHGNQST
YEQQQLAAKVAEFLKPGVTVKHAKEGTESSTFWFALGGKQSYTSKKIASEVARDPHLFAY
SFNKGKFEIEEIYNFSQDDLLTEDVLLLDTHAEVFVWVGQSSDPKEKQSSFEVGQKYIEM
AASLEGLSPHVPLYKVMEGNEPCFFTTFFSWDPAKAIAHGNSFQKKVMLLFGVGHASENQ
QRFNGTNQGGATQRASALAALNSAFSSSSPAKSSSAPRSAGKSPGSQRAAAIAALSSALS
AEKKQPPEGGSPLRLSRTSSVDAIAPGNEVSTAEIEDSKEVPERKEIETVEPAETDGEDV
GPKPEPEQDETGNDSSQTTFSYERLKAKSENPVTGIDLKRREAYLSDEEFESVLEMTKEA
FYKLPKWKQDIHKKKVDLF
>CAE17317.1 Putative villin 2 [Nicotiana tabacum]
REDYYLCWWIGKDSIEEDQSMAARLASTMCNSFKGRPVLGRVFQGKEPPQFVAIFQPMLV
LKGGLSSGYKNYIADKGLNDETYAADSVALIRLSGTSVHNNKAVQVDAVPASLNSNECFL
LQSGSSIFSWHGNQSTYEQQQLAAKVAEFLKPGATVKHTKEGTESSAFWFAVGGKQSYTS
KKVATEVSRDPHLFAYSFNKGKFEVEEIYNFSQDDLLTEDILLLDTHAEVFVWIGQSADS
KEKQSAFDVGQKYVEMAASLEGLSPNVPLYKVTEGNEPCFFTTFFSWDPAKRSAHGNSFQ
KKVMLLFGVGHASENQQRSNGSGGPTQRASALAALNSAFSSPSPPKSSSAPRPAGTSSAS
QRAAAIAALSGVLTAEKKQSSEGGSPVRSNRSSPVRSSRSSPVRSADSGPTENDLSTAEV
QDSEKASEPKEIVEPAESNGSEPKPEAEQDEGGNESGQAIFSYEQLKAKSDNPVTGIDFK

RREAYLSDEEFESVLGMKKEAFYKLPKWKQDMHKRKVDLF
>AAW69549.1 Allergen Cuc m 2; profilin [Cucumis melo]
MSWQVYVDEHLMCEIEGNHLTSAAIIGQDGSVWAQSQNFPQLKPEEVAGIVGDFADPGTL
APTGLYIGGTKYMVIQGEPGAVIRGKKGPGGATVKKTGMALVIGIYDEPMTPGQCNMIVE
RLGDYLIDQGL
>CAG26895.1 Allergen Arg r 1; lipocalin [Argas reflexus]
MALIILLVACLSVVSADDCSGKTDAWTSIKGPKTGGYWLKQTTKTGENECTYVKGTDFKE
NTKTATYTYGYKDASGKLTKTTGTATAKGSDIVVGSDTSTVIYTDGKTCDVVKHGGHTEL
WVHSSKTSGGYNNCCDKKFTETRGSTPANEVYKKCPGMP
>NP_001011564.1 Allergen Api m 11; major royal jelly protein [Apis mellifera]
MIRWLLLMYLGITCQGVTDIHSRNLTNSLKVIYEWKYIDYDFGSDEKRQAAIQSGDYNYT
MNYLLDTDQWGDKTFVIIMKFNGVPSSLNVITNKTGNGGPLLAPYPDWTWAKNENCSGIT
SAYKIEIDMCDRLWVLDSGLINNVRSVCPPQLLVFDLNTSQLLKQVKIPHDIAVNTTTEK
GALVTLSVQLLSCEVNGSTLVYIGDNEGFALIIYNNSDNSFQRLTSSTFASDPRYTTFTI
NGESFTLQSGIFGMALSPLTQNLYYSALSSHNLNYVNTEQFVKSQYQANNVHYQGKENIL
WTQASAKGISDNGVLFFGLVGDTSLACWNENRLLDRRNIEVVAKNKETLQAITGLKVKRR
ISFILVHGFPLEYEYVLAVSNRIQKVIYGFDFNDVNFRILIANVNDLIKNTRCISP
>AAW81034.1 Allergen Cro s 2; profilin [Crocus sativus]
MSWQTYVDEHLMCDMDGHVLTSAAILGHDGSVWAQSAGFPELKPAEITAILNDFNEPGSL
APTGMYINGAKYMVIQGEPGVVIRGKKGSGGVTIKKSNMALIFGLYDEPMTPGQCNLVVE
RLGDYLIEQGY
>P69199.1 polcalcin, partial [Brassica rapa]
MADATEKAEHDRIFKKFDANGDGKISASELGDALKNLGSVTHDDIKRMMAEIDTDGDGYI
SYQEFSDFASANRGLMKDVAKIF
>AAX11194.1 Allergen Pen b 26; acidic ribosomal protein P1 [Penicillium brevicompactum]
MSTAELAVSYAALILADDGIEVSADKIQTILGAAKVQEVEPIWATIFAKALEGKDIKEIL
TNVGSAGPATAGAPAAAGAAAPAEEKKEEKEEEKEESDEDMGFGLFD
>AAX11261.1 Allergen Sal k 1; pectin methylesterase [Salsola kali]
QPIPPNPAELESWFQGAVKPVSEQKGLEPSVVQAESGGVETIEVRQDGSGKFKTISDAVK
HVKVGNTKRVIITIGPGEYREKVKIEGLHPYITLYGIDPKNRPTITFAGTAAEFGTVDSA
TLIVESDYFVGANLIVSNSAPRPAGKRKGAQASALRISGDRAAFYNCKFTGFQDTVCDDK
GNHLFKDCYIEGTVDLIFGEARSLYLNTELHVVPGDPMAMITAHARKNADGVGGYSFVHC
KVTGTGGTALLGRAWFEAARVVFSYCNLSDAVKPEGWSDNNKPAAQKTIFFGEYKNTGPG
AAADKRVPYTKQLTEADAKTFTSLEYIEAAKWLPPPPKV
>AAX11262.1 Allergen Sal k 1; pectin methylesterase [Salsola kali]
QPIPPNPAELESWFQGAVKPVSEQKGLEPSVVQAESGGVETIEVRQDGSGKFKTISDAVK
HVKVGNTKRVIITIGPGEYREKVKIERLHPYITLYGIDPKNRPTITFAGTAAEFGTVDSA
TLIVESDYFVGANLIVSNSAPRPDGKRKGARASALRISGDRAAFYNCKFTGFQDTVCDDK
GNHLFKDCYIEGTVDFIFGEARSLYLNTELHVVPGDPMAMITAHARKNADGVGGYSFVHC
KVTGTGGTALLGRAWFEAARVVFSYCNLSDAVKPEGWSDNNKPAAQKTIFFGEYKNTGPG
AAADKRVPYTKQLTEADAKTFTSLEYIEAAKWLLPPPKV
>AAX14379.1 Allergen Cla h 9; serine protease [Cladosporium herbarum]
MRGALAGLSLATLATASPVLVNSIHNDAAPIISASNAKEIADNYMIKFKDHVTQNLAAEH
HGWVQDLHEKTQVAKTELRKRSQSPMVDDIFNGLKHTYNIAGGLMGYAGHFDEDVIEQIR
RHPDVELVERDQEVHVLGSESEVEKNAPWGLARISHRDSLSFGTFNKYLYTEDGGEGVDV
YVVDTGTNVDHVDFEGRASWGKTIPQGDADEDGNGHGTHCSGTVAGKKYGVAKKAHVKAV
KVLRSNGSGSMSDVVKGVEYAAESHLEQVSITKKGKRKGFKGSTANMSLGGGKSPILDKA
VNAAVDAGIHFAVAAGNDNADSCNYSPAAAENAVTVGASTLADERAYFSNYGKCNDIFAP
GLNIQSTWIGSKYAVNTISGTSMASPHVAGLLAYLLSLQPAKDSAFAVADISPKKLKANL
ISIATVGALTDVPSNTANILAWNGGGESNYSAIVEKGGYKATHRPTMLEEIESEAKVASK
KVYSEGDELAHKVAELTEKVEDLIAGELKDMFRELKRE
>AAX19848.1 thaumatin-like protein precursor [Malus domestica]

MMKSQVASLLGLTLAILFFSGAHAAKITFTNNCPNTVWPGTLTGDQKPQLSLTGFELASK
ASQSVDAPSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEITIA
ANGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNMACPAQLQVKAADGSVISC
KSACLAFGDSKYCCTPPNDTPETCPPTEYSEIFEKQCPQAYSYAYDDKNSTFTCSGGPDY
VITFCP
>AAX19851.1 thaumatin-like protein precursor [Malus domestica]
MMKSQAASLLGLTLAILFFSGAHAAKITFTNNCPNTVWPGTLTGDQKPQLSLTGFELASK
ASQSVDAPSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEITIA
ANGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNMACPAQLQVKAADGSVISC
KSACLAFGDSKYCCTPPNDTPETCPPTEYSEIFEKQCPQAYSYAYDDKNSTFTCSGGPDY
VITFCP
>AAX19854.1 profilin 1 [Malus domestica]
MSWQAYVDDHLMCDIDGHHLTAAAILGHDGSVWAHSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTGQALVFGIYEETLTPGQCNMIVE
RLGDYLIDQGL
>AAX19856.1 profilin 1 [Malus domestica]
MSWQAYVDDHLMCDIDGHHLTAAAILGHDGSVWAQSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTGQDLVFGIYEEPLTPGQCNMIVE
RLGDYLIDQGL
>AAX19858.1 profilin 2 [Malus domestica]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHDGSVWAQSATFPQLKPEEVTGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGPGGVTVKKSTMALLIGIYDEPMTPGQCNMVVE
RLGDYLIEQGL
>AAX19860.1 profilin 2 [Malus domestica]
MSWQAYVDDHLMCEIEGNHLSAAAIIGHDGSVWAQSATFPQLKPEEVTGVMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGPGGVTVKKSTMALLIGIYDEPMTPGQCNMVVE
RLGDYLIEQGL
>AAX19889.1 Allergen Vig r 1; pathogenesis-related protein / PR-10 / Bet
v 1-like protein [Vigna radiata]
MAVFTFDDQATSPVAPATLYNALAKDADNIIPKAVGSFQSVEIVEGNGGPGTIKKISFVE
DGETKFVLHKIESVDEANLGYSYSIVGGVALPDTAEKITIDTKISDGADGGSLIKLTISY
HGKGDAPPNEDELKAGKAKSDALFKAVEAYLLANP
>AAX33727.1 Putative Per a 2 allergen [Periplaneta americana]
MTFLIQSAFVALAAISAVLCDPVVVPLQKRAPVEEYINTQYVGPVQLGNQYFLCVFDTSS
YTTVIPSASCVSGGCNCANVHKYYSNKPVSNNVASVPILGSGYANGSEAHDYIAVSTLNA
TNQGFLLADDISNDICSLGADCVIGLGRPKSGRAAFNLPTVMENFVNQDNIANSFSFHHG
RYPDGQHRGVLVLGGPIPAYYRGDFTYVPLVDQDTWNFKVDSISVGNEVIATDQLAFVDS
SKYVITGPAEEIKKINDRLGCTNKVIGSRTLCVFDCDKLDNVPSVTFTIGGVAFNISSTY
QIQQNGDLCYSGFQYSAGKCFHFGDFFMDNYYGEFDGQNKRMGFAKSVEEL
>AAX33728.1 Allergen Per a 4; lipocalin [Periplaneta americana]
MLSILVVCLLAGFQLAAGDDSCQIGTSFTGLDMTKYVGTWYELFRTPNSDEEDFTNCEYD
KYTLDENGVIQVTSVAYTNSTRGFITSTGTVPSWTENTFDIAYGDNETWSSTYFMIGTDY
QTYSIVAGCLDNDYSRHLYWIASHGTSFDDATKAKVNEVLAPYNLSLDDMEPVDQSYCVQ
YKS
>AAX33729.1 Allergen Per a 5 allergen [Periplaneta americana]
MTIDFYYLPGSAPCRSVLLAAKAIGVDLNLKVTNLMAGEHLTPEFLKMNPQHTIPTLNDK
GFCLWESRAILSYLADQYGKDDSLYRRDAKKRALVDQRLYFDIGTLYHRFGEYYYPIYFA
KQAADPEKMKKLEEAFEFLNKFLESQEFVAGNKLTIADLAIVSSVSTADIMGFDVSKYSN
VAKWFEKCKKIVPGYEELNHSGCLKFKEMCDNLAKK
>AAX33730.1 Allergen Per a 6; troponin C [Periplaneta americana]
MDELPDEQIQLLKKAFDAFDREKNGFISTDMVGTILEMLGHPLDDDMLEEIIAEVDADGS
GELEFQEFVTLAARFLVEEDAEAMQQELKEAFRLYDKEGNGYITTTVLREILKELDDKLT
NEDLDAMIEEIDSDGSGTVDFDEFMEVMTGE
>AAX33734.1 Allergen Per a 10; serine protease [Periplaneta americana]

MLRYLVLASLIACSLSAVPKAKRPRLDGRIVGGRPADIADYPYQLSFEYYGSHMCGASII
SPNWVVTAAHCVDGVSASSATFRAGGSIRESGGSVHQATQLIANPNYDYYTIDFDVAVAR
VSPAFSYGTGVQPIPLASSEPSAGQIATVSGWGTTSEGGSTLPSQLQVVSVPIVSRSECN
QAYSDYGGITDDMICAAEQQGGKDACQGDSGGPLVVNGQLAGIVSWGVGCAEQGYPGVYS
NVASLKGFITEQTGVN
>AAX34047.1 Allergen Blo t 21; unknown function, group 5/21 mite allergen [Blomia tropicalis]
MKFIIALAALIAVACALPVSNDNFRHEFDHMIVNTATQRFHEIEKFLLHITHEVDDLEKT
GNKDEKARLLRELTVSEAFIEGSRGYFQRELKRTDLDLLEKFNFEAALATGDLLLKDLKA
LQKRVQDSE
>AAX35807.1 Allergen Len c 3; lipid transfer protein (LTP) type 1 [Lens culinaris]
MARGMKLACVVLVICMVVIAPMAEGAISCGAVTSDLSPCLTYLTGGPGPSPQCCGGVKKL
LAAANTTPDRQAACNCLKSAAGSITKLNTNNAAALPGKCGVNIPYKISTTTNCNTVKF
>AAX37288.1 Allergen Pen m 1; tropomyosin [Penaeus monodon]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANIQLVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>AAX37321.1 glutathione transferase mu class Yv5004H11 [Sarcoptes scabiei]
MSSKPTLGYWNIRGLAQPIRMMLSYAGVDFVDKRYNYGPAPDFDRSEWLNEKFNLGLDFP
NLPYYIDGDVKLTQSLAILRYLARKHKLDGHNEQEWLRIALCEQQIVDLYMAMGRISYDP
NFEKLKPDYLEKLPDNLKLFSEFLGDHPFVAGTNLSYVDFFVYEYLIRLKAMTPEVFAKF
QNLGNYVNRFESMPKISAYLKQQQPQFFNGLMAKWNMKY
>AAX37326.1 Putative glutathione transferase mu class Dp7019C10 [Dermatophagoides pteronyssinus]
MSQPILGYWDIRGYAQPIRLLLTYSGVDFVDKRYQIGPAPDFDRSQWLNEKFNLGLDFPN
LPYYIDGDMKMTQTFAILRYLGRKYKLNGSNDHEEIRISMAEQQTKDMMAAMIRVCYDAN
CDKLKPDYLKSLPDCLKLMSKFVGEHPFVAGANISYVDFYLYEYLCRVKVMVPEVFGQFE
NLKRYVERMESLPRVSDYIKKQQPKTFNAPTSKWNASYA
>AAX40948.1 Allergen Ziz m 1; chitinase [Ziziphus mauritiana]
MVPQAKLVVASLILTSALIQTSEAVGGIATYWGQYTETEEGSLAEACASNLYSYINIAYL
NIFGEGRYLSLNISGHCSDCTFLGEEIKACQSQGVKIFLSLGGPYGDYHLTTDGDADRVA
EQLWSSFLGGSKSTGVYQPLLGDVELDGIDLDIQIGPPEEYDVLARNLKDLTKDRTRPFY
LSAAPKCSAYNDSDAYLWTAVETGLFDFVWVKFYNDTSCQYNNDTAAGLDAFYRSWYDWT
VSLAEGNKLLIGIPASNETDNSPLGGYIPSDVLNDQIVSVIMTSSKFGGVNVWNRYYDLK
TNYSSSIILEYVNSGTKYLPLRTKFMYQNA
>AAX47076.1 Allergen Der p 1 allergen [Dermatophagoides pteronyssinus]
NEIAXAKIDLRQMRTVTPIXMQGGCGSCWALSGVAATESAYLAYGNXSLDLAEQELVDCA
SQHGCHGDTIPRGIEYIQHNGVVQESYYRYVAREQSCRRPNAQRFGISNYCQIYPPNVNK
IREALAQTHSAIAVIIGIKDLDAFRHYDGRTIIQRDNGYQPNYHAVNIVGYSNAQGVDYW
IVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>AAX57578.1 Putative BW 16kDa allergen [Fagopyrum esculentum]
RDEGFDLGETQMSSKCMRQVKMNEPHLKKCNRYIAMDILDDKYAEALSRVEGEGCKSEES
CMRGCCVAMKEMDDECVCEWMKMMVENQKGRIGERLIKEGVRDLKELPSKCGLSEMECGS
RGNRYFV
>CAI77218.1 Allergen Ves v 2; hyaluronidase [Vespula vulgaris]
DRTIWPKKGFSIYWNIPTHFCHNFGVYFKELKQFNIKYNSMNNFRGETISLFYDPGNFPS
MVLLKNGTYEIRNEGVPQKGNLTIHLEQFTKELDEIYPKKIAGGIGVIHFHNWRPIFRRN
VDNLKINKDISIDLVRKEHPKWDKSMIEKEASNRFETSAKIFMEKTLKLAKEIRKKTEWG
YHGYPHCLSGSTDKPSFDCDALSMSENDKMSWLFNNQNVLLPSIYLKNVLKPDEKIHLVQ
ERLKEAIRISKNFKHLPKVLPYWWYTYQDKESIFLTEADVKNTFKEILTNGADGIIIWGV

SYELTDRKRCEKLKEYLMKILGPIAFKVTKAVKENTPLNF
>AAX77383.1 Allergen Sin a 2; 11S globulin / legumn-like protein [Sinapis alba]
MVKLAHLLVATVGVLLVLNGCLARQSLGVPPQVKDACNLDNLDVLQPTEVIKSEAGQVEY
WDHNHPQIRCAGVSIARLVIQKGGLYLPTFFSSPFISYVVQGMGISGRVIPGCAETFMDS
QPMQGQQGQQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGFRDMHQK
VEHVRHGDAIAMTPGSAQWIYNTGDQPLIIVSLIDIANYQNQLDRNPRTFRLAGNNQQGS
SQQQQQQQQNILSGFDPQVLAQALKIDVRLAQELQNQQDKRGNIVRVKGPFQVVRPPLRQ
AYESEQWRHPRGPPQSPQDNGLEETICSMRTHENIDDPARADIYKPNLGRVTSVNSYTLP
ILQYIRLSATRGILQGSAMVLPKYNMNANEILYCTQGQARIQVVNDNGQNVLDQQVQKGQ
LVVIPQGFAYVVQSQNNFEWISFKTNANAMISTLAGRTSALRALPLEVITNAYQISLEEA
RKIKFNTLETTLTRARGGQQPQLIEEIVEV
>AAX77384.1 Allergen Sin a 2; 11S globulin precursor [Sinapis alba]
MVKLAHLLVATVGVLLVLNGCLARQSLGVPPQVKDACNLDNLDVLQPTETIKSEAGRLEY
WDHNNPQIRCAGVSIARLVIEQGGFYLPTFFSSPKISYVVQGMGISGRVIPGCAETFMDS
QPMQGQQQGHQGQQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQGQQQQ
GQQGFRDMYQKVEHVRHGDVIANTPGSAHWIYNTGDKPLVIISLLDIANYQNQLDRNPRV
FRLAGNNPQGGFGGPQQQQPQQNILNGFDPQVIAQALKIDVRLAQELQNKQDSRGNIVRV
KGPFQVVRPPLRQAYESEQWRHPRGPPQSPQDNGLEETICSMRTHENIDDPARADIYKPN
LGRVTSVNSYTIPILQYIRLSATRGILQGSAMVLPKYNMNANEILYCTQGQARIQVVNDN
GQNVLDQQVQKGQLVVIPQGFAYVVQSQNNFEWISFKTNANAMISTLAGRTSALRALPLE
VITNAFQISLEEARKIKFNTLETTLTRARGGQQPQLIEEIVEV
>AAX77684.1 Allergen Amb a 9; calcium-binding protein / polcalcin [Ambrosia artemisiifolia]
MAEEEDKAERDRIFGAFDANKDGKISSTELGESLKNLGSVSPEEVQTMMEELDTDGDGFI
SYEEFTDFYNANRGLMKDVGKIF
>AAX77685.1 Allergen Amb a 9; calcium-binding protein / polcalcin [Ambrosia artemisiifolia]
MAEDEDKAERDRIFGAFDANKDGKISSNELGEALKNLGSVSPEEVQTMMEELDTDGDGFI
SYEEFTDFYNANRGLMKDVGKIF
>AAX77686.1 Allergen Amb a 10; calcium-binding protein / polcalcin [Ambrosia artemisiifolia]
MAPENNKHSIFPTDKEEVTKIFNRFDTNGDGQISEDELFAILKSLGSDTSPDEVKRVMAE
IDADGDGFISLDEFILFCKGIESEGDEINDLKEAFKFYDQNNNGVISANELHQILGRLGE
NYSVESCADMIKSVDSDGDGFVDFEEFRKMMSRKGGDGAM
>AAX77687.1 Allergen Amb a 8; profilin [Ambrosia artemisiifolia]
MSWQTYVDEHLMCDIEGTGQHLASAAIFGTDGNVWAKSSSFPEFKPDEINAIIKEFSEPG
ALAPTGLFLAGAKYMVIQGEPGAVIRGKKGAGGICIKKTGQAMVFGIYEEPVNPGQCNMV
VERLGDYLVDQGM
>AAX77688.1 Allergen Amb a 8; profilin [Ambrosia artemisiifolia]
MSWQTYVDEHLMCDIDGSGHHLSSAAIFGTDGAVWAKSGSFPEFKPDEINAIIKEFDAAG
TLAPTGLFLAGAKYMVIQGEPGAVIRGKKGAGGICIKKTGQAMVFGIYEEPVAPGQCNMV
VERLGDYLVDQGM
>CAI78902.1 Allergen putative gamma-gliadin [Triticum aestivum]
MQVNPSVQVQPTQQQPYPESQQPFISQSQQQFPQPQQPFPQQPQQPFPQSQQQCLQQPQH
QFPQPTQQFPQRPLLPFTHPFLTFPDQLLPQPPHQSFPQPPQSYPQPPLQPFPQPPQQKY
PEQPQQPFPWQQPTIQLYLQQQLNPCKEFLLQQCRPVSLLSYLWSKIVQQSSCRVMQQQC
CLQLAQIPEQYKCTAIDSIVHAIFMQQGQRQGVQIVQQQPQPQQVGQCVLVQGQGVVQPQ
QLAQMEAIRTLVLQSVPSMCNFNVPPNCSTIKAPFVGVVTGVGGQ
>AAX85388.1 Allergen Art v 6; pectate lyase [Artemisia vulgaris]
MEKHYFVILFTAAFVFVGAAARADIGDELEAAQFNSTRRGLHECAAHNIIDKCWRCKADW
EKNRQALAKCAQGFAKGTTGGLGGEIYVVTDCSDDNAANPKPGTLRCGVTQDKPLWIIFK
KDMVIKLKHELVINKDKTIDGRGANVEITCGGLTIHNVCNVIIHNIHIHDIKVTEGGIIK
ATDAKPGHRHKSDGDGICVAGSSKIWIDHCTLSHGPDGLIDVTLGSTAVTISNCKFSHHQ

KILLLGADNSHVDDKKMHVTVAFNRFAEACDQRMPRCRFGFFQVVNNDYTSWGTYAIGGS
ANPTILSQGNRFHAPNDPMKKNVLVRADAPHTESMKWNWRSEKDLLENGAIFVASGCDPH
LTPEQKSHLIPAEPGSAVLQLTSCAGTLKCVPGKPC
>AAX85389.1 Allergen Art v 5; calcium-binding protein / polcalcin
[Artemisia vulgaris]
MADEDKAECDRIFGAFDKNGDGKISAAELGESLTKLGSVSPEEVQTMMDELDTDGDGYIS
YDEFAEFFNANRGLMKDVGKIF
>CAI79052.1 Putative putative LMW-glutenin subunit [Triticum aestivum]
MSHIPGLERPSQQQPLRPQQTLSHHHHQQPIQQQPQQFPQQQPCSQQQQQPPLSQQQQPP
FSQQQQPPFSQQQQPVLPQQPSFSQQQLPPFSQQQQPPFSQQQQPVLPQQPSFSQQQLPP
FSQQLPPFSQQQQPVLLQQQIPFVHPSILQQLNPCKVFLQQQCSPVAMPQSLARSQMLQQ
SSCHVMQQQCCQQLPQIPQQSRYEAIRAIVYSIILQEQQQVQGSIQTQQQQPQQLGQCVS
QPQQQSQQQLGQCSFQQPQQLQQLGQQPQQQQIPQGIFLQPHQISQLEVMTSIALRTLPT
MCGVNVPLYSSTTIMPFSIGTGVGGY
>1YG9_A Allergen Chain A, The Structure Of Mutant (N93q) Of Bla G 2
[Blattella germanica]
GASIVPLYKLVHVFINTQYAGITKIGNQNFLTVFDSTSCNVVVASQECVGGACVCPNLQK
YEKLKPKYISDGNVQVKFFDTGSAVGRGIEDSLTISQLTTSQQDIVLADELSQEVCILSA
DVVVGIAAPGCPNALKGKTVLENFVEENLIAPVFSIHHARFQDGEHFGEIIFGGSDWKYV
DGEFTYVPLVGDDSWKFRLDGVKIGDTTVAPAGTQAIIDTSKAIIVGPKAYVNPINEAIG
CVVEKTTTRRICKLDCSKIPSLPDVTFVINGRNFNISSQYYIQQNGNLCYSGFQPXGHSD
HFFIGDFFVDHYYSEFNWENKTMGFGRSVE
>AAY21180.1 Allergen Api m 11; major royal jelly protein [Apis mellifera]
MSFNIWWLILYFSIVCQAKAHYSLRDFKANIFQVKYQWKYFDYNFGSDEKRQAAIQSGEY
NYKNNVPIDVDRWNGKTFVTILRNDGVPSSLNVISNKIGNGGPLLEPYPNWSWAKNQNCS
GITSVYRIAIDEWDRLWVLDNGISGETSVCPSQIVVFDLKNSKLLKQVKIPHDIAINSTT
GKRNVVTPIVQSFDYNNTWVYIADVEGYALIIYNNADDSFQRLTSSTFVYDPRYTKYTIN
DESFSLQDGILGMALSHKTQNLYYSAMSSHNLNYVNTKQFTQGKFQANDIQYQGASDILW
TQASAKAISETGALFFGLVSDTALGCWNENRPLKRRNIEIVAKNNDTLQFISGIKIIKQI
SSNIYERQNNEYIWIVSNKYQKIANGDLNFNEVNFRILNAPVNQLIRYTRCENPKTNFFS
IFL
>CAI64396.1 Putative serine carboxypeptidase II [Triticum aestivum]
GNGLIDDYHDYVGTFEFWWNHGLVSDDTYQRLREACLHDSFIHPSPACDAATDVATAEQG
NIDMYSLYTPVCNITSSSSSSSSSLSQQRRSRGRYPWLTGSYDPCTERYSTAYYNRRDVQ
TALHANVTGAMNYTWSTCSDTINTHWHDAPRSMLPIYRELIAAGLRIWVFSGDTDAVVPL
TATRYSIGALGLPTTTSWYPWYDDQEVGGWSQVYKGLTLVSVRGAGHEVPLHRPRQALVL
FQYFLQGKPMPGQATNATVA
>CAI64397.1 Putative putative leucine-rich repeat protein [Triticum
aestivum]
KPVAANQDVDALSALRRGLQDPNGELKNWDANLVDACTWSHITCDRDNNRVTRIDLNKMN
LSGPLAPELGKLDRLQYLEIDHNRLTGPIPRELAGLSNLKHADFSNNNLCGPIPTTGAFQ
RIPRSSFANNPRLGRKC
>CAI64398.1 Putative 5a2 protein [Triticum aestivum]
IAVAVSADECEGDRRAMIKECAKYQQWPANPKLDPSDACCAVWQKANIPCLCAGVTKEKE
KIYCMEKVAYVANFCKKPFPHGYKCGSYTFPPLA
>CAI64400.1 Allergen Zea m 25; thioredoxin [Zea mays]
MAASEAAAAAATPVAPTEGTVIAIHSLEEWSIQIEEANSAKKLVVIDFTATWCPPCRAMA
PIFADMAKKSPNVVFLKVDVDEMKTIAEQFSVEAMPTFLFMREGDVKDRVVGAAKEELAR
KLELHMAS
>EAL89830.1 Putative major allergen Asp F2 [Aspergillus fumigatus]
MAALLRLAVLLPLAAPLVATLPTSPVPIAARATPHEPVFFSWDAGAVTSFPIHSSCNATQ
RRQIEAGLNEAVELARHAKAHILRWGNESEIYRKYFGNRPTMEAVGAYDVIVNGDKANVL
FRCDNPDGNCALEGWGGHWRGANATSETVICDRSYTTRRWLVSMCSQGYTVAGSETNTFW
ASDLMHRLYHVPAVGQGWVDHFADGYDEVIALAKSNGTESTHDSEALQYFALEAYAFDIA

APGVGCAGESHGPDQGHDTGSASAPASTSTSSSSSGSGSGATTTPTDSPSATIDVPPVRT
VRIS
>AAY83341.1 Allergen Fra a 3; lipid transfer protein (LTP) type 1
[Fragaria x ananassa]
MASSTAMKLSLVALLCIVVALPIAQAITCGQVASSISPCVNYVKSGGAVPAACCNGIRSL
NSAAKTTADRQATCNCLKQASGAIKGLNPSLAAGLPGKCGVSVPYKISTSTNCAAVK
>AAY83342.1 Allergen Fra a 3; lipid transfer protein (LTP) type 1
[Fragaria x ananassa]
MASSTAMKLSLVALLCIVVALPIAQAITCGQVASNISPCVTYVKSGGAVPAPCCSGIRNL
NGMAKTTADRQATCNCLKQAAGGIKGLNPNLAAGLPGKCGVSVPYKISTTTNCAAVK
>AAY83345.1 Allergen Fra a 3; lipid transfer protein (LTP) type 1
[Fragaria x ananassa]
MAISTAMKLSLVALLCIVVALPIAQAITCGQVASSISPCVNYVKSGGAVPAACCNGIRSL
NSAAKTTADRQTTCNCLKQASGAIKGLNPNLAAGLPGKCGVNVPYKISTSTNCAAVK
>AAY84563.1 Allergen Der p 18; chitin-binding protein [Dermatophagoides
pteronyssinus]
MTRLSFTVLIFLAAYFGSNIRPNVATLDPKTVCYYESWVHWRQGDGKMDPEDIDTSLCSH
IVYSYFGIDASSHEIKLLDQYLMITLHDMEHFTKHKGNAKAMIAVGGASMSDQFSKTAAV
EHYRETFVVSTIDLMTKYGFDGVMIDWSGMQAKDSDNFVKLLDKFDEKFAQTSFVMGVTL
PATIASYDNYNIPAISNYVDFMNVLTLDYDGPWAYTVGHASALPEQLKTLEAYNKRGAPR
HKMVMAVPFFARTWILEKMDKQDVGDKASGPGPKGQFTQTPGFLSYNELCVQIQAETNAF
SITRDHDNTAIYAVYVHDNHAEWISFEDRHTLGDKARNITEQGYGGMSVYTLSNEDVHGV
CGDKNPLLHAINSNYFRGIVTEPTVVTVTPVTHTTEHVTDIPGVFHCHQEGFFRDKTYCA
KYYECKKGDFGLEQTVHHCPNHSQAFDEVSRTCVDHAKIPGC
>AAY84565.1 Allergen Der p 15; chitinase [Dermatophagoides pteronyssinus]
MKTSCAILILMACFGLMNAAVKRDHNNYSKNPMRIVCYVGTWSVYHKVDPYTIEDIDPFK
CTHLMYGFAKIDEYKYTIQVFDPYQDDNHNTWEKHGYERFNNLRLKNPELTTMISLGGWY
EGSEKYSDMVANPTYRKQFVQSVLDFLQEYKFDGLDLDWEYPGSRLGNPKIDKQNYLTLV
RELKEAFEPFGYLLTAAVSPGKDKIDVAYELKELNQLFDWMNVMTYDYHGGWENVFGHNA
PLYKRPDETDELHTYFNVNYTMHYYLNNGATRDKLVMGVPFYGRAWSIEDRSKVKLGDPA
KGMSPPGFITGEEGVLSYIELCQLFQKEEWHIQYDEYYNAPYGYNDKIWVGYDDLASISC
KLAFLKELGVSGVMIWSLENDDFKGHCGPKYPLLNKVHNMINGDEKNSYECLLGPSTTTP
TPTTPSTPSTTTPTPTTPSTPSTTTPTPTTPSTPSTTTPTPTTTDSTSETPKYTTYVDGH
LIKCYKEGDLPHPTNIHKYLVCEYVNGGWWVHIMPCPPGTIWCQEKLTCITE
>P83958.1 Allergen Thaumatin-like protein (Allergen Act c 2) [Actinidia
chinensis]
ATFNFINNCPFTVWAAAVPG
>AAY88919.1 Putative Ole e 11.01 allergen precursor [Olea europaea]
MSCIAVEAVLLGILLYIPIVLSDDRAPIPANSAQLNSWFDGIIQPVAVRKATMDPALVTA
EGQAKVIKLKSDGSGDFKSINEAIKSIPDDNTKRVILSFSPGNYSEKVKIGMYKHYITFY
GEDPNNMPILVFGGTAAEYGTVDSATLIVESNYFSAVNLKIVNSAPRPDGKRVGAQAAAL
RISGDKASFYNVKIYGFQDTLCDDKGKHFYKDCYIEGTVDFIFGSGKSIFLNTELHAVPG
DQPAIITAQARKTESEDTGYYFVNCRVTGGGAFLGRSWMPAAKVVFAYTEMGDAIHPEGW
ILVKPEHESTVRFPEYNNKGPGANMEKRAKFVKRLSDAEAKQSISLGSIEASKWLLPPRV
VGLP
>AAZ20276.1 Allergen Ara h 11; oleosin [Arachis hypogaea]
MAEALYYGGRQRQEQPRSTQLVKATTAVVAGGSLLILAGLVLAGTVIGLTTITPLFVIFS
PVLVPAVITVALLGLGFLASGGFGVAAITVLTWIYRYVTGKHPPGANQLDTARHKLMGKA
REIKDFGQQQTSGAQAS
>CAI38795.2 Allergen Act d 2; thaumatin-like protein (TLP) [Actinidia
deliciosa]
MSTFKSLSLSALLFIAFLFTCARGATFNIINNCPFTVWAAAVPGGGKRLDRGQNWIINPG
AGTKGARVWPRTGCNFDGAGRGKCQTGDCNGLLQCQAFGQPPNTLAEYALNQFNNLDFFD
ISLVDGFNVAMEFSPTSGGCTRGIKCTADINGQCPNELRAPGGCNNPCTVFKTDQYCCNS

GNCGLTNFSKFFKDRCPDAYSYPKDDQTSTFTCPAGTNYKVVFCP
>AAZ23584.1 Allergen Tri a 26; HMW glutenin [Triticum aestivum]
MAKRLVLFAAVVVALVALTAAEGEASGQLQCEHELEACQQVVDQQLRDVSPGCRPITVSP
GTRQYEQQPVVPSKAGSFYPSETTPSQQLQQMIFWGIPALLRRYYPSVTSSQQGSYYPGQ
ASPQQSGQGQQPGQEQQPGQGQQDQQPGQRQQGYYPTSPQQPGQGQQLGQGQPGYYPTSQ
QPGQKQQAGQGQQSGQGQQGYYPTSPQQSGQGQQPGQGQPGYYPTSPQQSGQWQQPGQGQ
QPGQGQQSGQGQQGQQPGQGQRPGQGQQGYYPISPQQPGQGQQSGQGQPGYYPTSLRQPG
QWQQPGQGQQPGQGQQGQQPGQGQQSGQGQQGYYPTSLQQPGQGQQLGQGQPGYYPTSQQ
SEQGQQPGQGKQPGQGQQGYYPTSPQQSGQGQQLGQGQPGYYPTSPQQSGQGQQSGQGQQ
GYYPTSPQQSGQGQQPGQGQSGYFPTSRQQSGQGQQPGQGQQSGQGQQGQQPGQGQQAYY
PTSSQQSRQRQQAGQWQRPGQGQPGYYPTSPQQPGQEQQSGQAQQSGQWQLVYYPTSPQQ
PGQLQQPAQGQQPAQGQQSAQEQQPGQAQQSGQWQLVYYPTSPQQPGQLQQPAQGQQGYY
PTSPQQSGQGQQGYYPTSPQQSGQGQQGYYPTSPQQSGQGQQPGQGQQPRQGQQGYYPIS
PQQSGQGQQPGQGQQGYYPTSPQQSGQGQQPGHEQQPGQWLQPGQGQQGYYPTSSQQSGQ
GHQSGQGQQGYYPTSLWQPGQGQQPGQGQQGYASPYHVSAEYQAARLKVAKAQQLAAQLP
AMCRLEGSDALSTRQ
>CAJ19705.1 non-specific lipid transfer protein [Solanum lycopersicum]
MEMVNKIACFVLLCMVVVAPHAEALTCGQVTSTLAPCLPYLMNRGPLRNCCDGVKGLLGQ
AKTTVDRQAACTCLKSAASSFTGLNLGKAAALPNTCSVNIPYKISPSTDCSKVQ
>AAZ76743.1 Pen a 1 allergen [Penaeus aztecus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANIQLVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>1WKX_A Allergen Chain A, Crystal Structure Of A Hev B 6.02 Isoallergen
[Hevea brasiliensis]
EQCGRQAGGKLCPDNLCCSQWGWCGSTDEYCSPDHNCQSNCKD
>P0C088.1 Allergen Art v 3; lipid transfer protein (LTP) type 1
[Artemisia vulgaris]
ALTCSDVSNKISPCLSYLKQGGEVPADCCAGVKGLND
>BAE20328.1 Allergen Tri a 19; omega-5 gliadin [Triticum aestivum]
MKTFIIFVLLAMAMNIASASRLLSPRGKELHTPQEQFPQQQQFPQPQQFPQQQIPQQHQI
PQQPQQFPQQQQFLQQQQIPQQQIPQQHQIPQQPQQFPQQQQFPQQHQSPQQQFPQQQFP
QQKLPQQEFPQQQISQQPQQLPQQQQIPQQPQQFLQQQQFPQQQPPQQHQFPQQQLPQQQ
QIPQQQQIPQQPQQIPQQQQIPQQPQQFPQQQFPQQQFPQQQFPQQEFPQQQQFPQQQIA
RQPQQLPQQQQIPQQPQQFPQQQQFPQQQSPQQQQFPQQQFPQQQQLPQKQFPQPQQIPQ
QQQIPQQPQQFPQQQFPQQQQFPQQQEFPQQQFPQQQFHQQQLPQQQFPQQQFPQQQFPQ
QQQFPQQQQLTQQQFPRPQQSPEQQQFPQQQFPQQPPQQFPQQQFPIPYPPQQSEEPSPY
QQYPQQQPSGSDVISISGL
>AAZ91659.1 Putative polygalacturonase [Lilium longiflorum]
MASISSARLLLLSSVLLIVKLTAGLVPETKVNVKSFGAVGDGKTDSTQAILRAWDQACNG
FGKQRVIVPEGVYLTGPMAFRGPCNGFISMQVRGELRAYGDVGKYPNAKWVSYEDLNGLL
VTGGGRFNAQGSQAWTQNDCSTKKNCALLTTSVKFDHCTNATIRRINSIDSKFFHIAIDQ
CTDITVHHINITAPGTSPNTDGIHIGRSTNVNISNAIIGTGDDCISLGPGSSHITISKVQ
CGPGHGISVGSLGRYMNEENVWDVKVKNCTLTGTTNGVRIKTWKGSSPSEASQFIFQDIE
MREVQNPIIIDQEYCSYDYCANNPPAPSKVKLSDIQFMNIKGTSTSKVAINLICSSAVPC
EGIQLSDISLKYIRAGKPTMANCSHVSGTTSGLVSPPSCIKGADVSLFTTQML
>CAJ28930.1 Allergen Ves g 5; unknown function, antigen 5 [Vespula
germanica]
NNYCKIKCLKGGVHTACKYESLKPNCANKKVVAYGLTKQEKQDILKEHNDFRQKIARGLE
TRGNPGPQPPAKNMKNLVWNDELAYIAQVWANQCQYGHDTCRDVAKYPVGQNVALTGSTA
AKYDNPVKLVKMWEDEVKDYNPKKKFSENNFLKIGHYTQMVWANTKEVGCGSIKYIQDKW
HKHYLVCNYGPSGNFGNEELYQTK

>CAJ28931.1 Allergen Ves g 1 allergen precursor [Vespula germanica]
GPKCPFNTDTVSMIIETRENRNRDLYTLQTLQNHPEFKEKTITRPVVFITHGFTSSASET
NFINLSKALVDKDNYMVISIDWQTAACTNEAAGLKYLYYPTAASNTRLVGQYIATITQKL
VKQYKISMANIRLIGHSLGAHVSGFAGKKVQELKLGKYSEIIGLDPAGPSFSSNKCSDRL
CETDAEYVQILHTSNHLGTERILGTVDFYMNNGKNQPGCGRFFTEVCSHSRAVIYMAECI
KHECCLIGIPKSKSSQPISSCTKQECVCVGLNAKKYPSRGSFYVPVESTAPFCNNKGKII
>Q6R4B4.1 Allergen Alt a 13; glutathione S-transferase [Alternaria alternata]
MSDKPSELAVQKLVLFAVKGTATSTHNTVRPLILLDELGVPHEIYVVDRVSAPWFTEINP
HRMVPVILEKSPDGRDTLRAWESTSTLMYIADAYDKDGTFGGRNVQESSDINNWLTLHTA
ALGPTAKYWLYFYKLHPEKLPKTIEKLRSNITVQYDILERRLNEPGQQYLAWLNEKFKRS
SYNRRHCYASLCYEKYRRVVRAGVKVAQTARVVCPYGGDTRRGVWPARKST
>Q875I9.1 Putative RecName: Full=Endo-chitosanase; Flags: Precursor [Aspergillus fumigatus]
MRLSEILTVALVTGATAYNLPNNLKQIYDKHKGKCSKVLAKGFTNGDASQGKSFSYCGDI
PGAIFISSSKGYTNMDIDCDGANNSAGKCANDPSGQGETAFKSDVKKFGISDLDANIHPY
VVFGNEDHSPKFKPQSHGMQPLSVMAVVCNGQLHYGIWGDTNGGVSTGEASISLADLCFP
NEHLDGNHGHDPNDVLFIGFTSKDAVPGATAKWKAKNAKEFEDSIKSIGDKLVAGLKA
>Q8J077.1 Allergen RecName: Full=Subtilisin-like protease 6; AltName: Allergen=Tri m 2; Flags: Precursor [Trichophyton schoenleinii]
FITKAIPIVLAALSAVNGAKILEAGPHAETIPNKYIVVMKKDVSDEAFSTHTTWLSQNLN
RRLMRRSGSSKAMAGMQNKYSLGGIFRAYSGEFDDAMIKDISNHDDVDYIEPDFVVRTST
NGTNLTRQENVPSWGLARVGSKQAGGTTYYYDSSAGKGVTAYVIDTGIDIEHEDFGGRAK
WGKNFVDQRDEDCNGHGTHVAGTVGGTKYGLAKSVSLVAVKVLDCDGSGSNSGVIRGMEW
AMREASGGGNGTAKAAGKSVMNMSLGGPRSQASNDAARAISEAGIFMAVAAGNENMDAQH
SSPASEPSVCTVAASTEDDGKAEFSNYGAVVDVYAPGKDITSLKPGGSTDTLSGTSMASP
HVCGLGAYLIGLGKQGGPGLCDTIKQMANEAIQRPGEGTTGKLIY
>Q9UVU3 Putative Allergen Asp fl 1 [Aspergillus flavus]
MQSIKRTLLLLGAILPAVLGAPVQETRRAAEKLPGKYIVTFKPGIDEAKIQEHTTWATNI
HQRSLERRGATGGDLPVGIERNYKINKFAAYAGSFDDATIEEIRKNEDVAYVEEDQIYYL
DGLTTQKSAPWGLGSISHKGQQSTDYIYDTSAGEGTYAYVVDSGVNVDHEEFEGRASKAY
NAAGGQHVDSIGHGTHVSGTIAGKTYGIAKKASILSVKVFQGESSSTSVILDGFNWAAND
IVSKKRTSKAAINMSLGGGYSKAFNDAVENAFEQGVLSVVAAGNENSDAGQTSPASAPDA
ITVAAIQKSNNRASFSNFGKVVDVFAPGQDILSAWIGSSSATNTISGTSMATPHIVGLSL
YLAALENLDGPAAVTKRIEELATKDVVKDVKGSPNLLAYNGNA
>Q4WB37.1 Putative RecName: Full=Endo-chitosanase; Flags: Precursor [Aspergillus fumigatus]
MHFLATAAVLAGVGLASAYTVPANLQQIYNKHKTGTCQNKLQDGFSDGISGSRSFAYCGD
IEGAIFLHSSANGGQYVNMDIDCDGANNSAGDCANDPSGQSMTAFMDTVKQYGISDLDAN
IHPYVVFGNSGSSPTFDPQQYGMEPLSVMAVVCNNQLFYGIWGDTNGGTSTGEASISLAK
LCFPNDGITGDNGHGEEDVLYIGFMGQDAVPGASAAWTARDTKTFEESIKALGDRLVAKL
SA
>Q5BLY5.1 Allergen Api m 3; acid phosphatase [Apis mellifera]
MSVIAILAMVVGVQAELKQINVIFRHGDRIPDEKNEMYPKDPYLYYDFYPLERGELTNSG
KMREYQLGQFLRERYGDFLGDIYTEESVSALSSFYDRTKMSLQLVLAALYPPNKLQQWNE
DLNWQPIATKYLRRYEDNIFLPEDCLLFTIELDRVLESPRGKYEFSKYDKLKKKLEEWTG
KNITTPWDYYYIYHTLVAEQSYGLTLPSWTNNIFPRGELFDATVFTYNITNSTPLLKKLY
GGPLLRIFTKHMLDVVSGTQKKKRKIYLFSGHESNIASVLHALQLYYPHVPEYSSSIIME
LHNIEGTHYVKIVYYLGIPSEARELQLPGCEVLCPLYKYLQLIENVIPSNEELICDKRFV
DESANNLSIEELDFVKLNLIRIAGTENK
>Q7M4I3.1 Allergen Bom p 4; protease [Bombus pensylvanicus]
VVGGKPAKLGAWPWMVALGFHNYRQPKKSPEWKCGGSLRISRHVLTAAHCAIHRSLYVVR
IADLNLKRDDDGAHPIQMGIESKLIHPDYVYSEHHDDIAILKLEKDVSFSEYIRPICLPI
EESLRNNNFIGYNPFVAGWGRLRYKGPLSDALMEVQVPVVRNKVCKRAYSDVSDTVICAG

YPKGRKDSCQGDSGGPLMIPQESTYYEIGVVSYGHECALPKYPGVYTRVTSYLDSFILPA
LKK
>P80208.1 Allergen Bra n 1; 2S albumin [Brassica napus]
SAGPFRIPKCRKEFQQAQHLRACQQWLHKQAMQSGSGPQGPQQRPPLLQQCCNELHQEEP
LCVCPTLKGASRAVKQQVRQQQGQQGQQLQQVISRIYQTATHLPKVCNIPQVSVCPFQKT
MPGPS
>P82952.1 Putative Seed allergenic protein 2 (Conglutin gamma) (Allergen Pru du ?) [Prunus dulcis]
TKSQTHVPIRPNKLVLKVQKDRATN
>Q647G9.1 Allergen Ara h 6; 2S albumin, conglutin [Arachis hypogaea]
MAKSTILVALLALVLVAHASAMRRERGRQGDSSSCERQVDRVNLKPCEQHIMQRIMGEQE
QYDSYDIRSTRSSDQQQRCCDELNEMENTQRCMCEALQQIMENQCDRLQDRQMVQQFKRE
LMNLPQQCNFRAPQRCDLDVSGGRC
>Q7M1E8 Allergen Par o 1; lipid transfer protein (LTP) type 1 [Parietaria officinalis]
ATGKVVQGAMPP
>Q7M1L8 Allergen Pollen allergen Phl p V [Phleum pratense]
DLGYAPATPAAPGAGYTPATPAAP
>Q7M1X6 Allergen Ant o 1; beta-expansin / partial [Anthoxanthum odoratum]
IAKVPPGPNITATYGDKWLDAKSTWYGKPTGA
>Q7M1X7 Putative Group I allergen Agr a I (Form 2), pollen [Agrostis alba]
IAKVPPGPNITADYGDKWLDAKSTWYGKPTGAGPK
>Q7M1X9 Putative Group I allergen Agr a I (Form 1), pollen [Agrostis alba]
IAKVPPGPNITATYGDKWLDAKSTWYGKPTGAGPK
>Q7M1Y0 Allergen Ant o 1; beta-expansin / partial [Anthoxanthum odoratum]
IAKVPPGPNITADYGDKWLDAKSTWYGKPTGA
>Q7M1Y1 Putative Group I allergen FeS e I, pollen [Schedonorus arundinaceus]
IAKVPPGPNITAEYGDKWLDAKSTFYGKPTGAGPK
>Q7M262 Allergen 30K allergen [Holcus lanatus]
ADAGYTPAAPAATGAGGDAT
>Q7M263 Putative 30K allergen [Secale cereale]
ADAGYAPAAPGTQPKA
>O22108 Putative LMM glutenin 1 [Triticum aestivum]
RCIPGLERPWQQQPLPPQQTFPQQPLFSQQQQQQLFPQQPSFSQQQPPFWQQQPPFSQQQ
PILPQQPPFSQQQQLVLPQQSPFSQQQQLILPPQQQQQLPQQQISIVQPSVLQQLNPCKV
FLQQQCSPVAMPQRLARSQMWQQSSCHVMQQQCCQQLSQIPEQSRYDAIRAITYSIILQE
QQQGFVQAQQQQPQQSGQGVSQSQQQSQQQLGQCSFQQPQQQLGQQPQQQQVQQGTFLQP
HQIAHLEVMTSIALRTLPMMCSVNVPLYSSTTSVPFGVGTGVGAY
>O23791.1 Allergen Ana c 2; bromelain, sulfhydryl protease [Ananas comosus]
MASKVQLVFLFLFLCAMWASPSAASRDEPNDPMMKRFEEWMAEYGRVYKDDDEKMRRFQI
FKNNVKHIETFNSRNENSYTLGINQFTDMTKSEFVAQYTGVSLPLNIEREPVVSFDDVNI
SAVPQSIDWRDYGAVNEVKNQNPCGSCWSFAAIATVEGIYKIKTGYLVSLSEQEVLDCAV
SYGCKGGWVNKAYDFIISNNGVTTEENYPYLAYQGTCNANSFPNSAYITGYSYVRRNDER
SMMYAVSNQPIAALIDASENFQYYNGGVFSGPCGTSLNHAITIIGYGQDSSGTKYWIVRN
SWGSSWGEGGYVRMARGVSSSSGVCGIAMAPLFPTLQSGANAEVIKMVSET
>Q94JN2.1 Allergen Ana c 1; profilin [Ananas comosus]
MSWQAYVDDHLMCEIDGQHLSSAAILGHDSTVWAQSPNFPQFKPEEISAILNDFENPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGTGGITVKKTNLALIIGVYDEPMTPGQCNMVVE
RLGDYLLEQGF
>O22116 Putative LMM glutenin 3 [Triticum aestivum]

ASAVAQISQQQQPPPFSQQQQPPFSQQQQPPFSQQQQSPFSQQQQQPPFSQQQQPPFSQQ
PLISQQQQLPFSQQQQPQFSQQQQPPYSQQQQPPYSQQQQPPFSQQQQPPFSQQQQPSFS
QQQQQPPFTQQQQPPFSQQSPISQQQQQQQQQQQQPFTQQQQPPFSQQPPISQQQQPPFS
QQQQPPFSQQQQIPVIHPSVLQQLNPCMVFLQQQCIPVAMQRCLARSQMLQQSICHVMQR
QCCQQLRQIPEQSRHESIRAIIYSIILQQQQQQQQQQQQQQGQSIIQYQQQPPQQLGQCV
SQPQQQLQQQLGQQPQQQQLAHGTFLQPHKIAQLEVMTSIALRTLPRMCSVNVPLYETTT
SVPLGVGIGVGVY
>Q6W8Q2.1 Allergen Tri a 32; peroxiredoxin [Triticum aestivum]
MPGLTIGDTVPNLELDSTHGKIRIHDYVGNGYVILFSHPGDFTPVCTTELAAMANYAKEF
EKRGVKLLGISCDDVQSHKEWTKDIEAYKPGSKVTYPIMADPDRSAIKQLNMVDPDEKDA
EGQLPSRTLHIVGPDKKVKLSFLYPSCTGRNMDEVVRAVDSLLTAAKHKVATPANWNPGE
CVVIAPGVSDDEAKKMFPQGFETADLPSKKGYLRFTKV
>ABA39435.1 Allergen Der p 1; cysteine protease [Dermatophagoides
pteronyssinus]
RPSSIKPFEEYKKAFNKSYATFEDEEAARKNFLESVKYVQSNGGAINHLSDLSLDEFKNR
FLMSAEAFEHLKTQFDLNAETNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFSGV
AATESAYLAYRNQSLDLAEQELVDCASQHGCHGDTIPRGIEYIQHNGVVQESYYRYVARE
QSCRRPNAQRFGISNYCQIYPPNANKIREALAQTHSAIAVIIGIKDLDAFRHYDGRTIIQ
RDNGYQPNYHAVNIVGYSNAQGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVV
IL
>ABA39436.1 Allergen Der f 1; cysteine protease [Dermatophagoides
farinae]
RPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEANKGAINHLSDLSLDEFKNR
YLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRTVTPIRMQGGCGSCWAFSG
VAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIEYIQQNGVVEERSYPYVAR
EQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVIIGIKDLRAFQHYDGRTII
QRDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTT
>ABA39437.1 Allergen Der p 2; NPC2-like protein [Dermatophagoides
pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEAVFEANQNSKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVLGDNGVLACA
IATHAKIRD
>ABA39438.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
DQVDVKDCANNEIKKVMVDGRHGSDPCIIHRGKPFTLEALFDANQNTKTAKIEIKANING
LEVDVPGIDTNACHFVKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKLIGDNGVLACA
IATHAKIRD
>ABA42918.1 putative alpha/beta hydrolase superfamily protein
[Cladosporium herbarum]
MPAGLQYVTTDGGRLAVEITGKETDPLVICSPGMGDTRDAYKPLAKVLVSNGYRVAAMDA
RAHGESSAKFARYGDEATADDFLTVANELSPGSPVVLAGASFSAAAATIAAAKQPERVSK
IILLGPFLRNGMGVVGLWLMPVMFAWPWGPAAWEMYAATLWPGLEGDGAKKRAATTRASL
TRPGRWAGFQALISSLDHRVVAPYISSVRAPALVVMGDKDPDWSDPKVEAEWVASNFSQV
DTLMVPEAGHAPMYERPQVVAERVLSFLGDQTNV
>CAA55071.2 Allergen Alt a 10; aldehyde dehydrogenase [Alternaria
alternata]
MTSVKLSTPQTGEFEQPTGLFINNEFVKAVDGKTFDVINPSTEEVICSVQEATEKDVDIA
VAAARKAFNGPWRKETPENRGKLLNKLADLFEKNADLIAAVEALDNGKAFSMAKNVDVPA
AAGCLRYYGGWADKIEGKVVDTAPDSFNYIRKEPIGVCGQIIPWNFPILMWSWKIGPAIA
TGNTVVLKTAEQTPLSAYIACKLIQEAGFPPGVINVITGFGKIAGAAMSAHMDIDKIAFT
GSTVVGRQIMKSAAGSNLKKVTLELGGKSPNIVFADADLDEAIHWVNFGIYFNHGQACCA
GSRIYVQEEIYDKFIQRFKERAAQNAVGDPFAADTFQGPQVSQLQFDRIMGYIEEGKKSG
ATIETGGNRKGDKGYFIEPTIFSNVTEDMKIQQEEIFGPVCTISKFKTKADVIKIGNNTT
YGLAAAVHTSNLTTAIEVANALRAGTVWVNSYNTLHWQLPFGGYKESGIGRELGEAALDN

YIQTKTVSIRLGDVLFG
>CAA55072.2 Allergen Cla h 10; aldehyde dehydrogenase [Cladosporium herbarum]
MTSVQLETPHSGKYEQPTGLFINNEFVKGQEGKTFDVINPSDESVITQVHEATEKDVDIA
VAAARKAFEGSWRQETPENRGKLLNNLANLFEKNIDLLAAVESLDNGKAISMAKGDISMC
VGCLRYYGGWADKITGKVIDTTPDTFNYVKKEPIGVCGQIIPWNFPLLMWAWKIGPAIAC
GNTVVLKTAEQTPLGGLVAASLVKEAGFPPGVINVISGFGKVAGAALSSHMDVDKVAFTG
STVVGRTILKAAASSNLKKVTLELGGKSPNIVFEDADIDNAISWVNFGIFFNHGQCCCAG
SRVYVQESIYDKFVQKFKERAQKNVVGDPFAADTFQGPQVSKVQFDRIMEYIQAGKDAGA
TVETGGKRKGDKGYFIEPTIFSNVTEDMKIVKEEIFGPVCSIAKFKTKEDAIKLGNASTY
GLAAAVHTKNLNTAIEVSNALKAGTVWVNTYNTLHHQMPFGGYKESGIGRELGEDALANY
TQTKTVSIRLGDALFG
>Q06811.2 Allergen Asc s 1; unknown function [Ascaris suum]
TMEHYLKTYLSWLTEEQKEKLKEMKEAGKTKAEIQHEVMHYYDQLHGEEKQQATEKLKVG
CKMLLKGIIGEEKVVELRNMKEAGADIQELQQKVEKMLSEVTDEKQKEKVHEYGPACKKI
FGATTLQHHRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKTKKELEAKILHYYDE
LEGDAKKEATEHLKGGCGEILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDE
EKKQYIADFGPACKKIYGVHTSRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAK
KELEAKILHYYDELEGDAKKEATEHLKGGCAEILKHVVGEEKAAELKNLKDSGASKEELK
AKVEEALHAVTDEEKKQYIADFGPACKKIYGVHTSRRRRHHFTLESSLDTHLKWLSQEQK
DELLKMKKDGKTKKDLQAKILHYYDELEGDAKKEATEHLKDGCREILKHVVGEEKEAELK
KLKDSGASKEEVKAKVEEALHAVTDEEKKQYIADFGPACKKIFGAAHTSRRRRHHFTLES
SLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYDELEGDAKKEATEHLKGGCREI
LKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIADFGPACKKIYGVH
TSRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYDELEGDAKK
EATEHLKGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIA
DFGPACKKIYGVHTSRRRRHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKI
LHYYDELEGDAKKEATEHLKGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEAL
HAVTDEEKKQYIADFGPACKKIYGVHTSRRRRHHFTLESSLDTHLKWLSQEQKDELLKMK
KDGKAKKELEAKILHYYDELEGDAKKEATEHLKGGCREILKHVVGEEKAAELKNLKDSGA
SKEELKAKVEEALHAVTDEEKKQYIADFGPACKKIYGVHTSRRRRHHFTLESSLDTHLKW
LSQEQKDELLKMKKDGKAKKELEAKILHYYDELEGDAKKEATEHLKGGCREILKHVVGEE
KAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIADFGPACKKIYGVHTSRRRRHH
FTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYDELEGDAKKEATEHLKG
GCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIADFGPACKK
IYGVHTSRRRRYHAEDGTDDIDGLAQSRQRRSGFFEKLIDVFAFF
>ABA81885.1 Putative profilin-like [Solanum tuberosum]
MSWQTYVDEHLLCEIEGNHLTSAAIIGQDGTVWAQSANFPQFKPEEITGVMNDFAEPGTL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGITIKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLVEQGL
>BAE46763.1 Putative dark muscle parvalbumin [Trachurus japonicus]
MAFKGVLNDADVTAALDGCKSAFDHKAFFKACGLAAKSADDIKKAFAIIDQDKSGFIEED
ELKLFLQNFCAGARALSDAETKAFLKAGDSDGDGKIGVDEFAAMVKH
>ABB16985.1 Putative profilin-like protein [Solanum tuberosum]
MSWQTYVDEHLLCEIEGNHLTSAAIVGQDGTVWAQSANFPQFKPEEISGIMNDFAEPGTL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGITIKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLVEQGL
>CAI43283.4 Allergen Mala s 12; glucose-methanol-choline oxidoreductase [Malassezia sympodialis]
MKGIVSWAVVSAALVLSATESLAFANVSSFEKRTTTGNGWDLDGKSYDYVIVGGGTAGLV
LANRLSANQGTTVAVIEAGNSGYDDNDKFVVPDANLYNSAVNTQYDWQFHTSSQKHMNNR
RASWPRGKVLGGSSAVNGLYYVRPSETEVNVWSKLAGGSGRWSWNSLLSGMKKSEHFRGP
VKSVQNQLQIQYNAGSHGSNGPIGTTWPAVTYDPVERFIKTADSMSGAINNDPYNGNNHG
TYVALSSIDKTNWQRSFSRNGYLDPISKRSNLHVLTGHTVTGIIFDRSGKNAQATGVHYA

ASSNEASHTVHANKEVIISGGAINSPQILQLSGIGDKNLLNGLGIDVVVDLPGVGENLQD
HVSAGMSFKPKNKKDAGPTSVTGDAKADSYVNSAVSYTSLGKLFNNKDSILGKIQARAKQ
IADSHNVSPAVKQGQSKAYNALADTIFPSKVSPVEILGNVMFGSISIQAALQHPLSRGSI
KITSKDPFAYPKINPNYFAENLDLVLLREGFKLIREMSQQSPLKDVIDFETVPGDKVQTN
EDWENWIRSAAGTEYHPSSTCAMLPRGDGGVVDENLKVYGTSNLRVVDASVTPIAMSCHL
ESVVYGLAEVAADIILGN
>AAY84564.2 Allergen Der p 15; chitinase [Dermatophagoides pteronyssinus]
MKTSCAILILMACFGLMNAAVKRDHNNYSKNPMRIVCYVGTWSVYHKVDPYTIEDIDPFK
CTHLMYGFAKIDEYKYTIQVFDPYQDDNHNTWEKHGYERFNNLRLKNPELTTMISLGGWY
EGSEKYSDMVANPTYRQQFVQSVLDFLQEYKFDGLDLDWEYPGSRLGNPKIDKQNYLTLV
RELKEAFEPFGYLLTAAVSPGKDKIDVAYELKELNQLFDWMNVMTYDYHGGWENVFGHNA
PLYKRPDETDELHTYFNVNYTMHYYLNNGATRDKLVMGVPFYGRAWSIEDRSKVKLGDPA
KGMSPPGFITGEEGVLSYIELCQLFQKEEWHIQYDEYYNAPYGYNDKIWVGYDDLASISC
KLAFLKELGVSGVMIWSLENDDFKGHCGPKYPLLNKVHNMINGDEKNSYECLLGPSTTTP
TPTTPSTPSTTTPTPTTPSTPSTTTPTPTTPSTPSTTTPTPTTPSTPSTTTPTPTTPSTT
STTTPTPTTTDSTSETPKYTTYVDGHLIKCYKEGDLPHPTNIHKYLVCEYVNGGWWVHIM
PCPPGTIWCQEKLTCITE
>ABB52642.1 Allergen tropomyosin [Dermatophagoides pteronyssinus]
MEAIKNKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRALQKKIQQIENELDQV
QEQLSAANTKLEEKEKALQTAEGDVAALNRRIQLIEEDLERSEERLKIATAKLEEASQSA
DESERMRKMLEHRSITDEERMEGLENQSKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAHEQQIRIMTTKLKEAEARAE
FAERSVQKLQKEVGRLEDELVHEKEKYKSISDELDQTFAEL
>Q63213 Putative Alpha-2u globulin [Rattus norvegicus]
MKLLLLLLCLGLTLVCGHAEEASFERGNLDVDKLNGDWFSIVVASDKREKIEENGSMRVF
VQHIDVLENSLGFTFRIKENGVCTEFSLVADKTAKDGEYFVEYDGENTFTILKTDYDNYV
MFHLVNVNNGETFQLMELYGRTKDLSSDIKEKFAKLCVAHGITRDNIIDLTKTDRCLQAR
G
>ABB78006.1 Allergen Pru p 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Prunus persica]
MGVFTYESEFTSEIPPPRLFKAFVLDADNLVPKIAPQAIKHSEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSIDKENHSYSYTLIEGDALGDNLEKISYETKLVASPSGGSIIKSTSH
YHTKGDVEIKEEHVKAGKEKASNLFKLIETYLKGHPDAYN
>ABB88514.1 Allergen Bomb m 1; arginine kinase [Bombyx mori]
MVDAATLEKLEAGFSKLQGSDSKSLLKKYLTREVFDSLKNKKTSFGSTLLDCIQSGVENL
DSGVGIYAPDAESYSVFAELFDPIIEDYHNGFKKTDKHPPKNWGDVDTLGNLDPAGEFVV
STRVRCGRSLEGYPFNPCLTESQYKEMEDKVSGTLSSLEGELKGTFYPLTGMSKETQQQL
IDDHFLFKEGDRFLQAANACRFWPTGRGIYHNENKTFLVWCNEEDHLRIISMQMGGDLQQ
VYKRLVSAVNEIEKKIPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAADKKKLEEVA
SKYHLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKEMYDGIAELIKIEKSL
>ABB89296.1 Allergen Bla g 6; troponin C [Blattella germanica]
MDELPPEQIQLLKKAFDAFDREKKGCISTEMVGTILEMLGHRLDDDMLQEIIAEVDADGS
GELEFEEFVSLASRFLVEEDAEAMQQELREAFRLYDKEGNGYITTNVLREILKELDDKIT
AEDLDMMIEEIDSDGSGTVDFDEFMEVMTGE
>ABB89297.1 Allergen Bla g 6; troponin C [Blattella germanica]
MDEIPAEQVVLLKKAFDAFDREKKGCISTEMVGTILEMLGTRLDQDMLDEIIAEVDADGS
GELEFEEFCTLASRFLVEEDAEAMQHELREAFRLYDKEGNGYITTAVLREILKELDDKIT
AEDLDMMIEEIDSDGSGTVDFDEFMEVMTGE
>ABB89298.1 Allergen Bla g 6; troponin C [Blattella germanica]
MADEQLQLPPEQISVLRKAFDAFDREKSGSISTNMVEEILRLMGQPFNRRTLEELIDEVD
ADKSGRLEFDEFVTLAAKFIIEEDSEAMEKELREAFRLYDKEGNGYIPTSCLREILRELD
EQLTSDELDMMIEEIDADGSGTVDFDEFMEMMTG
>ABB89950.1 Allergen Pen c 30; catalase [Penicillium citrinum]
MHLLAFATDLVGIANAACPYMTGEVPGDYSPHELHRRADEGAADNTEEFLSQFYLNDKDA

YLTSDVGGPIEDQNSLSAGERGPTLLEDFIFRQKIQHFDHERVPERAVHARGAGAHGVFT
SYADWSNITAASFLSKKDKETPMFVRFSTVAGSRGSADTARDVHGFATRFYTDEGNFDIV
GNNIPVFFIQDAIQFPDLIHAVKPSGDNEIPQAATAHDSAWDFFSQQPSSLHTLLWAMAG
HGIPRSFRNVDGFGVHTFRFVTDSGKSKLVKFHWKGLQGKASLVWEEAQQISGKNPDFLR
QDLWDAIEAGRFPEWELGVQIMDEEDQLRFGFDLLDPTKIVPEEIIPVTKLGKMTLNRNP
RNYFAETEQVMFQPGHIVRGVDFTDDPLLQGRLFSYLDTQLNRHGGPNFEQLPINRPRTP
IHNNNRDGAGQMFIPLNKDAYSPNTLNNASPKQANQTTGKGFFTTPSRKGNGKLQRTVSS
TFEDVWSQPRLFWNSLVEAEKQFVVDATRFENSNVVSDIVRNNVIIQLNRISNDLAKRVA
EAIGIEAPKPDPSFYHDNTTAHIGAFGQKLLKLEGLKVGVLASVQNASSVSSAASLQSQL
KDAGVDVVVVAERLGDGVNQTYSGSDAIQFDAVVVADGAEGLFSSRSFTEKPVKNKASSL
FPAGRPLDILVDAFRFGKPVGAIGKGAAALRAAQISSDREGVYAAKSIGNEFVKGLKEGL
RIFKFLDRFALDA
>Q96X30.3 Allergen Asp f 22; enolase [Aspergillus fumigatus]
MPISKIHARSVYDSRGNPTVEVDVVTETGLHRAIVPSGASTGQHEAHELRDGDKTQWGGK
GVLKAVKNVNETIGPALIKENIDVKDQSKVDEFLNKLDGTANKSNLGANAILGVSLAVAK
AGAAEKGVPLYAHISDLAGTKKPYVLPVPFQNVLNGGSHAGGRLAFQEFMIVPDSAPSFS
EALRQGAEVYQKLKALAKKKYGQSAGNVGDEGGVAPDIQTAEEALDLITEAIEQAGYTGK
IKIAMDVASSEFYKADVKKYDLDFKNPESDPSKWLTYEQLADLYKSLAAKYPIVSIEDPF
AEDDWEAWSYFYKTSDFQIVGDDLTVTNPGRIKKAIELKSCNALLLKVNQIGTLTESIQA
AKDSYADNWGVMVSHRSGETEDVTIADIAVGLRSGQIKTGAPCRSERLAKLNQILRIEEE
LGENAVYAGSKFRTAVNL
>P79017.2 Allergen Asp f 2; unknown function [Aspergillus fumigatus]
MAALLRLAVLLPLAAPLVATLPTSPVPIAARATPHEPVFFSWDAGAVTSFPIHSSCNATQ
RRQIEAGLNEAVELARHAKAHILRWGNESEIYRKYFGNRPTMEAVGAYDVIVNGDKANVL
FRCDNPDGNCALEGWGGHWRGANATSETVICDRSYTTRRWLVSMCSQGYTVAGSETNTFW
ASDLMHRLYHVPAVGQGWVDHFADGYDEVIALAKSNGTESTHDSEALQYFALEAYAFDIA
APGVGCAGESHGPDQGHDTGSASAPASTSTSSSSSGSGSGATTTPTDSPSATIDVPSNCH
THEGGQLHCT
>O60024.2 Allergen Asp f 4; unknown function [Aspergillus fumigatus]
MQLKNSMLLLTALAAGSSVARLHGHERRHLHHAGEKREVGDTVYATINGVLVSWINEWSG
EAKTSDAPVSQATPVSNAVAAAAAASTPEPSSSHSDSSSSSGVSADWTNTPAEGEYCTDG
FGGRTEPSGSGIFYKGNVGKPWGSNIIEVSPENAKKYKHVAQFVGSDTDPWTVVFWNKIG
PDGGLTGWYGNSALTLHLEAGETKYVAFDENSQGAWGAAKGDELPKDQFGGYSCTWGEFD
FDSKINQGWSGWDVSAIQAENAHHEVQGMKICNHAGELCSIISHGLSKVIDAYTADLAGV
DGIGGKVVPGPTRLVVNLDYKE
>O42799.2 Allergen Asp f 7; unknown function [Aspergillus fumigatus]
MAPIFKSLALVSALFAAISSAAPVNLDKREVDVVWTTVTTVVWTTIDVTTTIYPTPQAPT
PPVVESTPTPTPSAAPEQAEPIETSTQPETTKSQPTQPSVATFIPVAAAAAAADSAAPIP
EEPAPQPATTAAPSTSTTTQAAPSAPPAANSGSTEKAASSGYSGPCSKGSPCVGQLTYYD
TATSASAPSSCGLTNDGFSENVVALPVGIMTDADCGKTVTITYNGITKTATVVDKCMGCK
PTDLDASRHLFGELADFSAGRIDGMSWYFN
>Q8NKF4.2 Allergen Asp f 23; L3 ribosomal protein [Aspergillus fumigatus]
MSHRKYEAPRHGSLAFLPRKRAARHRGKVKSFPKDDPKKPVHLTASMGYKAGMTTVVRDL
DRPGAKMHKKEIVEAVTIIETPPLVAVGVVGYIETPRGLRSLTTVWAEHLSDEVKRRFYK
NWYKSKKKAFTKYAKKHAEENGASITRELERIKKYCTVVRVLAHTQIRKTPLKQKKAHLM
EIQVNGGSVADKVDFARNLFEKPIEIDSIFEKDEMIDVIAVTKGHGFQGVTSRWGTKKLP
RKTHKGLRKVACIGAWHPSHVQWTVARAGQMGYHHRTSCNHKVFRIGKGSDEGNASTDFD
ISKKQITPMGGFVRYGEVKNDYIMVKGSVPGVKKRVMTLRKTLYPQTSRRATEKVELKWI
DTSSKFGHGAFQTPEEKRAFMGTLKKDLVTSA
>Q9UUZ6.2 Allergen Asp f 8; acidic ribosomal protein P2 [Aspergillus fumigatus]
MKHLAAYLLLALAGNTSPSSEDVKAVLSSVGIDADEERLNKLIAELEGKDLQELIAEGST
KLASVPSGGAAAAAPAAAGAAAGGAAAPAAEEKKEEEKEESDEDMGFGLFD
>Q92450.3 Allergen Asp f 6; superoxide dismutase [Aspergillus fumigatus]

MSQQYTLPPLPYPYDALQPYISQQIMELHHKKHHQTYVNGLNAALEAQKKAAEANDVPKL
VSVQQAIKFNGGGHINHSLFWKNLAPEKSGGGKIDQAPVLKAAIEQRWGSFDKFKDAFNT
TLLGIQGSGWGWLVTDGPKGKLDITTTHDQDPVTGAAPVFGVDMWEHAYYLQYLNDKASY
AKGIWNVINWAEAENRYIAGDKGGHPFMKL
>CAJ43561.1 Allergen staphylococcal enterotoxin B precursor (SEB)
[Staphylococcus aureus]
IFVLILVISTPNVLAESQPDPKPDELHKASKFTGLMENMKVLYDDNHVSAINVKSIDQFL
YFDLIYSIKDTKLGNYDNVRVEFKNKDLADKYKDKYVDVFGANYYYQCYFSKKTNDINSH
QTDKRKTCMYGGVTEHNGNQLDKYRSITVRVFEDGKNLLSFDVQTNKKKVTAQELDYLTR
HYLVKNKKLYEFNNSPYETGYIKFIENENSFWYDMMPAPGDKFDQSKYLMMYNDNKMVDS
KDVKIEVYLTTKKK
>ABC02750.1 Putative profilin [Litchi chinensis]
MSWQAYVDDHLMCETDGQHLTAAAIIGHDGSVWAQSANFPQFKPVEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEPGAVIRGKKGPGGITVKKTTQALIIGIYDEPMTPGQCNMVVE
RLGDYLVDQGL
>ABC18306.1 Allergen Fag e 2; 2S albumin [Fagopyrum esculentum]
MKLFIILATATLLIAATQATYPRDEGFDLGETQMSSKCMRQVKMNEPHLKKCNRYIAMDI
LDDKYAEALSRVEGEGCKSEESCMRGCCVAMKEMDDECVCEWMKMMVENQKGRIGERLIK
EGVRDLKELPSKCGLSELECGSRGNRYFV
>BAE54429.1 Putative tropomyosin [Sepia esculenta]
MDAIKKKMLAMKMEKEVATDKAEQTEQSLRDLEDAKNKTEEDLSTLQKKYSNLENDFDNA
NEQLTAANTNLEASEKRVAECESEIQGLNRRIQLLEEDLERSEERLTSAQSKLEDASKAA
DESERGRKVLENRSQGDEERIDLLEKQLEEAKWIAEDADRKFDEAARKLAITEVDLERAE
ARLEAAEAKIVELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTHRLKEAENRAA
EAERTVSKLQKEVDRLEDELLAEKERYKSISDELDQTFAELAGY
>BAE54430.1 Putative tropomyosin [Sepioteuthis lessoniana]
MDAIKKKMLAMKMEKEVATDKAEQTEQSLRDLEDAKNKIEEDLSTLQKKYANLENDFDNA
NEQLTAANTNLEASEKRVAECESEIQGLNRRIQLLEEDLERSEERFSSAQSKLEDASKAA
DESERGRKVLENRSQGDEERIDLLEKQLEEAKWIAEDADRKFDEAARKLAITEVDLERAE
ARLEAAEAKIVELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTHRLKEAENRAA
EAERTVSKLQKEVDRLEDELLAEKERYKTISDELDQTFAELAGY
>BAE54431.1 Putative tropomyosin [Todarodes pacificus]
MDAIKKKMLAMKMEKEVATDKAEQTEQSLRDLEAAKNTIEEDLSTLQKKYSNLENDFDNA
KENLTVANTNLEASEKRVNECESEIQGLNRRIQLLEEDLERSEERLTSAQSKLEDASKAA
DESERGRKVLENRSQGDEERIDLLEKQLEEAKWIAEDADRKFDEAARKLAITEVDLERAE
ARLEAAEAKIVELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTHRLKEAENRAA
EAERTVSKLQKEVDRLEDELLAEKERYKSISDELDQTFAELAGY
>BAE54432.1 Putative tropomyosin [Ommastrephes bartramii]
MDAIKKKMLAMKMEKEVATDKAEQTEQSLRDLEDAKNKTEEDLSTLQKKYANLENDFDNA
NEQLTAANTNLEASEKRVAECESEIQGLNRRIQLLEEDLERSEERFSSAQSKLEDASKAA
DESERGRKVLENRSQGDEERIDLLEKQLEEAKWIAEDADRKFDEAARKLAITEVDLERAE
ARLEAAEAKIVELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTHRLKEAENRAA
EAERTVSKLQKEVDRLEDELLAEKERYKTISDELDQTFAELAGY
>BAE54433.1 Putative tropomyosin [Octopus vulgaris]
MDAIKKKMLAMKMERELATDKAEQTDQKLRDTEDNKNKLEEDLTTLQKKFSNLENDFDNA
KEQLAEANQKLETSEKRVGECESEIAGLNRRIQLLEEDLERSEERLSTAQTKLDEASKAA
DESERGRKVLENRSQGDEERIDLLEKQLEEAKWIAEDADRKFDEAARKLAITEVDLERAE
ARLEAAEAKIVELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTHRLKEAENRAA
EAERTVSKLQKEVDRLEDELLAEKERYKAISDELDQTFAELAGY
>2AS8_B Allergen Chain B, Crystal Structure Of Mature And Fully Active
Der P 1 Allergen [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFSGVAATESAYLAYRQQSLDLAEQ
ELVDCASQHGCHGDTIPRGIEYIQHNGVVQESYYRYVAREQSCRRPNAQRFGISNYCQIY
PPNANKIREALAQTHSAIAVIIGIKDLDAFRHYDGRTIIQRDNGYQPNYHAVNIVGYSNA

QGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>2CYG_A Allergen Chain A, Crystal Structure At 1.45- Resolution Of The Major Allergen Endo-Beta-1,3-Glucanase Of Banana As A Molecular Basis For The Latex-Fruit Syndrome [Musa acuminata]
IGVCYGMLGNNLPPPSEVVSLYKSNNIARMRLYDPNQAALQALRNSNIQVLLDVPRSDVQ
SLASNPSAAGDWIRRNVVAYWPSVSFRYIAVGNELIPGSDLAQYILPAMRNIYNALSSAG
LQNQIKVSTAVDTGVLGTSYPPSAGAFSSAAQAYLSPIVQFLASNGAPLLVNVYPYFSYT
GNPGQISLPYALFTASGVVVQDGRFSYQNLFDAIVDAVFAALERVGGANVAVVVSESGWP
SAGGGAEASTSNAQTYNQNLIRHVGGGTPRRPGKEIEAYIFEMFNENQKAGGIEQNFGLF
YPNKQPVYQISF
>Q948T6.2 Putative Lactoylglutathione lyase (Methylglyoxalase) (Aldoketomutase) (Glyoxalase I) (Glx I) (Ketone-aldehyde mutase) (S-D-lactoylglutathione methylglyoxal lyase) (Allergen Ory s ?) (Allergen Glb33) (PP33) [Oryza sativa]
MASGSEAEKSPEVVLEWPKKDKKRLLHAVYRVGDLDRTIKCYTECFGMKLLRKRDVPEEK
YTNAFLGFGPEDTNFALELTYNYGVDKYDIGAGFGHFAIATEDVYKLAEKIKSSCCCKIT
REPGPVKGGSTVIAFAQDPDGYMFELIQRGPTPEPLCQVMLRVGDLDRSIKFYEKALGMK
LLRKKDVPDYKYTIAMLGYADEDKTTVIELTYNYGVTEYTKGNAYAQVAIGTEDVYKSAE
AVELVTKELGGKILRQPGPLPGLNTKIASFLDPDGWKVVLVDNADFLKELQ
>ABC68516.1 Allergen Bla g 11; alpha-amylase [Blattella germanica]
MKLFPLVALLVLVVGVLSQKDPHVWDGRSAIVHLFEWKFADIADECERFLGPKGFAGVQV
SPVHENVIISSPFRPWWERYQLVSYKLVSRSGDENAFRDMVRRCNNVGIRIYVDVVLNQM
SGSWPDAHGQGGSTADTYNLQYPAVPYGPGDFHSTCTVSNYQDPSNVRNCELVGLHDLNQ
GSDYVRGKMIEYLNHLVDCGVAGFRVDAAKHMWPADLQYIYSKVNNLNTDHGFPSGARPF
FYQEVIDLGGEAIHSTEYTGFGRVTEFKYSRDIGDAFRGNNAIKWLVNFGVGWGYIPDGD
ALVFVDNHDNQRGHGAGGASILTYKTSKLYKMAVAFMLAYPYGYPRVMSSFSFDNSDQGP
PQDGNGNIISPSINADGTCGNGWVCEHRWRQIFNMVGFRNAVAGTAVSNWWDNGDKQISF
CRGNKGFVAFNDEFNNDLKQTLQTCLPAGDYCDVISGSYENGSCTGKTVTVGSDGKAYIE
ILSSADDGVLAIHVNSKVGSKSQTTTTQSSHCTCS
>P46075.3 Allergen Asp f 5; metalloprotease [Aspergillus fumigatus]
MRGLLLAGALALPASVFAHPAHQSYGLNRRTVDLNAFRLKSLAKYVNATETVIEAPSSFA
PFKPQSYVEVATQHVKMIAPDATFRVVDDHYVGDNGVAHVHFRQTANGLDIDNADFNVNV
GKDGKVFSYGNSFYTGQIPSSAALTKRDFSDPVTALKGTTNTLQLPITVDSASSESTEEK
ESYVFKGVSGTVSDPKAKLVYFVKDDGTLALAWRVETDIDSNWLLTYIDAKSGEEIHGVV
DYVAEADYQVYAWGINDPTEGERTVIKDPWDSVASEFTWISDGSTNYTTSRGNNGIAQSN
PSGGSSYLNNYRPSSSSLSFKYPYSVSSSPPSSYIDASIIQLFYTANIYHDLLYTLGFTE
KAGNFEYNTNGQGGLGNDYVILNAQDGSGTNNANFATPPDGQPGRMRMYVWTESTPYRDG
SFEAGIVIHEYTHGLSNRLTGGPANSNCLNALESGGMGEGWSDFMATAIRLKPGDKRSTD
YTMGEWASNRAGGIRQYPYSTSLSTNPLTYTSVNSLNAVHAIGTVWASMLYEVLWNLIDK
HGKNDAPKPTLRDGVPTDGKYLAMKLVMDGMALQPCNPNFVQARDAILDADTALTGGENQ
CEIWTAFAKRGLGAGAKYSSRNRVGSTEVPSGVC
>P82947.1 Putative Major Gly 50 kDa allergen [Glycine max]
ANPTFGFTPLGLSSDAN
>ABC73068.1 Allergen venom allergen 5 [Vespula maculifrons]
MEISGLVYLIIIVTIIDLPYGKANNYCKIKCLKGGVHTACKYGSLKPNCGNKVVVSYGLT
KQEKQDILKEHNDFRQKVARGLETRGNPGPQPPAKNMKNLVWNDELAYVAQVWANQCQYG
HDTCRDVAKYQVGQNVALTGSTAAKYENPVNLVKMWENEVKDYNPKKKFSENNFIKIGHY
TQMVWANTKEIGCGSMKYTENKWHYHYLVCNYGPSGNFGNEELYQTK
>ABC73706.1 Allergen Der p 21; unknown [Dermatophagoides pteronyssinus]
MKFIITLFAAIVMAAAVSGFIVGDKKEDEWRMAFDRLMMEELETKIDQVEKGLLHLSEQY
KELEKTKSKELKEQILRELTIGENFMKGALKFFEMEAKRTDLNMFERYNYEFALESIKLL
IKKLDELAKKVKAVNPDEYY
>P84527.1 Allergen Act d 5; kiwellin [Actinidia deliciosa]
ISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHICRGTTHSHQPGGCKPSGTLTCRGKS

YPTYDCSPPVTSSTPAKLTNNDFSEGGDDGGPSECDESYHNNNERIVALSTGWYNGGSRC
GKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQPPCRNNIVDGSNAVWSALGLDKNVG
VVDITWSMA
>Q00002.2 Allergen Alt a 4; disulfide isomerase [Alternaria alternata]
ARDMTKQALPAVSEVTKDTLEEFKTADKVVLVAYFAADDKASNETFTSVANGLRDNFLFG
ATNDAALAKAEGVKQPGLVCTSPSTTARTSSPRPSMRTYPRLRKVASTPLIGEVGPETYA
GYMAAGIPLAYIFAETPEEREEFAKELKPLALKHKGEINFATIDAKSFGQHAGNLNLKVG
TWPAFAIQRTEKNEKFPTNQEAKITEKEIGKFVDDFLAGKIDPSIKSEPIPESNDGPVTV
VVAHNYKDVVIDNDKDVLVEFYAPWCGHCKALAPKYEELGQLYASDELSKLVTIAKVDAT
LNDVPDEIQGFLPSSLFPLARRMPQSTTLVPHCRGSRPVHRRERLTQASASVGEAVEDAT
ESAKASASSATDSAASAVSEGTETVKSGASVASDSASSAASEATKSVKSAASEVTNSASS
AASEASASASSVKDEL
>ABC96702.1 Allergen Der s 2 a allergen [Dermatophagoides siboney]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKANIDGLEVDVPGIDTNACHFIKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLIGDNGVLACAIATHAKIRD
>ABD39049.1 Allergen Fra a 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Fragaria x ananassa]
MGVYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAVKCAEILEGDGGPGTIKKITFG
EGSHYGYVKHKIHSIDKENHTYSYSLIEGDALSDNIEKIDYETKLVSAPHGGTVIKTTSK
YHTKGDVEIKEEHVKAGKEKASHLFKLIEGYLKDHPSEYN
>1Z3Q_A Allergen Mus a 4; thaumatin-like protein (TLP) [Musa acuminata]
ATFEIVNRCSYTVWAAAVPGGGRQLNQGQSWTINVNAGTTGGRIWGRTGCSFDGSGRGRC
QTGDCGGVLSCTAYGNPPNTLAEFALNQFNNLDFFDISLVDGFNVPMDFSPTSGGCRGIR
CAADINGQCPGALKAPGGCNNPCTVFKTDQYCCNSGACSPTDYSQFFKRNCPDAYSYPKD
DQTTTFTCPGGTNYRVVFCP
>ABD51779.1 Putative allergen Api m 6 variant 2 precursor [Apis
mellifera]
MSRLVLASFLLLAVFSMLVGGFGGFGGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPK
PLCIKICAPGCVCRLGYLRNKKKVCVPRSKCLPG
>ABD79094.1 Putative Zea m 1 allergen [Zea mays]
MWSLMQAQVAMVVALSFLVSGAWCGPPKVPPGKNITATYGKDWLDAKATWYGKPTGAGPD
DNGGGCGYKDVNKPPFNSMGACGNIPIFKDGLGCGSCFEIKCDKPVECSGKPVVVHITDM
NYEPIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMQFRRVKCKFGSKVSFHLEKGCGP
NYLALLVKYVDGDGDIVPVDIKEKGSDTYEPLKHSWGAIWRKDSDKPLKGPLTVRLTTEG
GTKTVYDDVIPANWKANTAYTAK
>ABD79095.1 Putative Zea m 1 allergen [Zea mays]
ARALVFLVSGAWCGPPKVPPGKNITATYGKDWLDAKATWYGKPTGAGPDDNGGGCGYKDV
NKPPFNSMGACGNIPIFKDGLGCGSCFEIKCDKPVECSGKPVVVHITDMNYEPIAAYHFD
LAGTAFGAMAKKGEEEKLRKAGIIDMQFRRVKCKYDSKVTFHLEKGCGPNYLALLVKYVD
GDGDIVAVDVKEKGSDTYEPLKHSWGAIWRKDSDKPLKGPLTVRLTTEGGTKSVYDDVIP
ANWKANTAYTAK
>ABD79096.1 Putative Zea m 13 allergen [Zea mays]
MACIDNAMRALFLLALFCVVHGEKAKSKDNDAKASGPGGSFDITKLGASGNGKTDSTKAV
QEAWASACGGTGKQTILIPKGDFLVGPLNFTGPCKGDVTIQVNGNLLATTDLSQYKDHGN
WIEILRVDNLVITGKGKLDGQGPAVWSKNSCVKKYDCKILPNSLVMDFVNNGEVSGITLL
NSKFFHMNMYKCKDMLIKDVNVTAPGDSPNTDGIHMGDSSGVTITNTVIGVGDDCISIGP
GTSKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKTANGVRIKAYEDAASV
LTASKIHYENIKMEDSGYPIIIDMKYCPNKLCTANGASKVTVKDVTFKNITGTSSTPEAV
NLLCSAKIPCTGVTMDDVNIKYSGTNNKTMAVCKNAKGSAKGCLKELACF
>ABD79097.1 Putative Zea m 13 allergen [Zea mays]
ARGALFLLALFCVVHGEKAKSKDNDAKASGPGGSFDITKLGASGNGKTDSTKAVQEAWAS
ACGGTGKQTILIPKGDFLVGPLNFTGPCKGDVTIQVNGNLLATTDLSQYKDHGNWIEILR
VDNLVITGKGKLDGQGPAVWSKNSCVKKYDCKILPNSLVMDFVNNGEVSGITLLNSKFFH

MNMYKCKDMLIKDVNVTAPGDSPNTDGIHMGDSSGVTITNTVIGVGDDCISIGPGTFKVN
ITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKTANGVRIKAYEDAASVLTASKI
HYENIKMEDSGYPIIIDMKYCPNKLCTANGASKVTVKDVTFKNIPGTSSTPEAVNLLCSA
KIPCTGVTMDDVNIKYSGTNNKTMAVCKNAKGSAKGCLKELACF
>ABD79098.1 Putative Zea m 13 allergen [Zea mays]
ARACTDNAMRALFLLVLFCIVHGEKEESKGIDAKASGPGGFFDITKLGASGNGKTDSTKA
VQEAWASACGGTGKQTILIPKGDFLVGQLNFTGPCKGDVTIQVDGNLLATTDLSQYKEHG
NWIEILRVDNLVITGKGNLDGQGPAVWSKNFCTKKYDCKILPNSLVMDFVNNGEVSGITL
LNSKFFHMNMYQCKNMLIKDVTVTAPGDSPNTDGIHMGDSSGITITNTVIGVGDDCISIG
PGTSKVNITGVTCGPGHGISIGSLGRYKDEKDVRDINVKDCTLKKTMFGVRIKAYEDAAS
VLTVSKIHYENIKMEDSANPIFIDMKYCPNKLCTANGASKVTVKDITFKNITGTSSTPEA
ISLLCTAKVPCTGVTMDDVNVEYSGTNNKTMAICTNAKGSTKGCLKELACF
>CAI84850.2 Putative vicilin-like protein, partial [Lupinus albus]
MGKMRVRFPTLVLVLGIVFLMAVSIGIAYGEKDVLKSHERPEEREQEEWQPRRQRPQSRR
EEREQEQEQGSPSYPRRQSGYERRQYHERSEQREEREQEQQQGSPSYSRRQRNPYHFNSQ
RFQTLYKNRNGKIRVLERFDQRTNRLENLQNYRIVEFQSKPNTLILPKHSDADYVLVVLN
GRATITIVNPDRRQAYNLEYGDALRIPAGSTSYILNPDDNQKLRVVKLAIPINNPGYFYD
FYPSSTKDQQSYFSGFSRNTLEATFNTRYEEIQRILLGNEDEQEYEEQRRGQEQSHQDEG
VIVRVSREQIQELTKYAQSSSGKDKPSQSGPFNLRSNEPIYSNKYGNFYEITPDRNPQVQ
DLDISLTFTEINEGALLLPHYNSKAIFIVVVGEGNGKYELVGIRDQQRQQDEQEEEPEEV
RRYSARLSEGDIFVIPAGYPISVNASSNLRLLGFGINAYENQRNFLAGSEDNVIRQLDRE
VKELTFPGSAEDIERLIKNQQQSYFANALPQQQQQSEKEGRRGRRGPISSI
>CAJ85641.1 Allergen Major strawberry allergen Fra a 1-B [Fragaria x
ananassa]
MGVYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAIKCAEILEGDGGPGTIKKITFG
EGSHYGYVKHKIHSIDKENHTYSYSLIEGDALSDNIEKIDYETKLVSAPHGGTIIKTTSK
YHTKGDVEIKEEHVKAGKEKASHLFKLIEGYLKDHPSEYN
>CAJ85642.1 Allergen Major strawberry allergen Fra a 1-D [Fragaria x
ananassa]
MGGYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAIKCAEILEGDGGPGTIKKITFG
EGSHYGYVKHKIHSIDKENHTYSYSLIEGDALSDNIEKIDYETKLVSAPHGGTIIKTTSK
YHTKGDVEIKEEHVKAGKEKASHLFKLIEGYLKDHPSEYN
>CAJ85644.1 Allergen Major strawberry allergen Fra a 1-C [Fragaria x
ananassa]
MGVYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAVKCAEILEGDGGPGTIKKITFG
EGSHYGYVKHKIHSIDKENHTYSYSLIEGDALSDNIEKIDYETKLVSAPHGTIIKTTSKY
HTKGDVEIKEEHVKAGKEKASHLFKLIEGYLKDHPSEYN
>CAJ85646.1 Allergen Major strawberry allergen Fra a 1-E [Fragaria x
ananassa]
MGVYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAVKCAEILEGDGGPGTIKKITFG
EGSHYGYVKHKIHSIDKVNHTYSYSLIEGDALSENIEKIDYETKLVSAPHGGTIIKTTSK
YHTKGDVEIKEEHVKAGKEKAAHLFKLIEGYLKDHPSEYN
>CAI78448.1 Allergen Asp f 27; cyclophilin [Aspergillus fumigatus]
MVVKTFFDITIDGQPAGRITFKLFDEVVPKTVENFRALCTGEKGFGYKGSSFHRIIPQFM
LQGGDFTKGNGTGGKSIYGDRFPDENFQLKHDKPGLLSMANAGKNTNGSQFFITTVVTSW
LDGAHVVFGEVEDGMDLVKKIESYGSASGTPKKKITIADCGQL
>CAI78449.1 Allergen Asp f 28; thioredoxin [Aspergillus fumigatus]
MSHGKVIAVDNPIIYKALTSSGPVVVDFFATWCGPCRAVAPKVGELSEKYSNVRFIQVDV
DKVRSVAHEMNIRAMPTFVLYKDGQPLEKRVVGGNVRELEEMIKSISA
>CAI78450.1 Allergen Asp f 29; thioredoxin [Aspergillus fumigatus]
MSHNVEKITDAKVFKEKVQEGSGPVIVDCSATWCGPCKAISPVFQRLSTSEEFKNAKFYE
IDVDELSEVAAELGVRAMPTFMFFKDGQKVNEVVGANPPALEAAIKAHVA
>NP_001035360.1 Allergen Api m 6; unknown function [Apis mellifera]
MSRLVLASFLLLAIFSMLVGGFGGFGGFGGLGGRGKCPSNEIFSRCDGRCQRFCPNVVPK

PLCIKICAPGCVCRLGYLRNKKKVCVPRSKCG
>ABF18122.1 Allergen Aed a 3; unknown function [Aedes aegypti]
MKPLVKLFLLFCLVGIVLSRPMPEDEEPVAEGGDDDASGESEGEEETTDDAGGDGGEEEN
EGEEHAGDKDAGGEDTGKEENTGHDDAGEEDAGEEDAGEEDAGEEDAGEEDAEKEEGEKE
DAGDDAGSDDGEEDSTGGDEGEDNAEDSKGSEKNDPADTYRQVVALLDKDTKVDHIQSEY
LRSALNNDLQSEVRVPVVEAIGRIGDYSKIQGCFKSMGKDVKKVISEEEKKFKSCMSKKK
SEYQCSEDSFAAAKSKLSPITSKIKSCVSSKGR
>ABF21077.1 Allergen Api m 10; icarapin [Apis mellifera]
MKTLGVLFIAAWFIACTHSFPGAHDEDSKEERKNVDTVLVLPSIERDQMMAATFDFPSLS
FEDSDEGSNWNWNTLLRPNFLDGWYQTLQSAISAHMKKVREQMAGILSRIPEQGVVNWNK
IPEGANTTSTTKIIDGHVVTINETTYTDGSDDYSTLIRVRVIDVRPQNETILTTVSSEAD
SDVTTLPTLIGKNETSTQSSRSVESVEDFDNEIPKNQGDVLTA
>ABF21078.1 Allergen Api m 10; icarapin [Apis mellifera]
ERDQMMAATFDFPSLSFEDSDEGSNWNWNTLLRPNFLDGWYQTLQTHMKKVREQMAGILS
RIPEQGVVNWNKIPEGANTTSTTKIIDGHVVTINETTYTDGSDDYSTLIRVRVIDVRPQN
ETILTTVSSEADSDVTTLPTLIGKNETSTQSSRSVESVEDFDNEIPKNQGDVLTA
>P0C1B3.1 Allergen Asp o 21; TAKA-amylase A [Aspergillus oryzae]
MMVAWWSLFLYGLQVAAPALAATPADWRSQSIYFLLTDRFARTDGSTTATCNTADQKYCG
GTWQGIIDKLDYIQGMGFTAIWITPVTAQLPQTTAYGDAYHGYWQQDIYSLNENYGTADD
LKALSSALHERGMYLMVDVVANHMGYDGAGSSVDYSVFKPFSSQDYFHPFCFIQNYEDQT
QVEDCWLGDNTVSLPDLDTTKDVVKNEWYDWVGSLVSNYSIDGLRIDTVKHVQKDFWPGY
NKAAGVYCIGEVLDGDPAYTCPYQNVMDGVLNYPIYYPLLNAFKSTSGSMDDLYNMINTV
KSDCPDSTLLGTFVENHDNPRFASYTNDIALAKNVAAFIILNDGIPIIYAGQEQHYAGGN
DPANREATWLSGYPTDSELYKLIASANAIRNYAISKDTGFVTYKNWPIYKDDTTIAMRKG
TDGSQIVTILSNKGASGDSYTLSLSGAGYTAGQQLTEVIGCTTVTVGSDGNVPVPMAGGL
PRVLYPTEKLAGSKICSSS
>CAI94601.1 Allergen Par j 1; lipid transfer protein [Parietaria judaica]
QETCGTMVRALMPCLPFVQGKEKEPSKGCCSGAKRLDGETKTGPQRVHACECIQTAMKTY
SDIDGKLVSEVPKHCGIVDSKLPPIDVNMDCKTLGVVPRQPQLPVSLRHGPVTGPSDPAH
KARLERPQIRVPPPAPEKA
>CAK22338.1 Allergen Der p 2; NPC2-like protein [Dermatophagoides
pteronyssinus]
MMYKILCLSLLVAAVAADQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEALFEA
NQNTKNAKIEIKASIDGLEVDVPGIDPNACHYVKCPLVKGQQYDIKYTWNVPKIAPKSEN
VVVTVKVLGDNGVLACAIATHAKIRD
>ABF81661.1 Putative EXPB10 [Zea mays]
CKYGSKVTFHLEKGCNPNYLALLVKYVDGDGDIVAVDIKEKGSDTYEPLKHSWGAIWRKD
SDKPIKGPITVRLTTEGGTKTVYDDVIPAEWKPNTAYTT
>ABF81662.1 Putative EXPB10 [Zea mays]
MTVVSIMWSLVQVQVLVAVALSFLVGGAWCGPPKVPPGKNITANYGSDWLDAKATWYGKP
TGAGPDDNGGGCGYKDVNKAPFNSMGACGNVPIFKDGLGCGSCFEIKCDKPAECSGKPVV
VYITDMNYEPIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMQFRRVKCKYGSKVTFHL
EKGCNPNYLALLVKYVDGDGDIVAVDIKEKGSDTYEPLKHSWGAIWRKDSDKPIKGPITV
RLTTEGGTKTVYDDVIPTDWKPNTAYTTK
>ABG02262.1 Allergen Vig r 2; 8S globulin (vicilin- like protein) [Vigna
radiata]
MVRARVQLLLGILFLASLSVSFGIVHREHQESQEESDSRGQNNPFYFNSDRRFHTLFKNQ
YGHLRVIHRFDQRSKQIQNLENYRVVEFKSKPNTLLLPHHADADFLLVVLNGRAILTLVN
PDGRDSYILEQGHAQKIPAGTTFFLVNPNDNDNLRIIKLAIPVNNPHRFQNFFLSSTEAQ
QSYLRGFSKNILEASFDSDFKEIDRVLFGEERQQQHGEESQEEGVIVELKREQIRELIKH
AKSSSRKELSSQDEPFNLRNSNPIYSNKFGRWYEITPEKNPQLKDLDVFISSVDMKEGGL
LLPHYNSKAIVILVINEGEAKIELVGPSDQQQQDESLEVQRYRAELSEDDVFVIPAAYPV
AINATSNLNFFAFGINAENNQRNFLAGEKDNVMSEIPTEVLDVSFPASGNKVEKLIKKQS
ESHFVDAQPEQQQREEGHKGRKGSLSSILGSLY

>Q40638.2 Allergen Ory s 1; beta-expansin [Oryza sativa Japonica Group]
MASSSLLLACVVVAAMVSAVSCGPPKVPPGPNITTSYGDKWLEAKATWYGAPKGAGPKDN
GGACGYKDVDKAPFLGMNSCGNDPIFKDGKGCGSCFEIKCSKPEACSDKPALIHVTDMND
EPIAAYHFDLSGLAFGAMAKDGKDEELRKAGIIDTQFRRVKCKYPADTKITFHIEKASNP
NYLALLVKYVAGDGDVVEVEIKEKGSEEWKALKESWGAIWRIDTPKPLKGPFSVRVTTEG
GEKIIAEDAIPDGWKADSVYKSNVQAK
>ABG54494.1 Allergen Rub i 3; lipid transfer protein [Rubus idaeus]
MACSAVMKLALVALLCIVVAVPVAQAITCGQVTQNVAPCFNYVKNGGAVPAACCNGVRNL
NSQAKTTADRQQTCNCLKNAAGSIPGLNPSLAAGLPGKCGVSVPYKISTSTNCATVK
>ABG54495.1 Allergen Rub i 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Rubus idaeus]
YTSVIPPPKLFKAFVLDADNLIPKIAPQAVKSVEIIEGDGGVGTVKKIHLGEGTEHSYVK
HKIDGLDKVNFVYSYSITEGDALGDKIEKISYEIKLVASGRGSIIKTTSHYHCKGGAEIK
EEQVKDGKERAAGLFKI
>CAL07989.1 Allergen Pla a 3; lipid transfer protein [Platanus x acerifolia]
MAFSRVAKLACLLLACMVATAPHAEAAITCGTVVTRLTPCLTFLRSGGAVAPACCNGVKA
LNNDAKTTPDRQAACGCLKTASTSISGIQLGNAASLAGKCGVNLPYKISPTIDCSKVK
>CAK50389.1 Allergen Ani s 4; cystein protease inhibitor [Anisakis simplex]
MQSRIVVAVVVFCCIILMQTEAGMLGGSSDVDVNDPEIKELAGKSIAKISAMINDGKPHE
LVKVVSAKKQVVAGDKYTLEILVKDGDHQDLCTVTIWQKKWENFEEVKVLKCDHQ
>ABG73108.1 Allergen Pis v 1; 2S albumin, conglutin [Pistacia vera]
MAKLVLLLSAFAFLILAANASIYRATVEVEGENLSSGQSCQKQFEEQQKFKHCQMYVQQE
VQKSQDGHSLTARINQRQQCFKQCCQELQEVDKKCRCQNLEQMVKRQQQQGQFRGEKLQE
LYETASELPRMCNISPSQGCQFSSPYWSY
>ABG73109.1 Allergen Pis v 2; 11S globulin / legumin-like protein [Pistacia vera]
MGYSSLLSFSLGFLLLFHCSFAQIEQVVNSQQRQQQQRFQTQCQIQNLNALEPKRRIESE
AGVTEFWDQNEEQLQCANVAVFRHTIQSRGLLVPSYDNAPELVYVVQGSGIHGAVFPGCP
ETFQEESQSRSRSERSQQSGEQHQKVRPIQEGDVIALPAGVAHWIYNNGQSKLVLVALAD
VGNSENQLDQYLRKFVLGGSPQQEIQGSGQSRSRSQSQSSRRGQQGQQSNNILSAFDEEI
LAQSFNIDTQLARRLQKEKRQRGIIVRVQEDLEVLSPHRQEQEQEYEEERERRQRNGLEE
TFCTMTLKYNINDPSRADVYNPRGGRVSSVNALNLPILRFLQLSAKKGVLHRDAILAPHW
NVNAHSIVYITRGNGRIQIVSENGESVFDEEIREGQLVVVPQNFAVVKRASSDKFEWVSF
KTNGLSQTSQLAGRVSVFRALPLDVIKNSFDISREDARRLKESRSETTIFAPGSSSQRKS
QSERERQREREEREIH
>ABG73110.1 Allergen Pis v 2; 11S globulin / legumin-like protein [Pistacia vera]
MGYSSLLSFSLGFLLLFHCSFAQIEQVVNSQQRQQQQRFQTQCQIQNLNALEPKRRIESE
AGVTEFWDQNEEQLQCANVAVFRHTIQSRGLLVPSYNNAPELVYVVQGSGIHGAVFPGCP
ETFQEESQSQSRSQHSRSERSQQSGEQHQKVRHIREGDIIALPAGVAHWIYNNGQSKLVL
VALADVGNSENQLDQYLRKFVLGGSPQQEIQGGGQSWSQSRSSRKGQQSNNILSAFDEEI
LAQSFNIDTQLVKKLQREEKQRGIIVRVKEDLQVLSPQRQEKEYSDNGLEETFCTMTLKL
NINDPSRADVYNPRGGRVTSINALNLPILRFLQLSVEKGVLYQNAIMAPHWNMNAHSIVY
ITRGNGRMQIVSENGESVFDEEIREGQLVVVPQNFAVVKRASSDGFEWVSFKTNGLAKIS
QLAGRISVMRGLPLDVIQNSFDISREDAWNLKESRSEMTIFAPGSRSQRQRN
>ABG76196.1 Allergen group 2 allergen Der p 2 [Dermatophagoides pteronyssinus]
RDQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEALFEANQNSKTAKIEIKASID
GLEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVMGDNGVLAC
AIATHAKIRD
>ABG81289.1 Putative pollen profilin variant 2 [Phleum pratense]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL

APTGMFVAAAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVKQGL
>ABG81290.1 Putative pollen profilin variant 3 [Phleum pratense]
MSWQTYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAAAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLKQGL
>ABG81291.1 Putative pollen profilin variant 4 [Phleum pratense]
MSWQTYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVATAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLKQGL
>ABG81292.1 Putative pollen profilin variant 5 [Phleum pratense]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVATAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLKQGL
>ABG81293.1 Putative pollen profilin variant 6 [Phleum pratense]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAAAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLKQGL
>ABG81294.1 Putative pollen profilin variant 7 [Phleum pratense]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAAAKYMVIQGEPGAVTRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVKQGL
>ABG81295.1 Putative pollen profilin variant 8 [Phleum pratense]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVATAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCSMVVE
RLGDYLVKQGL
>ABG81312.1 Putative pollen profilin variant 1 [Zea mays]
MSWQTYVDEHLMCEIEGHHLSSAAIVGHDGAVWAQSTAFPQFKPEEMTNIIKDFDEPGFL
APIGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVIGIYDEPMTPGQCNMVVE
RLGDYLVKQGL
>ABG81313.1 Putative pollen profilin variant 2 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAVWAQSTAFPQFKTEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQAMVVGIYDEPMTPGQCNMVVE
RLGDYLLEQGL
>ABG81314.1 Putative pollen profilin variant 3 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAAWAQSTAFPEFKTEDMANIMKDFDEPGHL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLKQGL
>ABG81315.1 Putative pollen profilin variant 4 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAVWAQSTAFPQFKTEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVIGIYDEPMTPGQCNMVVE
RLGDYLLEQGM
>ABG81316.1 Putative pollen profilin variant 5 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAVWAQSTAFPQFKTEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVIGIYDEPMTPGQCNMVVE
RLGDYLLEQGL
>ABG81317.1 Putative pollen profilin variant 6 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAVWAQSTAFPQSKTEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQAMVVGIYDEPMTPGQCNMVVE
RLGDYLLEQGL
>ABG81318.1 Putative pollen profilin variant 7 [Zea mays]
MSWQAYVDEHLMCEIEGHHLTSAAIVGHDGAVWAQSTAFPQFKTEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQAMVVGIYDEPMTPGQCNMVVE
RLGDYLLNRA

>ABG85155.1 Allergen pathogenesis-related protein 10 [Arachis hypogaea]
MGVFTFEDEITSTLPPAKLYNAMKDADSLTPKIIDDVKSVEIVEGSGGPGTIKKLTIVED
GETRFILHKVEAIDEANYAYNYSVVGGVALPPTAEKITFETKLVEGHNGGSTGKLSVKFH
SKGDAKPEEEDMKKGKAKGEALFKAIEGYVLANPTQY
>ABH06346.1 Allergen Blo t 21 allergen [Blomia tropicalis]
MKFIIALAALIAVACALPVSNDNFRHEFDHMIVNTATQRFHEIEKFLLHITHEVDDLEKT
GNKDEKARPLRELTVSEAFIEGSRGYFQRELKRTDLDLLEKFNFEAALATGDLLLKDLKA
LQKRVQDSE
>ABH06348.1 Allergen Blo t 21 allergen [Blomia tropicalis]
MKFIIALAALIAVACALPVSNDNFRHEFDHMIINTATQRFHEIEKFLLHITHEVDDLEKT
GNKDEKARLLRELTVSEAFIEGSRGYFQRELKRTDLDLLEKFNFEAALATGDLLLKDLKA
LQKRVQDSE
>ABH06350.1 Allergen Blo t 21 allergen [Blomia tropicalis]
MKFIIALAALIAVACALPVSNDNFRHEFDHMIVNTATQRFHEIEKFLLHITHEVDDLEET
GNKDEKARLLRELTVSEAFIEGSRGYFQRELKRTDLDLLEKFNFEAALATGDLLLKDLKA
LQKRVQDSE
>ABH06352.1 Allergen Blo t 5 allergen [Blomia tropicalis]
MKFAIVLIACFAASVLAQGHKPKKDDFRNEFDHLLIEQANHAIEKGEHQLLYLQHQLDEL
NENKSKELQEKIIRELDVVCAMIEGAQGALERELKRTDLNILERFNYEEAQTLSKILLKD
LKETEQKVKDIQTQ
>ABH06359.1 Allergen Blo t 5 allergen [Blomia tropicalis]
MKFAIVLIACFAASVLAQEHKPEKDDFRNEFDHLLIEQANHAIEKGEHQLLYLQHQLDEL
NENKSKELQEKIIRELDVVCAMIEGAQGALERELKRTDLNILERFNYEEAQTLSKILLKD
LKETEQKVKDIQTQ
>ABH06347.1 Allergen Blo t 21 allergen [Blomia tropicalis]
MKFIIALAALIAVACALPVSNDNFRHEFDHMIVNAATQRFHEIEKFLLHITHEVDDLEKT
GNKDEKARLLRELTVSEAFIEGSRGYFQRELKRTDLDLLEKFNFEAALATGDLLLKDLKA
LQKRVQDSE
>ABI17154.1 Allergen iso-Ara h3 [Arachis hypogaea]
MAKLLALSLCFCVLVLGASSVTFRQGGEENECQFQRLNAQRPDNRIESEGGYIETWNPNN
QEFQCAGVALSRTVLRRNALRRPFYSNAPLEIYVQQGSGYFGLIFPGCPSTYEEPAQEGR
RYQSQKPSRRFQVGQDDPSQQQQDSHQKVHRFDEGDLIAVPTGVAFWMYNDEDTDVVTVT
LSDTSSIHNQLDQFPRRFYLAGNQEQEFLRYQQQQGSRPHYRQISPRVRGDEQENEGSNI
FSGFAQEFLQHAFQVDRQTVENLRGENEREEQGAIVTVKGGLRILSPDEEDESSRSPPSR
REEFDEDRSRPQQRGKYDENRRGYKNGIEETICSASVKKNLGRSSNPDIYNPQAGSLRSV
NELDLPILGWLGLSAQHGTIYRNAMFVPHYTLNAHTIVVALNGRAHVQVVDSNGNRVYDE
ELQEGHVLVVPQNFAVAAKAQSENYEYLAFKTDSRPSIANLAGENSIIDNLPEEVVANSY
RLPREQARQLKNNNPFKFFVPPFDHQSMREVA
>ABI26088.1 Putative TCTP [Alternaria alternata]
MLIYKDILTGDEIISDSYNLKEIDGVVYEADCTKITVGGESFDTGANASAEEQEEGAEDS
AETKIDVVYSFRLNETGFDKKGYLTYLKGYMKAVKDGLKKKGADEATIKDFETKASGYAK
KIISNFKDYEFFTGESMNPDGMIVLLNYREDGVTPYVTVWKHGLEEMKV
>ABI32184.1 Putative allergenic protein [Fagopyrum tataricum]
MSTKLILSFSLCLMVLSCSAQAAQLWPWRKGQDSRPHHGHQQFQQQCDIQRLTASEPSRR
VRSEAGVTEIWDHNTPEFRCTGFVAVRYVIQPGGLLLPSYSNAPYITFVEQGRGVQGVVI
PGCPETFQSDSEYPQSQRGQHSRESESQESSRGDQHQKIFRVREGDVIPSPAGVVQWTHN
DGDQDLISVTLLDANSFHNQLDENVRSFFLAGQSQQGREERRSQQQTREEGGDRQSRESD
DVEALIGANILSGFQDEILHELFRDVDRETISKLRGENDQRGFIVQAQDLKLRVPEDSEE
GYERQRGDRKRDERGSGRSNGLEQAFCNLKFRQNVNRPSHADVFNPRAGRINTVNSNNLP
ILEFLQLSAQHVVLYKNAIIGPRWNLNAHSALYVTRGEGRVQVVGDEGKSVFDDNVQRGQ
ILVVPQGFAVVVKAGRQGLEWVELKNNDNAITSPIAGRTSVLRAIPVEVLANSYDISTEE
AYKLKNGRQEVEVFRPFQSRYEKEEEKERERFSIV
>AAU21499.2 Allergen Ara h 10; oleosin [Arachis hypogaea]
MTDRTQPHTVQVHTTAGRFGDTAAGTNRYPDRGPSTSKVIAVITGLPIGGTLLLFAGLAL

AGTLLGLAVTTPLFILFSPVIVPAIIVVGLSVAGFLTSGACGLTGLSSFSWVMNYIRQTH
GSVPEQLEMAKHRMADVAGYVGQKTKDVGQKTKEVGQEIQTKAQDSKRT
>Q01883.2 Seed allergenic protein RAG1 precursor (Seed allergenic protein RA17) [Oryza sativa Japonica Group]
MASNKVVFSVLLLVVLSVLAAAMATMADHHQVYSPGEQCRPGISYPTYSLPQCRTLVRRQ
CVGRGAASAADEQVWQDCCRQLAAVDDGWCRCGALDHMLSGIYRELGATEAGHPMAEVFP
GCRRGDLERAAASLPAFCNVDIPNGPGGVCYWLGYPRTPRTGH
>Q01882.2 Seed allergenic protein RAG2 precursor (Seed allergenic protein RA14) [Oryza sativa Japonica Group]
MASNKVVFSALLLIIVSVLAATATMADHHKDQVVYSLGERCQPGMGYPMYSLPRCRAVVK
RQCVGHGAPGGAVDEQLRQDCCRQLAAVDDSWCRCSALNHMVGGIYRELGATDVGHPMAE
VFPGCRRGDLERAAASLPAFCNVDIPNGTGGVCYWLGYPRTPRTGH
>NP_001041618.1 Allergen major allergen I, polypeptide chain 1 [Felis catus]
MLDAALPPCPTVAATADCEICPAVKRDVDLFLTGTPDEYVEQVAQYKALPVVLENARILK
NCVDAKMTEEDKENALSLLDKIYTSPLC
>2HCZ_X Putative Chain X, Crystal Structure Of Expb1 (Zea M 1), A Beta-Expansin And Group-1 Pollen Allergen From Maize [Zea mays]
GPPKVPPGXNITTNYNGKWLTARATWYGQPNGAGAPDNGGACGIKNVNLPPYSGMTACGN
VPIFKDGKGCGSCYEVRCKEKPECSGNPVTVYITDMNYEPIAPYHFDLSGKAFGSLAKPG
LNDKIRHCGIMDVEFRRVRCKYPAGQKIVFHIEKGCNPNYLAVLVKYVADDGDIVLMEIQ
DKLSAEWKPMKLSWGAIWRMDTAKALKGPFSIRLTSESGKKVIAKDVIPANWRPDAVYTS
NVQFY
>BAF32105.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>BAF32110.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPQFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>BAF32116.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAF32119.1 Allergen pollen allergen [Cryptomeria japonica]

MAMKFIAPMAFVAMQLIIMAAAEDQSAQIMLDSDIEQYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDINLSDISLKLTSGKIASCLNDNANGYFS
GNVIPACKNLSPSAKRKESKSHKHPKTVMVENMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAF32122.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GNVIPACKNLSPSAKRKESKSHKHPKTVMVENMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAF32128.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGTENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>BAF32130.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLRLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAF32133.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKKPSAMLLVPGNKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA
SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPSAKRKESKSHKHPKTVMVENMGAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWMCSCHGKIYHP
>BAF32134.1 Allergen pollen allergen [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRKVEHSRHDAINIFN
VEKYGAVGDGKHDCTEAFSTAWQAACKNPSAMLLVPGSKKFVVNNLFFNGPCQPHFTFKV
DGIIAAYQNPASWKNNRIWLQFAKLTGFTLMGKGVIDGQGKQWWAGQCKWVNGREICNDR
DRPTAIKFDFSTGLIIQGLKLMNSPEFHLVFGNCEGVKIIGISITAPRDSPNTDGIDIFA

SKNFHLQKNTIGTGDDCVAIGTGSSNIVIEDLICGPGHGISIGSLGRENSRAEVSYVHVN
GAKFIDTQNGLRIKTWQGGSGMASHIIYENVEMINSENPILINQFYCTSASACQNQRSAV
QIQDVTYKNIRGTSATAAAIQLKCSDSMPCKDIKLSDISLKLTSGKIASCLNDNANGYFS
GHVIPACKNLSPNAKRKESKSHKHPKTVMVENMRAYDKGNRTRILLGSRPPNCTNKCHGC
SPCKAKLVIVHRIMPQEYYPQRWICSCHGKIYHP
>BAF32143.1 Putative pollen allergen [Chamaecyparis obtusa]
LDSDIEQYLRSNRSLKKLVHSRHDAATVFNVEQYGAVGDGKHDSTEAFETAWNAACKKAS
AVLVVPANKKFFVNNLVFRGPCQPHLSFKVDGTIVAQPDPARWKNSKIWLQFAQLTDFNL
MGTGVIDGQGQQWWAGQCKVVNGRTVCNDRNRPTAIKIDYSKSVTVKELTLMNSPEFHLV
FGECEGVKIQGLKIKAPRDSPNTDGIDIFASKRFHIEKCVIGTGDDCIAIGTGSSNITIK
DLICGPGHGISIGSLGRDNSRAEVSHVHVNRAKFIDTQNGLRIKTWQGGSGLASYITYEN
VEMINSENPILINQFYCTSASACQNQRSAVQIQGVTYKNIHGTSATAAAIQLMCSDSVPC
TGIQLSNVSLKLTSGKPASCVDKNARGFYSGRLIPTCKNLRPGPSPKEFELQQQPTTVM
>ABI98020.1 Allergen Lit v 2; arginine kinase [Litopenaeus vannamei]
MADAAVIEKLEAGFKKLEAATDCKSLLKKYLTKEVFDKLKDKRTSLGATLLDVIQSGVEN
LDSGVGIYAPDAEAYTLFAPLFDPIIEDYHVGFKQTDKHPNKDFGDVNSFVNVDPEGKFV
ISTRVRCGRSLQGYPFNPCLTESQYKEMEAKVSSTLSSLEGELKGTYYPLTGMSKEVQQK
LIDDHFLFKEGDRFLQAANACRYWPAGRGIYHNDNKTFLVWVNEEDHLRIISMQMGGDLG
QVFRRLTSAVNEIEKRIPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANREKLEEV
AGKYNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILELIKIEKEM
>Q1ZYQ8.2 Putative Expansin-B10 precursor (ZmEXPB10) (Beta-expansin-10)
(Pollen allergen Zea m 1c) [Zea mays]
MAVNVRTMWSSMRAQVAMVVALVFLVRGAWCGPPKVPPGKNITATYGKDWLDAKATWYGK
PTGAGPDDNGGGCGYKDVNKPPFNSMGACGNIPIFKDGLGCGSCFEIKCDKPVECSGKPV
VVHITDMNYEPIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMQFRRVKCKYDSKVTFH
LEKGCGPNYLALLVKYVDGDGDIVAVDVKEKGSDTYEPLKHSWGAIWRKDSDKPLKGPLT
VRLTTEGGTKSVYDDVIPANWKANTAYTAK
>P0C1Y5.1 Putative Expansin-B11 precursor (ZmEXPB11) (Beta-expansin-11)
(Pollen allergen Zea m 1a) (Pollen allergen Zea m 1b) [Zea mays]
MTVVSIMWSLVQVQVLVAVALAFLVGGAWCGPPKVPPGKNITAKYGSDWLDAKATWYGKP
TGAGPDDNGGGCGYKDVNKAPFNSMGACGNVPIFKDGLGCGSCFEIKCDKPAECSGKPVV
VYITDMNYEPIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMQFRRVKCKYGSKVTFHL
EKGCNPNYLALLVKYVDGDGDIVAVDIKEKGSDTYEPLKHSWGAIWRKDSDKPIKGPITV
QLTTEGGTKTVYDDVIPAGWKPNTAYTAK
>CAL59818.1 Allergen hyaluronidase [Vespula germanica]
SERPKRVFNIYWNVPTFMCHQYDLYFDEVTNFNIKRNSKDDFQGDKIAIFYDPGEFPALL
SLKDGKYKKRNGGVPQEGNITIHLQKFIENLDKTYPNRNFSGIGVIDFERWRPIFRQNWG
NMKIHKNFSIDLVRNEHPTWNKKMIELEASKRFEKYARFFMEETLKLAKKTRKQADWGYY
GYPYCFNMSPNNLVPECDVTAMHENDKMSWLFNNQNVLLPSVYVRQELTPDQRIGLVQGR
VKEAVRISNNLKHSPKVLSYWWYVYQDETNTYLTETDVKKTFQEIVINGGDGIIIWGSSS
DVNSLSKCKRLQDYLLTVLGPIAVNVTEAVN
>CAL59819.1 Allergen hyaluronidase homologue [Vespula germanica]
VITIWPKKGFSIYWNIPTHFCHNFGVYFKELKQFNIKYNSMNNFRGETISLFYDPGNFPS
MVLLKNGTYEIRNEGVPQKGNLTIHLEQFTKELDEIYPKKIAGGIGVIHFHNWRPIFRRN
VDNLKINKDISIDLVRKEHPKWDKSMIEKEASNRFETSAKIFMEKTLKLAKEIRKKTEWG
YHGYPHCLSGSTDKPSFDCDALSMSENDKMSWLFNNQNVLLPSIYLKNVLKPDEKIHLVQ
ERLKEAIRISKNLKHLPKVLPYWWYTYQDKESIFLTEADVKNTFKEILTNGADGIIIWGV
SYELTDRKRCEKLKEYLMKILGP
>ABK78766.1 Allergen major allergen Cup a 1 [Cupressus arizonica]
SDNPIDSCWRGDSNWDQNRMKLADCVVGFGSSTMGGKGGEIYTVTSSEDNPVNPTPGTLR
YGATREKALWIIFSQNMNIKLQMPLYVNGYKTIDGRGADVHLGNGGPCLFMRKASHVILH
GLHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVTNAWIDHNSLSDCSDGLIDVT
LGSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAFNQFGPNAGQRMPRARYGLVH
VANNNYDQWNIYAIGGSSNPTILSEGNSFTAPNESYKKEVTKRIGCETTSACANWVWRST

RDAFTNGAYFVSSGKAEDTNIYNSNEAFKVENGNAAPQLTQNAGVVA
>P00791.3 Putative RecName: Full=Pepsin A; Flags: Precursor [Sus scrofa]
MKWLLLLSLVVLSECLVKVPLVRKKSLRQNLIKNGKLKDFLKTHKHNPASKYFPEAAALI
GDEPLENYLDTEYFGTIGIGTPAQDFTVIFDTGSSNLWVPSVYCSSLACSDHNQFNPDDS
STFEATSQELSITYGTGSMTGILGYDTVQVGGISDTNQIFGLSETEPGSFLYYAPFDGIL
GLAYPSISASGATPVFDNLWDQGLVSQDLFSVYLSSNDDSGSVVLLGGIDSSYYTGSLNW
VPVSVEGYWQITLDSITMDGETIACSGGCQAIVDTGTSLLTGPTSAIANIQSDIGASENS
DGEMVISCSSIDSLPDIVFTINGVQYPLSPSAYILQDDDSCTSGFEGMDVPTSSGELWIL
GDVFIRQYYTVFDRANNKVGLAPVA
>P0C0Y4.2 Allergen Alt a 8; mannitol dehydrogenase [Alternaria alternata]
MPISVPQATELKDLFSLKGKVVIVTGASGPTGIGTEAARGCAEYGADLAITYNSRAEGAE
KNAKEMSEKYGVKVKAYKCQVNEYAQCEKLVQDVIKDFGKVDVFIANAGKTADNGILDAT
VEQWNEVIQTDLTGTFNCARAVGLHFRERKTGSLVITSSMSGHIANFPQEQASYNVAKAG
CIHLAKSLANEWRDFARVNSISPGYIDTGLSDFVPQDIQKLWHSMIPMGRDAKATELKGA
YVYFASDASSYCTGSDLLIDGGYCVR
>ABL09307.1 Allergen Aca s 13; fatty acid-binding protein [Acarus siro]
MVQINGSYKLEKSDNFDAFLKELGLNFVTRNLAKSATPTVEVSVNGDSYTIKTASTLKNT
EISFKLGEEFEEARADGKTVKTVVNKESDTKFVQVQQGDKEVTIVREFSDEGLTVTATVN
GVTSVRFYKRQ
>ABL09312.1 Putative allergen Aca s 4 [Acarus siro]
MAHLLLAVVAITLALSQSVFGGSPYSNPHFTGSRSVITHLMQWKFDDIAAECERFLGPKG
YGGIQLSPVNEHAVLGNRPWYELYQPVGYKIQSRSGNEEQFKGMVQRCNKVGVRIYVDIV
MNHMSGAQEGHGNCWFKLQWHHDVSRCSLLVPNDFHGRESCHTDNMDIKNYDNPEEARNC
RLSGLRDLKQSSEYVRQKQADFLNHLIDLGVAGSRSDASKHMWPGDLEAIYGKLHNLNTA
YFPANSRPFIYHEVIYYGGDGIKSSDYTKLGRAIEFHFYRDIANVVRRHNQLKTVKNFGQ
PWGMVPSDDALVMVDSHDLQRFHTGQVGVNINYFESRLLKVATAFMLAWPYGVPRVMSSY
HWDQKIEDGKDKNDWIGPPSDGSGNILSVTPQPDDTCNKEWICEHRWRQIYNMVHFRNVA
GNEAVSHWWDNGDYQIAFGRGSKAFIAINLQDGQGLNRKLATGLPQGTYCDLVTGNLAGG
KCTGGTVTVDGSGNADINIAKTAEDPFVAIHVEAKLH
>ABL77410.1 Allergen Ani s 7; unknown [Anisakis simplex]
AKYGSQFCKNLLANCLSSTGATLPMQSPWQIPPVVSSCITSGMAKGTDHNKKDVMATCIQ
RYGADFCKNMVGSCAALTDVTLTSYGIGSVLPQVIVDCMTSEMSSPSIMWQCVQKYGTEF
CKKLLQDCSASTGASLSPQAPWLIPSVIAECMAKGMVNGGRQADDTMAICIQKYGIKFCN
IIGAACSVLTQVPFFPQLPGTVQQLPSELRACVRSETQKPNVMTKCVEKYGTEFCSSLLQ
SCSASTGAILPLREPWKIPHPIADCMYAGMNPESKEDRGGIMSKCIRRYGFDFCKKMLES
CSALTSVQHDSRNTNYASLPQVLKDCMASEMDSPSVMFECVQRYGTPFCKGLLETCTEKT
RASLSPQAPWLIPTAIAQCMRQGMNQGDEKKTLMSLCVRRYGADYCNNLAAACSVLTNLP
FFPQTPPSEQNLPPMMHKCLKSEMENPGIMSTCVQRYGTQFCKNLLNSCTASTGMHLPYD
APWKIPEPIAACMAQGMNGGDHKPKEDAMARCIRKYGVTYCNNMLASCSVLTNVNYDPSG
GQMPGILSECVTAETDEPSAMCQCVQKYGTEFCKKRLASCIASTGMNLPATTPWKLPPPV
ARCMQHGSPNDNRGQGQGSNDVMSQCIARYGAEFCQRLARFCYAMNSLQYPGETFDPQQQ
TPTQVARCMKSEMDSPSVMWHCVQKYGQEFCNKLAATCSTETNTPLPQQDPWRLPQPIIA
CMLGKMNNPNPTSKPQSVMSQCTARYGDDFCLSLGKACAELNNVPSSMISLSAQQLPQPV
SSCMKAEMNNPSALWQCIQQYGIEFCKKLRDACSAMTGASLSTTTPWILPQPVSNCMRNE
MNNPSAMWLCIQKYGIEFCNRLASACAMIKKVTMPTVTINLPEIIASCVASENSQAMCYA
RKGPEQCKTEENICRNPNNPPGSPLTIPETECMKSQVAMATCQKKFGSECVALQQECVAG
TGAPPVTIGARGAFMLATALRSCIFNGGVIGSCVLYHPPSQCDQWVQQCATALQTSAGVT
VAGGYRQLSPPMAVCVASQDLMTRCMTRLGQGTCQQAVKNCKRRFNTPSSRLPGRLWSLS
SELINCLYRPVNRASN
>ABL84749.1 Allergen Der f 1; cysteine protease [Dermatophagoides
farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
ATPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE

YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>ABL84750.1 Allergen Der f 1; cysteine protease [Dermatophagoides
farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQKLVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>ABL84751.1 Allergen Der f 1; cysteine protease [Dermatophagoides
farinae]
MKFVLAIASLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIRHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>ABL89183.1 Putative allergen tropomyosin [Portunus sanguinolentus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANLRAEKTEEEIRATQKKMQQVENELDQA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ABM53030.1 Putative profilin [Caryota mitis]
MSWQAYVDHHLMCEIDGQRLAAAAILGHDGSVWAQSETFPQVKPEEISGIMNDFAEPGNL
APTGLYLGNTKYMVIQGEPGAVIRGKKGSGGVTIKKTNMALIIGIYDEPMTPGQCNMIIE
RLGDYLIDQGF
>ABM53751.1 Putative mite allergen Tyr p 13 [Tyrophagus putrescentiae]
MTIEGKYKLEKSENFDAFLDKLGVGFMVKTAAKTLKPTLEVEVAGDTYTLRSLSTFKNTE
IKFKLGEEFEEDRADGKKVKTVVNKEGDNKLVQTQFGDKEVKIIREFNGDDVVVTASVDG
VTSVRSYKRI
>BAF43534.1 Allergen Ani s 5; SXP/RAL-2 family protein [Anisakis simplex]
MKTLIVAALFCTIGMALADDTPPPPPFLAGAPQDVVKAFFELLKKDETKTDPEIEKDLDA
WVDTLGGDYKAKFETFKKEMKAKEAELAKAHEEAVAKMTPEAKKADAELSKIAEDDSLNG
IQKAQKIQAIYKTLPQSVKDELEKGIGPAVPQ
>ABM60783.1 Allergen Pen c 32; pectate lyase [Penicillium citrinum]
VGDVATGYASENGGTTGGSGGTTTTVSSYAAFTEAVSGDDAKVVFVSGKISKTADQARVG
SNTSIIGKDSNAILSGFGVLVKEASNVIIRNLGVEKVLADNGDAIGIQKSNNVWVDHCDV
SSDRDHDKDYYDGLIDITHAADYVTVSNTSIHDHWKACLIGHSDSNGDEDKGHLHVTLNN
NYWYNINSRGPSFRFGTGHVYNSYYLDMSDGINTRQGAQHLVESNTFSGSKKPLYSTDDG
YAVANDNDFGDGENNAEKGTLTSVPYSYDLVGSGKVKDAVVGTAGQTLTF
>P80740.2 Allergen Ole e 5; superoxide dismutase / partial [Olea
europaea]
MVKAVTVLNSSEGPHGIVYFAQEGDGPTTV
>P82977.2 Putative RecName: Full=Subtilisin-chymotrypsin inhibitor WSCI;
Flags: Precursor [Triticum aestivum]
MSSVVKKPLGGNTDTGDHHNQKTEWPELVGKSVEEAKKVILQDKSEAQIVVLPVGTIVTM
EYRIDRVRLFVDSLDKIAQVPRVG
>Q45W86 Allergen Ara h 11; oleosin [Arachis hypogaea]
MAEALYYGGRQRQDQPRSTQLVKATTAVVAGGSLLILAGLVLAATVIGLTTITPLFVIFS
PVLVPAVITVALLGLGFLASGGFGVAAITVLTWIYRYVTGKHPPGANQLDTARHKLMSKA
REIKDYGQQQTSGAQAS

>BAF45320.1 Allergen Cry j 2 [Cryptomeria japonica]
MAMKLIAPMAFLAMQLIIMAAAEDQSAQIMLDSVVEKYLRSNRSLRRVEHSRHDAINIFN
VEKYG
>ABN03965.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASLGITDAQVGVCYGMQGNNLPSVSEVIALYK
QSNIKRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
RFRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLANIYPYFTYADNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHDATILFLKSDM
>ABN03966.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLFFFTASVGITDAQVGVCYGMQGNNLPPVSEVIALYK
KSNITRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNAKSWVQKNVRGFWSSV
RFRYIAVGNEISPVNRGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVRNSY
PPSAGAFRDDVRSYLNPIIRFLSSIRSPLLANIYPYFTYAGNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKRGTPKRPKRAIETYLFAMFDENKKQPEVEKHFGLFFPNKWQKYNLNFSAEKNWDIS
TEHNATILFLKSDM
>ABN09653.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASIGITDAQVGVCYGMQGNNLPSVSEVIALYK
QSNIKRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
RFRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLTNIYPYFTYAYNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFATFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHNATILFLKSDM
>ABN09654.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASLGITDAQVGVCYGMQGNNLPSVSEVIALYK
KSNIKRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
RFRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSSXSPLLANIYPYFTYAYNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHNATILFLKSDM
>ABN09655.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLFFFTASVGITDAQVGVCYGMQGNNLPPVSEVIALYK
KSNITRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNAKSWVQKNVRGFWSSV
RFRYIAVGNEISPVNRGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLNPIIRFLSSIRSPLLANIYPYFTYAGNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKRGTPKRPKRAIETYLFAMFDENKKQPEVEKHFGLFFPNKWQKYNLNFSAEKNWDIS
TEHNATILFLKSDM
>ABN14313.1 Allergen Der f 2; NPC2-like protein [Dermatophagoides
farinae]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKANINGLEVDVPGIDTNACHYIKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLIGDNGVLACAIATHGKIRD
>BAF46896.1 Putative tropomyosin [Balanus rostratus]
MDAIKKKMQAMKLEKENALDKAEQLEQKLRDVEETKAKAEEDLTLLQKKYTNLENEFDQV
NEQYNEGVTKLEVSEKRVTEAEDEIKGYTRRIQLLEDDLERTPVKLDEATFKLEDATKTA
DESERGRKVLESRSIADDDRIDALEKQVKDAKYVAEEADRKYDEAARKLAITEVDLERSE
TRLEAAEAKITELSEELAVVGNNCKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAA
EAERVVNKLQKEVDRLEDELLAEKEKYKAISDELDQTFAELAGM

>P08819.2 Putative RecName: Full=Serine carboxypeptidase 2; AltName: Full=Serine carboxypeptidase II; AltName: Full=Carboxypeptidase D; AltName: Full=CPDW-II; Short=CP-WII; Contains: RecName: Full=Serine carboxypeptidase 2 chain A; AltName: Full=Serine carboxypeptidase II c [Triticum aestivum]
VEPSGHAADRIARLPGQPAVDFDMYSGYITVDEGAGRSLFYLLQEAPEDAQPAPLVLWLN
GGPGCSSVAYGASEELGAFRVKPRGAGLVLNEYRWNKVANVLFLDSPAGVGFSYTNTSSD
IYTSGDNRTAHDSYAFLAKWFERFPHYKYRDFYIAGESYAGHYVPELSQLVHRSKNPVIN
LKGFMVGNGLIDDYHDYVGTFEFWWNHGIVSDDTYRRLKEACLHDSFIHPSPACDAATDV
ATAEQGNIDMYSLYTPVCNITSSSSSSSSSLSQQRRSRGRYPWLTGSYDPCTERYSTAYY
NRRDVQMALHANVTGAMNYTWATCSDTINTHWHDAPRSMLPIYRELIAAGLRIWVFSGDT
DAVVPLTATRYSIGALGLPTTTSWYPWYDDQEVGGWSQVYKGLTLVSVRGAGHEVPLHRP
RQALVLFQYFLQGKPMPGQTKNAT
>BAF47263.1 Putative tropomyosin fast isoform [Marsupenaeus japonicus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANIQLVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAF47265.1 Putative tropomyosin fast isoform [Paralithodes camtschaticus]
MDAIKKKMQAMKLEKDNAMDKADTLEQQNKEANNRAEKAEEEVHGLQKRMQQLENDLDQV
QESLLKANTQLEDKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAF47266.1 Putative tropomyosin slow-tonic isoform [Paralithodes camtschaticus]
MDAIKKKMQAMKLEKDNAMDKADTLEQQNKEANNRAEKTEEEIRLTQKKMQQVENELDVA
QEQLSLANTKLEEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKNIADEMDQAFSELSGF
>BAF47268.1 Putative tropomyosin slow-twitch isoform [Erimacrus isenbeckii]
MDAIKKKMQAMKLEKDNAMDRAHTLEQQNKEANLRAEKTEEEIRATQKKMQQIENELDHA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAF47269.1 Putative tropomyosin slow-tonic isoform [Erimacrus isenbeckii]
MDAIKKKMQAMKLEKDNAMDRAHTLEQQNKEANLRAEKTEEEIRATQKKMQQIENELDHA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKNIADEMDQAFSELSGF
>AAM09530.3 Allergen Equ c 4; latherin [Equus caballus]
MLKVSCLFVLLCGLLVPSSAQQIPPEVSSQITDALTQGLLDGNFLSLLNAINLEGLLNTI
LDQVTGLLNILVGPLLGPSDAEIKLQDTRLLQLSLEFSPDSKGIDIWIPLELSVYLKLLI
LEPLTLYVRTDIRVQLRLESDEDGKYRLAFGHCSLLPRAIELQSGNPLSLPVNAVLGTIE
NALGNFITEDLGAGLCPTLNSLVSNLDLQLVNNLINLILDRANVDLSV
>ABO36677.1 Allergen Pis v 3; 7S globulin/ vicilin-like protein [Pistacia vera]

KTDPELKQCKHQCKVQRQYDEEQKEQCAKGCEKYYKEKKGREQEEEEEEEWGSGRGRGDE
FSTHEPGEKRLSQCMKQCERQDGGQQKQLCRFRCQEKYKKERREHSYSRDEEEEEEGDEE
QEEEDENPYVFEDEHFTTRVKTEQGKVVVLPKFTKRSKLLRGLEKYRLAFLVANPQAFVV
PNHMDADSIFFVSWGRGTITKIRENKRESMNVKQGDIIRIRAGTPFYIVNTDENEKLYIV
KLLQPVNLPGHYEVFHGPGGENPESFYRAFSREVLEAALKTPRDKLEKLFEKQDEGAIVK
ASKEQIRAMSRRGEGPSIWPFTGKSTGTFNLFKKDPSQSNNYGQLFESEFKDYPPLQELD
IMVSYVNITKGGMSGPFYNSRATKIAIVVSGEGRLEIACPHLSSSKNSGQEKSGPSYKKL
SSSIRTDSVFVVPAGHPFVTVASGNQNLEILCFEVNAEGNIRYTLAGKKNIIEVMEKEAK
ELAFKTKGEEVDKVFGKQDEEFFFQGPKWRQHQQGRADE
>CAM54066.1 Allergen Asp f 34; PhiA cell wall protein [Aspergillus fumigatus]
MQIKSFVLAASAAATASAAACQAPTNKYFGIVAIHSGSAVQYQPFSAAKSSIFAGLNSQN
ASCDRPDEKSATFYIQDGSLYLYAASATPQEIFVDRSGMGQGKIGYTTGAQPAPRNSERQ
GWAIDSQNHLQFQGKDLIACPNSIDGAWSIWADAGVANPAGNTDCVGIAARVEDVTNPNS
CVYTQ
>ABO71783.1 Putative tropomyosin [Eriocheir sinensis]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKTEEEIRATQKKMQQVENELDQA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAF51970.1 Allergen thaumatin-like protein [Cryptomeria japonica]
MAKVSDLALLLVAGMAISLYIQETGAVKFDIKNQCGYTVWAAGLPGGGQQLTQGQTWTVN
LAAGTQSARFWGRTGCSFDASGKGTCQTGDCGGQLSCTVSGAVPATLAEYTQSDQDYYDV
SLVDGFNIPLSINPTNAQCTAPACKADVNAVCPAELKVDGGCKSACAAFQTDQYCCTGTY
ANSCPATNYSMIFKNQCPQAYSYPKDDTATFACPSGTDYSIVFCP
>ABO84963.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDRMLMEEFGEKIDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>ABO84964.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDRMLMEEFEEKMDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>ABO84966.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDRMLMEEFEEKIDQIEHGLLMLSEQYKE
SEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>ABO84967.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDRMLMEEFEEKIDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>ABO84968.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDRMLMEEFEEKMDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVPTIEILVK
DLAELAKKVKAVKSDD
>ABO84969.1 Putative group 21 allergen [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRGAFDRMLMEEFEEKMDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>ABO93594.1 Putative BW10KD allergen protein [Fagopyrum tataricum]
MKLFLILAAASLLIVASHADSQMRSKCRKQMRMMEPQLEQCEGYMTMDMMDADSMRGQEC
RSEESCMRGCCMAMKEMDDECMCEWMKMMVQQQRGEMGEEDMRMVMRKMKQLPNKCGMGH
MRCHMGMGTRVYE

>ABP04043.1 Allergen Bla g 4 allergen [Blattella germanica]
AVLALCASDTLAMEDCFRHESLVPNLDYERFRGSWIIAAGTSEALTQYKCWIDRFSYDDA
LYSLYTDSKGNNKTAIRGRTKFEGNKFTIDYNDKGKAFSAPYSVLATDYDNYAIVEGCPA
AANGHVIYVQLRLTWRRFHPKLGDKEMIQHYTLDQVNQHKKAIEEDLKHFNLKYEDLHST
CH
>ABP04044.1 Allergen Bla g 5 variant allergen [Blattella germanica]
YKLTYCPVKALGEPIRFLLSYGEKDFEDYRFQEGDWPKLKPSMPFGKTPVLEIDGKQTHQ
SVAISRYLGKQFGLSGKDDWENLEIDMIVDTISDFRAAIANYHYDADENSKQKKWDPLKK
ETIPYYTKKFDEVVKANGGYLAAGKLTWADFYFVAILDYLNHMAKEDLVANQPNLKALRE
KVLGLPAIKAWVAKRPPTDL
>ABP35603.1 Allergen Bla g 2 allergen variant [Blattella germanica]
MIGLKIVTVLFAVATITHAAELQRVPLYKLVHVFINTQYAGITKIGNQNFLTVFDSTSCN
VVVASQECVGGACVCPNLQKYEKLKPRYISDGNVQVKFFDTGSAVGRGIEDSLTIFNLTT
SQQDIVLADELSQEVCILSADGVVGIAAPGCPNALKGKTVLENFVEENLIAPVFSIHHAR
FQDGEHFGEIIFGGSDWKYVDGEFTYVPLVGDDSWKFRLDGVKIGDTTVAPAGTQAIIDT
SKAIIVGPKAYVNPINEAIGCVVEKTTTRRICKLDCSKIPSLPDVTFVINGRNFNISSQY
YIQQNGNLCYSGFQPCGHSDHFFIGDFFVDHYYSEFNWENKAMGFGRSVESV
>ABP58627.1 Putative pollen allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGTPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABP58632.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
PPVSQFHIQGQIYCDTCRSRFITELSEFIPGASVRLQCREKENGDITFTEIGYTRAEGLY
SMLVERDHKNEFCEITLISSGRKDCDEIPIEGWAKPSLKFILNTVNGTTRTVNPLGFFKK
EALPKCAQVYNKLGMYPPNM
>ABP58633.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
PPVSQFHIQGQVYCDTCRAGFITELSEFIPGASVRLQCREKKNGDITFTEVGYTRAEGLY
SMLVERDHKNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILNTVNGTTRTINPLGFYKK
EALPKCAQVYNKLDMYPPNM
>ABP58635.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
PPVSQFHIQGQVYCDTCRARFITELSEFIPGASVRLQCRDGENGSITFTEVGSTRAEGLY
SMLIERDHKDEFCEITLISSSRKDCDEIPVEGWVKPSLKFMLNTVNGTTRTVNPLGFFKK
EALPKCPQVFNKLGMYPPDM
>ABP58636.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
PPVSQFHIQGQVYCDTCRAGFITELSEFIPGASVRLQCREKKNGDITFTEVGYTRAEGLY
SMLVERDHKNEFCEITLISSGRKDCNEIPTEGWAKPSLKFILNTVNGTTRTINPLGFYKK
EALPKCAQVYNKLGMYPPNM
>ABP58637.1 Allergen major pollen allergen Ole e 1 [Olea europaea]
PPVSQFHVQGQIYCDTCRAGFIAELSEFILGAGVRLQCRDSKKGNITFTEVGYTRAEGLY
SMLIERDHKNEFCEVNSLSSSRKDCDEIPIEGWVRPSLRFLLNTVNGTTCTIKPLGFFKN
KALPKCPQVFNKLGMYPPDL
>P80273.2 Putative Nonspecific lipid-transfer protein P3 (LTP P3) [Vitis sp.]
LSCGDVATQMASCINYLRGAGPLPAACCNGVKNLKNSATTTQDRRTACKCLISASKTISG
VNFGLAAGLPAKCGVSIPYKISPSTNCDQVN
>ABP97433.1 Allergen Ara h 8; pathogenesis related protein, PR-10, Bet v 1-like protein [Arachis hypogaea]
MGVHTFEEESTSPVPPAKLFKATVVDGDELTPKLIPAIQSIEIVEGNGGPGTVKKVTAVE
DGKTSYVLHKIDAIDEATYTYDYTISGGTGFQEILEKVSFKTKLEAADGGSKIKVSVTFH
TKGDAPLPDEVHQDVKQKSQGIFKAIEGYVLSN
>ABQ10638.1 Allergen Fag e 3; 7S globulin/vicilin-like protein partial [Fagopyrum esculentum]
GDYPFEPRRQIEHCRQRCQDRSQGFRETRECLETCEKRAGFDDEPSKEVDSYTTDTRSRD
PQQEFRQCRHRCQTQEEGGRQQRKCEQRCEKQLERQQGYDDEEFGQGRSNIGAPVRNYDD

CTEMCGGSPLCALFCE
>ABQ42566.1 Allergen thaumatin-like protein [Actinidia deliciosa]
ATFNIINNCPFTVWAAAVPGGGKRLDRGQNWIINPSAGTKGARVWPRTGCNFDGAGRGKC
QTGDCNGLLQCQAFGQPPNTLAEYALNQFNNLDFFDISLVDGFNVAMEFSPTSGGCTRGI
KCTADINGQCPNELRAPGGCNNPCTVFKTDQFCCNSGNCGLTNFSKFFKDRCPDAYSYPK
DDQTSTFTCPAGTNYKVVFCP
>CAM56785.1 Allergen Gad m 1; parvalbumin beta [Gadus morhua]
MAFAGILADADCAAAVKACEAAESFSYKAFFAKCGLSGKSADDIKKAFFVIDQDKSGFIE
EDELKLFLQVFKAGARALTDAETKAFLKAGDSDGDGAIGVEEWAVLVKA
>CAM56786.1 Allergen Gad m 1; parvalbumin beta [Gadus morhua]
MAFAGILNDADITAALAACKAEGSFDHKAFFTKVGLAAKSSADIKKVFEIIDQDKSDFVE
EDELKLFLQNFSAGARALSDAETKVFLKAGDSDGDGKIGVDEFGAMIKA
>ABQ59329.1 Allergen Cla c 9; vacuolar serine protease [Cladosporium cladosporioides]
DQEVHVLKSESEVEKNAPWGLARISHRDSLSFGTFNKYLYTEDGGEGVDVYVVDTGTNVD
HVDFEGRASWGKTIPQGDADEDGNGHGTHCSGTVAGKKYGVAKKAHVKAVKVLRSNGSGS
MSDVVKGVEYAAESHLEQVSIAKKGKRKGFKGSTANMSLGGGKSPILDKAVNAAVDAGIH
FAVAAGNDNADSCNYSPAAAENAVTVGASTLSDERAYFSNYGKCNDIFAPGLNIQSTWIG
SKYAVNTISGTSMASPHVAGLLAYLLSLQPAKDSAFAVADISPKKLKANLISIATVGALT
DVPSNTANILAWNGGGESNYSAIVEKGGYKAAVRPTMLEEIESEAKVASKKVYSEGDELA
KKVAELTEKIEDLISGDLKDMFRDLKRE
>ABQ96644.1 Putative tropomyosin [Tyrophagus putrescentiae]
MEAIKKKMQAMKLEKDNAIDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLGNDLDQV
QESLLKANIQLVEKDRALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEKRMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELTGY
>CAK50834.1 Allergen Art v 2; pathogenesis related protein, PR-1 [Artemisia vulgaris]
MGHLGNFWLVLAISFAILHLSHAHETYGEPGNTPDDYVHAHNCIRRVLGMKPLCWDEIGK
VAQAWAETRTPDCSLIHSDRCGENMAQGAINGSMAVQLWLDERLDYDYNENKCIKMCGHY
TQIVWANSERVGCGRALCSNGWAYIIVCNYDPPGNVVGQKPY
>ABR21771.1 Putative conglutin beta [Lupinus angustifolius]
EERQEEERERRREPCREREQEQQPQHGRREEEEEEEEWQPRRLRPQSRKEEREQEQGSSS
SSRKQSGYERRQYHERREQRDEKEKEQDSRSDSRRQRNPYHFSSERFQTRYRNRNGQIRV
LERFDQRTNRLENLQNYRIVEFQSNPNTLILPKHSDADYILVVLNGRATITIVNPDKRQA
YNLEYGDALRLPAGTTSYILNPDDNQNLRVVKLAIPINNPSNFYDFYPSSTKDQQSYFSG
FSKNTLEATFNTRYEEIQRILLGNEDEQEDEEQRRGQEQSYQDEGVIVRVSKEQIQELRK
HAQSSSRKGKPSESGPFNLRSNESIYSNKFGNFYEITPERNPQVQDLDISLTFTEINEGA
LLLPHYNSKAIFIVVVDEGEGNYELVGIRDQQRQQDEQEEEEEEVRRYSARLSEGDIFVI
PAGYPISVNASSNLRLLGFGINANENQRNFLAGSEDNVISQLDREVKELTFPGSAQDVER
LIKNQQQSYFANAQPQQKQQREKEGRRGRRSLISSILSTLY
>ABR21772.1 Putative conglutin beta [Lupinus angustifolius]
MAKMRVRLPMLILLLGVVFLLAASIGIAYGEKDFTKNPPKEREEEEHEPRQQPRPRQQEE
QEREHRREEKHDGEPSRGRSQSEESQEEEHERRREHHREREQEQQPRPQRRQEEEEEEEE
WQPRRQRPQSRREEREEREQEQGSSSGSQRGSGDERRQHRERRVHREEREQEQDSRSDSR
RQRNPYHFSSNRFQTYYRNRNGQIRVLERFNQRTNRLENLQNYRIIEFQSKPNTLILPKH
SDADFILVVLNGRATITIVNPDKRQVYNLEQGDALRLPAGTTSYILNPDDNQNLRVAKLA
IPINNPGKLYDFYPSTTKDQQSYFSGFSKNTLEATFNTRYEEIERVLLGDDELQENEKQR
RGQEQSHQDEGVIVRVSKKQIQELRKHAQSSSGEGKPSESGPFNLRSNKPIYSNKFGNFY
EITPDINPQFQDLNISLTFTEINELWLTKEKEIMN
>ABR29644.1 Allergen Pis v 4; Mn superoxide dismutase [Pistacia vera]
MALLSYVTRKTLTESLRLGLKSHVRGLQTFTLPDLPYEYGALEPAISSEIMQLHHQKHHQ
TYITNYNKALEQLDQAINKGDASAVVKLQSAIKFNGGGHINHSIFWKNLTPVSEGGGEPP

HGSLGWAIDTNFGSMEALIQRMNAEGAALQGSGWVWLGLDKESKKLVVETTANQDPLVTK
GPSLVPLLGIDVWEHAYYLQYKNVRPDYLKNIWKVINWKYAGELYQKECP
>ABS12233.1 Allergen Scy p 1; tropomyosin [Scylla serrata]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANLRAEKTEEEIRATQKKMQQVENELDQA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ABS12234.1 Putative tropomyosin [Portunus trituberculatus]
MDAIKKKMQAMKLEKDNAMDRANTLEQQNKEANLRAEKTEEEIRATQKKMQQVENELDQA
QEQLSAANTKLDEKEKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ABS29033.1 Putative Alt a 1 major allergen [Stemphylium sp. CID1012]
LAAAAPFEARQADASCPVSTQGDYVWKISEFSGRKPEGTYYNSLSFNIKATNKGTLDFTC
SAQADKLEDDKFYSCGENSFMSFAFQSDRNGLLFRQDVSDEITYVATATLPNYCHAGGNG
PKDFVCQGVSDAYFTLV
>ABS58503.1 Putative serine proteinase inhibitor-like allergen [Triticum aestivum]
MSPVVKKPEGGNTDTGDHHNQKTEWPELVGKSVEEAKKVIMQDKSEAQIVVLPVGTIVTM
EYRIDRVRLFVDSLDKIAQVPRVG
>BAF75681.1 Allergen Ani s 8; SXP/RAL-2 family protein [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75704.1 Putative SXP/RAL-2 family protein 2 isoform 2 [Anisakis simplex]
MRVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75705.1 Putative SXP/RAL-2 family protein 2 isoform 3 [Anisakis simplex]
MKVLFFVAAVVADSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQATEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75706.1 Putative SXP/RAL-2 family protein 2 isoform 4 [Anisakis simplex]
MKVLFFVAAVVAVPLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75707.1 Putative SXP/RAL-2 family protein 2 isoform 5 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAYAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75708.1 Putative SXP/RAL-2 family protein 2 isoform 6 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFRDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75709.1 Putative SXP/RAL-2 family protein 2 isoform 7 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ

FANDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTATADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75710.1 Putative SXP/RAL-2 family protein 2 isoform 8 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNNHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75711.1 Putative SXP/RAL-2 family protein 2 isoform 9 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAESTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELNKLNQQGQS
>BAF75712.1 Putative SXP/RAL-2 family protein 2 isoform 10 [Anisakis simplex]
MKVLFFVAAVVAVSLAQDQGPPPLPKFLDGADQATKDAFAALAQTFKDDTDKQVEDAVQQ
FVNDHPAIKDAYEAEKKEVLAAQQAAEEEHKKLVAALPPDAQKADAELTAIADDASLTLA
AKHDKIVQTFESLPPAVKEELDKLNQQGQS
>ABU42022.1 Putative 11S globulin [Pistacia vera]
MGYSSLLSFSLGFLLLFHCSFAQIEQVVNSQQRQQQQRFQTQCQIQNLNALEPKRRIESE
AGVTEFWDQNEEQLQCANVAVFRHTIQSRGLLVPSYNNAPELVYVVQGSGIHGAVFPGCP
ETFQEESQSQSRSQHSRSERSQQSGEQHQKVRHIREGDIIALPAGVAHWIYNNGQSKLVL
VALADVGNSENQLDQYLRKFVLGGSPQQEIQGGGQSWSQSRSSRKGQQSNNILSAFDEEI
LAQSLNIDTQLVKKLQREEKQRGIIVRVKEDLQVLSPQRQEKEYSDNGLEETFCTMTLKL
NINDPSRADVYNPRGGRVTSINALNLPILRFLQLSVEKGVLYQNAIMAPHWNMNAHSIVY
ITRGNGRMQIVSENGESVFDEEIREGQLVVVPQNFAVVKRASSDGFEWVSFKTNGLAKIS
QLAGRISVMRGLPLDVIQNSFDISREDAWNLKESRSEMTIFAPGSRSQRQRN
>ABU49605.1 Allergen Der f 1 allergen [Dermatophagoides farinae]
MKFVLAIVSLLVLSTVYARPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEAN
KGAINHLSDLSLDEFKNRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRT
VTPIRMQGGCGSCWAFSGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIE
YIQQNGVVEERSYPYVAREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVI
IGIKDLRAFQHYDGRTIIQHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGY
GYFQAGNNLMMIEQYPYVVIM
>ABU53681.1 Putative tropomysin [Sinonovacula constricta]
MDAIKKKMQAMKIEKENALDKSEQLENKLKEIEDVKVKIEEDLTSLQKKYTNQENEYDKV
NEQFNESTVKLEASEKRVTECEDEIKGFTRRIQLLEDELERTQQKAEEAVLKLEEASKAA
DESERGRKVLESRSIADDDRIDKLEKDVKDSKYLAEEADRKYDEAARKLAITEVDLERAE
TRLEAAESKITELSEELQVVGNNCKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAA
EAERVVNKLQKEVDRLEDELLQEKEKYKQISDELDQTFAELAGM
>BAF76430.1 Allergen tropomyosin [Euphausia superba]
MDAIKKKMQAMKMEKDSAMDRSDALEAQNKETNAKADKADDEVHNLQKRLQTLENDLDQV
SEALLKANTQLVEKDKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSMLDEERMDALESQLKEARLLAEEADRKYDEVARKLAMVEADLERAE
ERAEAGENKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKHLTHKLKTAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKGITDELDQTFNELSGY
>BAF76431.1 Allergen tropomyosin [Euphausia pacifica]
MDAIKKKMQAMKMEKDSAMDRADALEAQNKETNARAEKADDEVHNLQKRLQTLENDLDQV
SEALLKANTQLVEKDKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLLDEERMDALENQLKEARLLAEEADRKYDEVARKLAMVEADLERAE
ERAEAGENKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKHLTHKLKTAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKGITDELDQTFNELSGY
>ABU95411.1 Allergen Sin a 3; lipid transfer protein [Sinapis alba]
ALSCGTVNSNLAACIGYLTQNAPLPKGCCTGVTNLNNMARTTPDRQQACRCLVGAANSFP
SLNAARAAALPKACGVNIPYKISKSTNCNSVR

>ABU95412.1 Allergen Sin a 4; profilin [Sinapis alba]
MSWQTYVDDHLMCDVEGNRLTAAAILGQDGSVWAQSANFPQLKPEEIKGINNDFAEPGTL
APTGLFIGGTKYMVIQGEPNAVIRGKKGAGGVTIKKTTQAFVFGIYEEPMTPGQCNMVVE
RLGDYLIEQGL
>ABU97466.1 Allergen Blo t 10; tropomyosin [Blomia tropicalis]
MEAIKKKMQAMKLEKDNAIDRAEIAEQKSRDANLRAEKSEEEVRALQKKIQQIENELDQV
QESLTQANTKLEEKEKSLQTAEGDVAALNRRIQLIEEDLERSEERLKVATAKLEEASHSA
DESERMRKMLEHRSITDEERMDGLESQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGETKIVELEEELRVVGNNLKSLEVSEEKAQQREEAYEQQIRMMTGKLKEAEARAE
FAERSVRKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELTGY
>ABU97470.1 Allergen Der f 20; arginine kinase [Dermatophagoides farinae]
MVDQATLSKLEAGFQKLQNAQDCHSLLKKYLTRDVLDQLKTKKTDMGATLLDVIQSGVEN
LDSGVGIYAPDAQSYKTFAALFDPIIDDYHKGFKPTDKHPQTDFGNIEHFVNVDPKNEYV
ISTRVRCGRSLKGYPFNPMLTEAQYKEMETKVKGQLATFEGELKGTYYPLLGMDKATQQK
LIDDHFLFKEGDRFLQAANACRYWPVGRGIFHNDKKTFLMWVNEEDHLRIISMQKGGDLK
EVFGRLVKAVKHIEQKIPFSRDDRLGYLTFCPTNLGTTIRASVHIKLPKLAADRKKLEEV
AARYNLQVRGTAGEHTESVGGIYDISNKRRMGLTEYQAVKEMQDGIIELIKMEKSL
>ABU97472.1 Putative profilin [Glycine max]
MSWQAYVDDHLLCEIEGNHLTHAAIIGQDGSVWAQSTNFPQFKPEEITAINNDFNEPGSL
APTGLYIGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTGAALIIGIYDEPMTPGQCNMVVE
RLGDYLIDQGL
>ABU97479.1 Putative tropomyosin [Tyrophagus putrescentiae]
MEAIKKKMQAMKLEKDNAIDRAEIAEQKARDANLKSEKTEEEVRALQKKIQQIENELDQV
QENLTQATTKLEEKEKALQTAEADVAALNRRIQLIEEDLERSEERLKVATAKLEEASHSA
DESERMRKMLEHRSIPDEERMDGLESQLKEARLMAEDADRKYDEVARKLGMVEAHLERAE
ERAQLGIXIAKLERTARLRHT
>ABU97480.1 Putative allergen Tyr p 13 [Tyrophagus putrescentiae]
MVQLNGSYKLEKSDNFDAFLKELGVNFVTRNLAKSASPTVEVIVDGDSYTIKTSSTLKNS
EIKFKLGEEFEEDRADGKKVQTSVTKEGDNKLVQVQKGDKPVTIVREFSEEGLTVTATVN
GATSVRFYKRQ
>ABV55106.1 Allergen Ani s 9; unknown function [Anisakis simplex]
MKLCILAVAVFVVAVSAQGPPPLPPFVANAPPAVQAEFRQLANGAPDKTEAEIEAQIEQW
VASKGGAVQAEFNKFKQMLEQGKARAEAAHQASLTRLSPAAKAADARLSAIASNRALKVG
EKQRQLAAAFQALDPAVKAELQKEMQG
>ABV66255.1 Allergen Der p 1 allergen [Dermatophagoides pteronyssinus]
TNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFSGVAATESAYLAYRNQSLDLAEQ
ELVDCASQHNGCHGDTIPRGIEYIQHNGVVQESYYRYVAREQSCRRPNAQRFGISNYCQI
YPQNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGRTIIQRDNGYQPNYHAVNIVGYSN
AQGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVVIL
>1A9V_A Allergen Chain A, Tertiary Structure Of The Major House Dust Mite
Allergen Der P 2, Nmr, 10 Structures [Dermatophagoides pteronyssinus]
SQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEAVFEANQNTKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVMGDDGVLACA
IATHAKIRD
>1CQA_A Allergen Bet v 2; profilin [Betula pendula]
MSWQTYVDEHLMCDIDGQGEELAASAIVGHDGSVWAQSSSFPQFKPQEITGIMKDFEEPG
HLAPTGLHLGGIKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLIDQGL
>ABW17159.1 Allergen Ara h 7; 2S albumin, conglutin [Arachis hypogaea]
MVKLSILVALLGALLVVASATRWDPDRGSRGSRWDAPSRGDDQCQRQLQRANLRPCEEHI
RQRVEKEQEQEQDEYPYIQRGSRGQRPGESDEDQEQRCCNELNRFQNNQRCMCQALQQIL
QNQSFRFQQDRSQLHQMERELRNLPQNCGFRSPSRCDLSSRTPY
>ABW23574.1 Allergen Vig r 2; 8S globulin (vicilin- like protein) [Vigna
radiata]

MVRARIPLLLLLGILFLASLSVSFGIVHRENIDGAEVSVSRGKNNPFYFNSDRWFHTLFR
NQFGHLRVLQRFDQRSKQMQNLENYRVVELMSKPNTLLLPHHADADFLLVVLNGRAVLTL
VNPDGRDSNILEQGHAQKIPAGTTFFLVNPDDNENLRIIKLAVPVNNPHRFQDFFLSSTE
AQQSYLQGFSKNILEASFDSDIKEISRVLFGEEGQQQQQGQESQQEGVIVELKREQIREL
TKHAKSSSKKSLSSEDQPFNLRNQKPIYSNKLGRWFEITPEKNPQLRDLDMFIRSVDMKE
GSLLLPHYNSKAIVILVINEGKANIELVGQREQQKQQEEQEESWEVQRYRAELSEDDVFI
IPATYPVAINATSNLNFFAFGINAENNQRNFLAGEKDNVISEIPTEVLDVTFPASGEKVK
KLIKKQSESQFVDAQPEQQEREEARKGGKGPFVY
>ABW34946.1 Allergen hevein [Hevea brasiliensis]
MNIFIVVLLCLTGVAIAEQCGRQAGGKLCPNNLCCSQWGWCGSTDEYCSPDHNCQSNCKD
SGEGVGGGSASNVLATYHLYNSQDHGWDLNAASAYCSTWDANKPYSWRSKYGWTAFCGPV
GAHGQPSCGKCLSVTNTGTGAKTTVRIVDQCSNGGLDLDVNVFRQLDTDGKGYERGHLTV
NYQFVDCGDSFNPLFSVMKSSVIN
>P15476.2 Allergen Sola t 1; patatin [Solanum tuberosum]
MATTKSFLILFFMILATTSSTCAKLEEMVTVLSIDGGGIKGIIPAIILEFLEGQLQEVDN
NKDARLADYFDVIGGTSTGGLLTAMITTPNENNRPFAAAKDIVPFYFEHGPHIFNYSGSI
FGPRYDGKYLLQVLQEKLGETRVHQALTEVAISSFDIKTNKPVIFTKSNLAKSPELDAKM
YDICYSIAAAPIYFPPHHFVTHTSNGATYEFNLVDGGVATVGDPALLSLSVATRLAQEDP
AFSSIKSLDYKQMLLLSLGTGTNSEFDKTYTAEEAAKWGPLRWMLAIQQLTNAASSYMTD
YYISTVFQARHSQNNYLRVQENALTGTTTEMDDASEANMELLVQVGETLLKKPVSKDSPE
TYEEALKRFAKLLSNRKKLRANKASY
>ABW86978.1 Allergen Car i 4; 11S globulin/ legumin-like protein [Carya illinoinensis]
MAKPILLSIYLCLIIVALFNGCLAQSGGRQQHKFGQCQLNRLDALEPTNRIEAEAGVIES
WDPNHQQLQCAGVAVVRRTIEPNGLLLPHYSNAPQLVYIARGRGITGVLFPGCPETFEES
QRQSQQGQRREFQQDRHQKIRHFREGDIIAFPAGVAHWCYNDGSSPVVAIFLLDTHNNAN
QLDQNPRNFYLAGNPDDEFRPQGQQEYEQHRRQQQHQQRRGEHGEQQRDLGNNVFSGFDA
EFLADAFNVDTETARRLQSENDHRGSIVRVEGRQLQVIRPRWSREEQEHEERKERERERE
SESERRQSRRGGRDDNGLEETICTLSLRENIGDPSRADIYTEEAGRISTVNSHNLPILRW
LQLSAERGALYSDALYVPHWNLNAHSVVYALRGRAEVQVVDNFGQTVFDDELREGQLLTI
PQNFAVVKRARDEGFEWVSFKTNENAMVSPLAGRTSAIRALPEEVLVNAFQIPREDARRL
KFNRQESTLVRSRSRSSRSERRAEV
>ABW86979.1 Putative 11S legumin protein [Carya illinoinensis]
MAKPILLSIYLCLIIVALFNGCLAQSGGRQQHKFGQCQLNRLDALEPTNRIEAEAGVIES
WDPNHQQLQCAGVAVVRRTIEPNGLLLPHYSNAPQLVYIARGRGITGVLFPGCPETFEES
QRQSQQGQRREFQQDRHQKIRHFREGDIIAFPAGVAHWCYNDGSSPVVAIFLLDTHNNAN
QLDQNPRNFYLAGNPDDEFRPQGQQEYEQHRRQQQHQQRRGEHGEQQRDLGNNVFSGFDA
EFLADAFNVDTETARRLQSENDHRGSIVRVEGRQLQVIRPRWSREEQEHEERKERERERE
SGSERRQSRRGGRDDNGLEETICTLSLRENIGDPSRADIYTEEAGRISTVNSHNLPILRW
LQLSAERGALYSDALYVPHWNLNAHSVVYALRGRAEVQVVDNFGQTVFDDELREGQLLTI
PQNFAVVKRARNEGFEWVSFKTNENAMVSPLAGRTSAIRALPEEVLVNAFQIPREDARRL
KFNRQESTLVRSRSRSSRSERRAEV
>1B6F_A Allergen Chain A, Birch Pollen Allergen Bet V 1 [Betula pendula]
GVFNYETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFPE
GFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNKY
HTKGDHEVKAEQVKASKELGETLLRAVESYLLAHSDAYN
>1H2O_A Allergen Chain A, Solution Structure Of The Major Cherry Allergen Pru Av 1 Mutant E45w [Prunus avium]
GVFTYESEFTSEIPPPRLFKAFVLDADNLVPKIAPQAIKHSEILWGDGGPGTIKKITFGE
GSQYGYVKHKIDSIDKENYSYSYTLIEGDALGDTLEKISYETKLVASPSGGSIIKSTSHY
HTKGNVEIKEEHVKAGKEKASNLFKLIETYLKGHPDAYN
>1W2Q_A Allergen Chain A, Allergen Arah6 From Peanut (Arachis Hypogaea) [Arachis hypogaea]
GPMRRERGRQGDSSSCERQVDRVNLKPCEQHIMQRIMGEQEQYDSYDIRSTRSSDQQQRC

CDELNEMENTQGCMCEALQQIMENQCDRLQDRQMVQQFKRELMSLPQQCNFRAPQRCDLD
VSGGRCS
>ABW98943.1 Allergen alpha S1 casein [Bos taurus]
VSAALARPKHPIKHQGLPQEVLNENLLRFFVAPFPEVFGKEKVNELSKDIGSESTEDQAM
EDIKQMEAESISSSEEIVPNSVEQKHIQKEDVPSERYLGYLEQLLRLKKYKVPQLEIVPN
SAEERLHSMKEGIHAQQKEPMIGVNQELAYFYPELFRQFYQLDAYPSGAWYYVPLGTQYT
DAPSFSDIPNPIGSENSEKTTMPLW
>ABW98945.1 Allergen alpha S1 casein [Bos taurus]
FSEVFGKEKVNELSKDIGSESTEDQAMEDIKQMEAESISSSEEIVPNSVEQKHIQKEDVP
SERYLGYLEQLLRLKKYKVPQLEIVPNSAEERLHSMKEGIHAQQKEPMIGVNQELAYFYP
ELFRQFYQLDAYPSGAWYYVPLGTQYTDAPSFSDIPNPIGSENSEKTTMPLW
>ABW98953.1 Allergen alpha S1 casein [Bos taurus]
IVPNSVEQKHIQKEDVPSERYLGYLEQLLRLKKYKVPQLEIVPNSAEERLHSMKEGIHAQ
QKEPMIGVNQELAYFYPELFXQFYQPDAYPSGAWYYVPLGTQYTDAPSFSDIPNPIGSEN
SEKTTMPLW
>2JMH_A Allergen Chain A, Nmr Solution Structure Of Blo T 5, A Major Mite
Allergen From Blomia Tropicalis [Blomia tropicalis]
GSQEHKPKKDDFRNEFDHLLIEQANHAIEKGEHQLLYLQHQLDELNENKSKELQEKIIRE
LDVVCAMIEGAQGALERELKRTDLNILERFNYEEAQTLSKILLKDLKETEQKVKDIQTQ
>ABX26131.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNIAVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX26132.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGLTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGTAAINIVDKQIPLTGPHSIIGRAVVVHSDPDDLGRG
CHELSKSTGNAGGRVACGIIGLQG
>ABX26134.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHEQSKSTGNAGGRVACGIIGLQG
>ABX26138.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVNALGATTNGCMSTG
PHFDPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX26139.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVFNSSEGVTGTVYFTQEGDGLTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGDAGGRVACGIIGLQG
>ABX26140.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTITGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVTCGIIGLQG
>ABX26141.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVAGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHAHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX26143.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDRQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX26145.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVRALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS

DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX26147.1 Putative allergen Ole e 5 [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVNALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54842.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTITGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54844.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDATNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54849.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDITNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54855.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAISIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRSGHELSKSTGNAGGRVACGIIGLQG
>ABX54859.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVAGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54862.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDFGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54864.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVINSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGTAAINIVDKQIPLTGPHSIIGRAVVVHSDPDDLGRG
GHELSKSTGNAGGRVACGIIGLQG
>ABX54866.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEQGAPGDENRHAGVLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54869.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHVLSKSTGNAGGRVACGIIGLQG
>ABX54876.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVLNSSEGVTGTVYFTQKGDGPTTITGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFLPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX54877.1 Putative Ole e 5 olive pollen allergen [Olea europaea]
MVKAVTVFNSSEGVTGTVYFTQEGDGPTTVTGNLSGLKPGLHGFHVHALGDTTNGCMSTG
PHFNPVGKEHGAPGDENRHAGDLGNITVGEDGTAAINIVDKQIPLTGPHSIIGRAVVVHS
DPDDLGRGGHELSKSTGNAGGRVACGIIGLQG
>ABX56711.1 Allergen Ara h 9; lipid transfer protein (LTP) type 1
[Arachis hypogaea]
MASLKFAFVMLVCMAMVGAPMVNAISCGQVNSALAPCIPFLTKGGAPPPACCSGVRGLLG
ALRTTADRQAACNCLKAAAGSLRGLNQGNAAALPGRCGVSIPYKISTSTNCATIKF

>ABX57814.1 Putative delta class glutathione S-transferase [Blattella germanica]
MTIDFYYLPGSAPCRSVLLAAKAFGVNLNLKVTNLMAGEHLTPEFLKMNPQHTIPTLNDN
GFCLWESRAILSYLADQYGKDDSLYPKDPKKRALVDQRLYFDLGTLYQRFGDYYYPIMFA
KASPDAEKMKKLEEAYQFLDKFLEGQKFVAGNSLTIADIATIASVSTAAILGFDITRYPN
VNKWFENAKKVIPGYDELNHSGCLEFRKMWDNLTQK
>ABX75045.1 Allergen Ara h 9; lipid transfer protein (LTP) type 1 [Arachis hypogaea]
LSCGQVNSALAPCITFLTKGGVPSGPCCSGVRGLLGAAKTTADRQAACNCLKAAAGSLHG
LNQGNAAALPGRCGVSIPYKISTSTNCATIKF
>BAF95206.1 Allergen tropomyosin [Oratosquilla oratoria]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKAEEEVHNLQKRMQQLENDLDQV
QEQLLKANTQLEEKDKALQNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKQLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ABY21305.1 Allergen Pla or 1; invertase inhibitor [Platanus orientalis]
MKLSFSLCIFFLISADIVQGTCKKVAQRSPNVNYDFCVKSLGADPKSHSADLQGLGVISA
NLAIQQGSKIQTFIGRILKSKVDPALKKYLNDCVGLYADAKSSVQEAIADFKSKDYASAN
VKMSAALDDSVTCEDGFKEKKGIASPVTKENKDYVQLTAISLAITKLLGA
>ABY21306.1 Allergen Pla or 2; polygalacturonase [Platanus orientalis]
MRGVQSSGGTFNVNDYGAKGSGDISQAVMKAWEAACASPGPSTVLIPTGNYIMGEVLLEG
PCKGSKIGFQLDGVVKAPADVSAFKSEGWVVFNHVDGLTVSGKGTFDGQGQKAWAANNCD
KDENCNRPPMNIRFNFLKNAVVRDITSMNSKMFHINVLECDNISFQHVTISAPGTSINTD
GIHIGLSRGVTITDTNIATGDDCVSIGPGSQNVTVTKVNCGPGHGISVGSLGKYKDEKDV
RGITVTGCTFTGTSNGVRVKTWPDSPPGVATDMAFEDLTMKNVQNPVILDQEYCPYGQCS
LKAPSRVKLSNIKFNNIRGTSSGPDAIVIACSHGFPCSNLEIGEINLALHAAGAPANSTC
TNAKPIFSGKQVPAIKCA
>ABY28115.1 Putative Der f 3 allergen precursor [Dermatophagoides farinae]
MMILTIVVLLAANILATPILPSSPNATIVGGVKAQAGDCPYQISLQSSSHFCGGSILDEY
WILTAAHCVNGQSAKKLSIRNNTLKHASGGEKIQVAEIYQHENYDSMTIDNDVALIKLKT
PTTLDQTNAKPVPLPAQGSDVKVGDKIRVSGWGYLQEGSYSLPSELQRVDIDVVSREQCD
QLYSKAGADVSENMICGGDVANGGVDSCQGDSGGPVVDIATKQIVGIVSWGYGCARKGYP
GVYTRVGNFVDWIESKRSQ
>ABY53034.1 Allergen Der p 2 allergen [Dermatophagoides pteronyssinus]
MYKILCLSLLVAAVARDQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEADFEAN
QNRKTAKIEIKASIDGLEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENV
VVTVKVMGDDGVLACAIATHAKIRD
>CAK93713.1 profilin [Malus domestica]
MSWQTYVDDHLMCEIEGNHLSAAAIIGHDGSVWAQSATFPQLKPEEVTGIMNDFNEPGSL
APTGLYLGGTKYMVIQGEPGVVIRGKKGPGGVTVKKSTMALLIGIYDEPMTPGQCNMVVE
RLGDYLIEQGL
>CAK93753.1 profilin [Malus domestica]
MSWQAYVDDHLMCDIDGNSLTAAAILGQDGSVWAQSATFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPVTPGQCNIVVE
RLGDYLIEQGL
>CAK93757.1 profilin [Malus domestica]
MSWQAYVDDHLMCDIDGNSLTAAAILGQGGSVWAQSATFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPVTPGQCNIVVE
RLGDYLIEQGL
>A2VBC4.1 Allergen Poly p 1; phospholipase A1 [Polybia paulista]
MNFKYSILFICFGTLDRGLIPECPFNEYDILFFVYTRQQRDGIVLTEETLQNYDLFKKST
ISRQVVFIDHGFLSNGNNENFIAMAKALIEKDNFLVISVDWKKGACNAFASTLDYLGYST

AVGNTRHVGKYVADFTKLLVEQYKVSMSNIRLIGHSLGAHTSGFAGKEVQELKLNKYSNI
DGLDPAGPSFDSNDCPERLCETDAEYVQIIHTSNILGVYSKIGTVDFYMNYGSHQPGCGR
FFSPSCSHTKAVKYLTECIKHECCLIGTPWKKYFSTPKPISQCTKDTCVCVGLNAKSYPA
RGSFYVPVEATAPYCHNEGIKL
>2JON_A Allergen Chain A, Solution Structure Of The C-Terminal Domain Ole
E 9 [Olea europaea]
ATPTPTPKAAGSWCVPKPGVSDDQLTGNINYACSQGIDCGPIQPGGACFEPNTVKAHAAY
VMNLYYQHAGRNSWNCDFSQTATLTNTNPSYGACNFPSGSN
>ABZ81040.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSILKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>ABZ81041.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSVVKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>ABZ81042.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEKMKGAKEMAEKLLRAVESYLLAHTAEYN
>ABZ81043.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>ABZ81044.1 Allergen Car b 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Carpinus betulus]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISSVENVGGNGGPGTIKNITFA
EGIPFKFVKERVDEVDNANFKYSYTVIEGDVLGDKLEKVSHELKIVAAPGGGSIVKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>ABZ81045.1 Allergen Que a 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Quercus alba]
MGVFTHESQETSVIAPARLFKALFLDSDNLIQKVLPQAIKSTEIIEGNGGPGTIKKITFG
EASKFKYAKHRIDALDPENCTYSFSVIEGDALTVMESVSTEIKCVASPDGGSIMKSTTKY
QTKGDFQLKEEQIQAAIEKAAGLLKAVEAYLVAHPDLYK
>ABZ81047.1 Allergen Que a 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Quercus alba]
MGVFTHESQETSVIAPARLFKALFLDSDNLIQKVLPQAIKSTEIIEGNGGPGTIKKITFG
EGSHLKHAKHRIDVIDPENFTYSFSVIEGDALFDKLENVSTETKIVASPDGGSIAKSTSK
YQTKGDFQLTDELIRGGKEKASGVFKAVEAYLVAHPDLYK
>ABZ81991.1 Allergen Tyr p 3; trypsin [Tyrophagus putrescentiae]
MKILLFLCFLVSVAFAKPPTIQLKSNTKSQNGFIVGGTEAVDGDAPHQVSLQHTSHFCGG
SIISERWILTAAHCIDADDLSNPGGMSVRYNTLNLKSGTLVKVKSIKVHEQYSNVTSDND
IALLETVASMNLNQTNAVAAKLPAKGNDPQDGDLFLSGWGTLHSGDTTIPTNLQKVTVPL
TNRSVCAEAYTGIVNITENMFCAGKMGIGGVDSCQGDSGGGAMLNKELVGVVSFGVGCGD
PKYPGVYTRVSQYLDWIELSAKSSATTLVAVNITLFLTLFIGAIW
>ACA00159.1 Allergen Ves v 3; dipeptidylpeptidase IV [Vespula vulgaris]
MVPLRSFVLLNSLFLVLLAARTVVTRVIDKDNSDRIVKTQNDQNLSKVPFNLEETYTADF
LAYVFNGTWTSDTTIVYTDRRTGDILQFDVIKQRSTLIVDSSVMDAYIVSNYVLSPKGRY
LLIGYDLKKGYRYSTFMRYVIYDIEHRAYHKIGNDMHIALAKWAPLTDDLIYILDNDIYY
MRFSNNGFNDVQRVTYDGISGIVYNGVPDWVYEEEVLQDSSAIWFSPDGNHLAYASFDDR

NVQEILYLHYGEPGNLDDQYPTEVKIKYPKVGTLNPVVSLTLVDLHDPTLNKIDLKAPHY
AVGTDNLLYNVQWKDFDHVVVTWSNRVQNKTEIVWYNMYGEIVKTLHVVEHKGWLDIKHL
FFYKGSVYIRKLQPSGTKAGRFHHVTRYDETFKQSPTQMDLTPDAIEVQNICTIDQSNGR
IYYLASGLGKPSQKNLYSVPADGSEKPTCISCNVLTPEGNVCTYADAIFSPLGQYYVLVC
HGPDPAFVSIFNNAHQKVYSWENNLSLRKKLAKRHLPLVKDLDVRANGYESKVRLFLPHN
FDESKSYPMLVNVYAGPNTLKIIDAASYGHQVYMTTNRSVIYAYIDGRGSSNKGSKMLFS
IYRKLGTVEVEDQITVTRQLQEMFPWIDSKRTGVWGWSYGGFSTAMILAKDTSFVFKCGI
AIAPVSSWIYYDSIYTERFMGFPTPEDNLSGYNETDVSRRVEDIRGKKFMLIHGSGDDNV
HYQQSLALAKALEKADVMFEQITYTDEAHALFGVLPHLYHTMDRFWSDCFSLSHAH
>ACA00204.1 Allergen Per a 9; arginine kinase [Periplaneta americana]
MVDAAVLEKLEAGFAKLAASDSKSLLKKYLTKEVFDNLKTKKTPSFGSTLLDVIQSGLEN
HDSGVGIYAPDAEAYAVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYI
ISTRVRCGRSMQGYPFNPCLTEAQYKEMEDKVSSTLSGLEAEPKGQFYLLTGMTKEVQQK
LIDDHFLFKEGDRFLQAANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVTAVNDIEKRIPFSHDDRLGFLTFCPTNLGTTVRASVHIKVPKLAADKAKLEEV
AGKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKEMNDGIAELIKLESSL
>ACA23876.1 Allergen Pas n 1; beta-expansin [Paspalum notatum]
MGSLAKIVAVAAVLAALVAGGSCGPPKVPPGPNITTNYNGKWLPAKATWYGQPNGAGPDD
NGGACGIKNVNLPPYNGFTACGNPPIFKDGKGCGSCYEIRCNKPECSGQPVTVFITDMNY
EPIAPYHFDLSGKAFGAMAKPGLNDKLRHYGIFDLEFRRVRCKYQGGQKIVFHVEKGSNP
NYLAMLVKFVADDGDIVLMELKEKSSDWKPMKLSWGAIWRMDTPKALVPPFSIRLTSESG
KKVIAQDVIPVNWKPDTVYNSNVQF
>ACA79908.1 Allergen Ara h 8 allergen isoform 3 [Arachis hypogaea]
MGVFTFEDEITSTLPPAKLYNAMKDADSITPKIIDDVKSVEIVEGNGGPGTIKKLTIVED
GETKFILHKVEAIDEANYAYNYSVVGGVALPPTAEKITFETKLVEGPNGGSIGKLSVKFH
SKGEAKPEEEDMKKGKAKGEALFKAIEGYVLANPTQY
>ACA96507.1 Allergen Pac c 3; unknown function, antigen 5 [Pachycondyla chinensis]
TEGGAVHTMCQYTSPQPSPNCGTYSNAHITAADKETILKVHNDERQKVKAGQETRGNPGP
QPAASNMPDLTWDNELAAIAQRWVNQCKIGHDGCRNVERYQVGQNIAMSGSTAKGPCNMN
NLVQMWINEVNALNAADVSSMPSDGNYFMKIGHYTQLVWGKTTKVGCGIIQFLDGKFYKC
YLACNYGPAGNMFGAPIYQ
>ACB05815.1 Allergen Lup an 1; 7S globulin vicilin like protein [Lupinus angustifolius]
MAKMRVRLPMLILLLGVVFLLAASIGIAYGEKDFTKNPPKEREEEEHEPRQQPRPRQQEE
QEREHRREEKHDGEPSRGRSQSEESQEEEHERRREHHRERQEQQPRPQRRQEEEEEEEE
WQPRRQRPQSRREEREEREQEQGSSSGSQRGGGDERRQHRERRVHREEREQEQDSRSDSR
RQRNPYHFSSNRFQTYYRNRNGQIRVLERFNQRTNRLENLQNYRIIEFQSKPNTLILPKH
SDADFILVVLNGRATITIVNPDKRQVYNLEQGDALRLPAGTTSYILNPDDNQNLRVAKLA
IPINNPGKLYDFYPSTTKDQQSYFSGFSKNTLEATFNTRYEEIERVLLGDDELQENEKQR
RGQEQSHQDEGVIVRVSKKQIQELRKHAQSSSGEGKPSESGPFNLRSNKPIYSNKFGNFY
EITPDINPQFQDLNISLTFTEINEGALLLPHYNSKAIFIVVVDEGEGNYELVGIRDQQRQ
QDEQEEEYEQGEEEVRRYSDKLSKGDVFIIPAGHPLSINASSNLRLLGFGINANENQRNF
LAGSEDNVIKQLDREVKELTFPGSIEDVERLIKNQQQSYFANAQPQQQQQREKEGRRGRR
GPISSILNALY
>ACB38288.1 Allergen Lit v 1; tropomyosin [Litopenaeus vannamei]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANIQLVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ACB45874.1 Allergen pathogen-related protein 1 [Cucumis melo var. inodorus]
MLPFSFAQDSIKDFVDAHNAARAQVGVGPVHWNKTVADYAHQYANKRIKDCNLVHSKGPY

GENIAWGSRNLAGTVAVRMWVSEKQFYNYDTNSCVRGKMCGHYTQVVWRNSVRIGCAKVR
CKSGGTFITCNYDPRGNIRGQRPYGEGTLQL
>ACB46292.1 Allergen Der p 23; peritrophin [Dermatophagoides pteronyssinus]
MKFNIIIVFISLAILVHSSYAANDNDDDPTTTVHPTTTEQPDDKFECPSRFGYFADPKDP
HKFYICSNWEAVHKDCPGNTRWNEDEETCT
>ACB55491.1 Putative seed maturation-like protein precursor [Sesamum indicum]
MQFFSSRLLGSSRVLATTLSHFHYNPCTNKAHFTKAQLLPAAPYSNKLVIRSMASSGQQF
PPQKQEGQPGKEHIMDPTPQATTPEYKPANKLVGKVALVTGGDSGIGRAVGHCFALEGAT
VAFTYVKGQEDKDANDTLGMLMKAKHADAKDPIAIPTDLGYDENCRRVVEEVVNNYGRID
ILVNNAAEQYEASTVEEIDEPRLERVFRTNIFSYFFTSRHALKHMKEGSSIINTTSVNAY
KGNAKLLDYTATKGAIVAFTRGLALQMVEKGIRVNGVAPGPIWTPLIPASFTEDENAKFG
SQTPMKRAGQPHEVAPSYVFLASNIDSSYITGQVLHPNGGTIVNG
>ACC76803.1 Allergen Lit v 3; myosin light chain [Litopenaeus vannamei]
MSRKSGSRSSSKRSKKSGGGSNVFDMFTQRQVAEFKEGFQLMDRDKDGVIGKTDLRGTFD
EIGRIATDQELDEMLADAPAPINFTMLLNMFAERQTGESDDDDVVAKAFLAFADEEGNID
CDTFRHALMTWGDKFSSQEADDALDQMDIDDGGKIDVQGVIQMLTAGGGDDAAAEEA
>NP_001119715.1 Allergen Api m 5; dipeptidylpeptidase [Apis mellifera]
MEVLVQLALLLVVHGSLVVLVAGKSVPRVIDQDLERYEPLEEEDHRGARVPFNLEETYDQ
SFRANSFNGTWKTDREILYSDNYVGDIRLFDVTTGSGTVLLDSSVTADFDKASVMFSFDN
SHVAIGHDYVNGFRYSIHQKCTVYNIKSRTFTDIANGDRIPLFKWSPTRNALIYVHKNDI
YYQVFFEGGSDTRRITNTGVPDIVFNGIPDWVYEEEVLGSPVAFWISPDGRHLAFATFND
TNVRDIVISKYGSPGNSRDQYPNEIRIKYPKAGTTNPFVSLSVIDLHDPSSKLIDLPPPV
DVVGADNVLYTANWRRDGEIVATWTNRVQNKAQLVLYDTKGNANNIYYEEETEGWLRIQP
PLYHDRYVIVAKLQDSGTKAGRFLHATRLEYRNGALVDETDLTPGTCEVISLLLVDHARA
RLYYLGTELGKPSHKNLYSVQLSGNEPPVCLSCDVLTPEGNRCTYAYAYFSTNGSHYALY
CAGPDPVFIAIVNANHRQISIWEENRSLRRKLAARTQPIVKNFNVNANGYTNKVKLYLPP
DFDETKKYPLLITVYAGPNTIRITEEATYGFESYIVTNRSVIYGRIDGRGSAYKGSKMLF
EIYRRLGTVEIEDQIIITRTLQEKYSWIDSNRTGIWGWSYGGFSAAMVLATDAESVFKCG
ISVAPVTSWIYYDSLYTERFMGLPTPEDNQSGYNDTDVSRRVEGMRGKKYMLIHGTADDN
VHYQQTMMLNKALVNSDIMFQQQTYTDEAHALGNVFPHLYHTTDRFWANCLGYSH
>ACD36974.1 Putative Gly m Bd 28K allergen [Glycine max]
LDSNLIIFIRRGEAKLGFIYDDELAERRLKTGDLYMIPSGSAFYLVNIGEGQRLHVICSI
DPSTSLGLETFQSFYIGGGANSHSVLSGFEPAILETAFNESRTVVEEIFSKELDGPIMFV
DDSHVPSLWTKFLQLKKDDKEQQLKKMMQDQEEDEEEKQTSRSWRKLLETVFGKVNEKIE
NKDTAGSPASYNLYDDKKADFKNAYGWSKALHGGEYPPLSEPDIGVLLVKLSAGSMLAPH
VNPISDEYTIVLSGYGELHIGYPNGSKAMKTKIKQGDVFVVPRYFPFCQVASRDGPLEFF
GFSTSARKNKPQFLAGAASLLRTLMGPELSAAFGVSEDTLRRAVDAQHEAVILPSAWAAP
PENAGKLKMEEEP
>ACD36975.1 Putative Gly m Bd 28K allergen [Glycine max]
LDSNLIIFIRRGEAKLGFIYDDELAERRLKTGDLYMIPSGSAFYLVNIGEGQRLHVICSI
DPSTSLGLETFQSFYIGGGANSHSVLSGFEPAILETAFNESRTVVEEIFSKELDGPIMFV
DDSHAPSLWTKFLQLKKDDKEQQLKKMMQDQEEDEEEKQTSRSWRKLLETVFGKVNEKIE
NKDTAGSPASYNLYDDKKADFKNAYGWSKALHGGEYPPLSEPDIGVLLVKLSAGSMLAPH
VNPISDEYTIVLSGYGELHIGYPNGSKAMKTKIKQGDVFVVPRYFPFCQVASRDGPLEFF
GFSTSARKNKPQFLAGAASLLRTLMGPELSAAFGVSEDTLRRAVDAQHEAVILPSAWAAP
PENAGKLKMEEEP
>ACD36976.1 Putative Gly m Bd 28K allergen [Glycine max]
LDSNLIIFIRRGEAKLGFIYDDELAERRLKTGDLYMIPSGSAFYLVNIGEGQRLHVICSI
DPSTSLGLETFQSFNIGGGANSHSVLSGFEPAILETAFNESRTVVEETFSKELDGPIMFV
DDSHAPSLWTKFLQLKKDDKEQQLKKMMQDQEEDEEEKQTSRSWRKLLETVFGKVNEKIE
NKDTAGSPASYNLYDDKKADFKNAYGWSKALHGGEYPPLSEPDIGVLLVKLSAGSMLAPH
VNPISDEYTIVLSGYGELHIGYPNGSKAMKTKIKQGDVFVVPRYFPFCQVASRDGPLEFF

GFSTSARKNKPQFLAGAASLLRTLMGPELSAAFGVSEDTLRRAVDAQHAAVILPSAWAAP
PENAGKLKMEEEP
>ACD36978.1 Putative Gly m Bd 28K allergen [Glycine max]
VLCHGVATTTMAFHDDEGGDKKSPKSLFLMSNSTRVFKTDAGEMRVLKSHGGRIFYRHMH
IGFISMEPKSLFVPQYLDSNLIIFIRRGEAKLGFIYDDELAERRLKTGDLYMIPSGSAFY
LVNIGEGQRLHVICSIDPSTSLGLETFQSFYIGGGANSHSVLSGFEPAILETAFNESRTV
VEEIFSKELDGPIMFVDDSHAPSLWTKFLQLKKDDKEQQLKKMMQDQEEDEEEKQTSRSW
RKLLETVFGKVNEKIENKDTAGSPASYNLYDDKKADFKNAYGWSKALHGGEYPPLSEPDI
GVLLVKLSAGSMLAPHVNPISDEYTIVLSGYGELHIGYPNGSKAMKTKIKQGDVFVVPRY
FPFCQVASRDGPLEFFGFSTSARKNKPQFLAGAASLLRTLMGPELSAAFGVSEDTLRRAV
DAQHEAVILPSAWAAPRKMQEAEMEESQMLLKLCQ
>ACD50950.1 Allergen Der p 20; arginine kinase [Dermatophagoides
pteronyssinus]
MVDPATLSKLEAGFQKLQNAQDCHSLLKKYLTRDVFDQLKNKKTDMGATLLDVIQSGVEN
LDSGVGIYAPDAQSYKTFAALFDPIIDDYHKGFKPTDKHPKTDFGNIENFVNVDPKNEYV
LSTRVRCGRSLNGYPFNPMLTEAQYKEMETKVKGQLATFEGELKGTYYPLLGMDKATQQQ
LIDDHFLFKEGDRFLQAANACRYWPVGRGIFHNDKKTFLMWVNEEDHLRIISMQKGGDLK
EVYGRLVKAVKHIEQKIPFSRDDRLGFLTFCPTNLGTTIRASVHIKLPKLAADRKKLEEV
AGRYNLQVRGTAGEHTESVGGIYDISNKRRMGLTEYQAVKEMQDGILELIKMEKSM
>ACD65080.1 Allergen For t 1; serine/threonine protein kinase
[Forcipomyia taiwana]
GTRVDEIKGHPFFREIDWTKELRNQKAPYEPKIKYPTDTSNFDPIDPDKLHDSSNADDYM
IEEFFGSGKPCHHGFFEFTFRRFFDDDADCKISLNHGNSGDRNDNNNSNDNQSGAIYV
>ACD65081.1 Allergen For t 2; eukaryotic translation initiation factor
[Forcipomyia taiwana]
MKPLMMQGHERAITQIKYNREGDLLFSCAKDHKPNVWFSLNGERLGTFNGHAGAVWCVDV
DWTTTKLITGSGDMSVRLWDVETGTSVACIPCKSSARTVGFSFSGNQAAYSTDRAMGHIC
ELFVIDSREPDSSLNDGDAILKIPISQSKITAMIWGTLDETIITGHENGQITLWDLRIGR
EINSVNDHMGAINDLQLSKDGTMFVSSSRDTTAKLFDSDSLMCLKTYKTERPVNSAAISP
LLEHVVLGGGQDAMEVTTTSARQGKFDSRFFHLIYEEEFARVKGHFGPINSLAFHPDGRS
YATGGEDGFVRLQTFDSSYYEYIFD
>CAQ55938.1 Allergen pollen allergen Phl p 4.0102 [Phleum pratense]
YYPTPLAKEDFLRCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPIYIVTPT
NASHIQSAVVCGRRHGVRIRVRSGGHDYEGLSYRSLQPEEFAVVDLSKMRAVWVDGKART
AWVDSGAQLGELYYAIHKASTVLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDANGTLHDKKSMGDDHFWAVRGGGGESFGIVVAWKVRLLPVPPTVTVFKIPKKASE
GAVDIINRWQVVAPQLPDDLMIRVIAQGPTATFEAMYLGTCQTLTPMMGSKFPELGMNAS
HCNEMSWIQSIPFVHLGHRDNIEDDLLNRNNTFKPFAEYKSDYVYEPFPKRVWEQIFSTW
LLKPGAGIMIFDPYGATISATPEWATPFPHRKGVLFNIQYVNYWFAPGAGAAPLSWSKEI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTFSSGLVWGQKYFKGNFQRLAITKGK
VDPTDYFRNEQSIPPLIQKY
>CAQ55939.1 Allergen pollen allergen Phl p 4.0202 [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPLYIITPT
NVSHIQSAVVCGRRHTVRIRVRSGGHDYEGLSYRSLQPETFAVVDLNKMRAVWVDGKART
AWVDSGAQLGELYYAIYKASPTLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDANGKLHDKKSMGDDHFWAVRGGGGESFGIVVAWQVKLLPVPPTVTIFKISKTVSE
GAVDIINKWQVVAPQLPADLMIRIIAQGPKATFEAMYLGTCKTLTPLMSSKFPELGMNPS
HCNEMSWIQSIPFVHLGHRDALEDDLLNRNNSFKPFAEYKSDYVYQPFPKTVWEQILNTW
LVKPGAGIMIFDPYGATISATPESATPFPHRKGVLFNIQYVNYWFAPGAAAAPLSWSKDI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTYASGKVWGQKYFKGNFERLAITKGK
VDPTDYFRNEQSIPPLIKKY
>CAQ55940.1 Allergen pollen allergen Phl p 4.0203 [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPLYIITPT
NVSHIQSAVVCGRRHSVRIRVRSGGHDYEGLSYRSLQPETFAVVDLNKMRAVWVDGKART

AWVDSGAQLGELYYAIYKASPTLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDPNGKLHDKKSMGDDHFWAVRGGGGESFGIVVAWQVKLLPVPLTVTIFKISKTVSE
GAVDIINKWQVVAPQLPADLMIRIIAQGPKATFEAMYLGTCKTLTPLMSSKFPELGMNPS
HCNEMSWIQSIPFVHLGHRDALEDDLLNRNNSFKPFAEYKSDYVYQPFPKTVWEQILNTW
LVKPGAGIMIFDPYGATISATPESATPFPHRKGVLFNIQYVNYWFAPGAAAAPLSWSKDI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTYASGKVWGQKYFKGNFERLAITKGK
VDPTDYFRNEQSIPPLIKKY
>CAQ55941.1 Allergen pollen allergen Phl p 4.0204 [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPLYIITPT
NVSHIQSAVVCGRRHTVRIRVRSGGHDYEGLSYRSLQPETFAVVDLNKMRAVWVDGKART
AWVDSGAQLGELYYAIYKASPTLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDPNGKLHDKKSMGDDHFWAVRGGGGESFGIVVAWQVKLLPVPLTVTIFKISKTVSE
GAVDIINKWQVVAPQLPADLMIRIIAQGPKATFEAMYLGTCKTLTPLMSSKFPELGMNPS
HCNEMSWIQSIPFVHLGHRDALEDDLLNRNNSFKPFAEYKSDYVYQPFPKTVWEQILNTW
LVKPGAGIMIFDPYGATISATPESATPFPHRKGVLFNIQYVNYWFAPGAAAAPLSWSKDI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTYASGKVWGQKYFKGNFERLAITKGK
VDPTDYFRNEQSIPPLIKKY
>ACE07186.1 Allergen Art v 3; lipid transfer protein (LTP) type 1
[Artemisia vulgaris]
MKMMKFFCAMVVCMVVSSSYAEALKCSDVSNKISACLSYLKQGGEVPADCCTGVKGLNDA
AKTTPDRQTACNCLKTTFKSNKDFKSDFAASLPSKCGVNIPYKISLETDCNKVK
>ACE07187.1 Allergen Art v 3; lipid transfer protein [Artemisia vulgaris]
MAMKMMKFFCAMVVCMVLSSSYAEALTCSDVSNKITPCLNYLKQGGEVPADCCTGVKGLN
DAAKTTPDRQTACNCLKTSFKSNKDLKSDFAASLPSKCGVNIPYKISLETDCNKVK
>ACE07188.1 Allergen Art v 3; lipid transfer protein (LTP) type 1
[Artemisia vulgaris]
MAIKMMKVFCIMVVCMVVSTSYAESALTCSDVSTKISPCLSYLKKGGEVPADCCTGVKGL
NDATKTTPDRQTACNCLKASFKSNKDLKSDFAVPLPSKCGLNLPYKLSLETDCNKVK
>ACE07189.1 Allergen Art v 3 allergen precursor [Artemisia vulgaris]
MAIKMMKVFCVMVVCMVVSSSYAEAALTCSDVSTKISPCLNYLKKGGEVPADCCTGVKGL
NDATKTTPDRQTACNCLKASFKSNKDLKSDFAVPLPSKCGLNLPYKLSLETDCNKVK
>P00785.4 Allergen Act c 1; cysteine protease, actinidin [Actinidia
chinensis]
MGLPKSFVSMSLLFFSTLLILSLAFNAKNLTQRTNDEVKAMYESWLIKYGKSYNSLGEWE
RRFEIFKETLRFIDEHNADTNRSYKVGLNQFADLTDEEFRSTYLRFTSGSNKTKVSNRYE
PRVGQVLPSYVDWRSAGAVVDIKSQGECGGCWAFSAIATVEGINKIVTGVLISLSEQELI
DCGRTQNTRGCNGGYITDGFQFIINNGGINTEENYPYTAQDGECNVDLQNEKYVTIDTYE
NVPYNNEWALQTAVTYQPVSVALDAAGDAFKQYSSGIFTGPCGTAVDHAVTIVGYGTEGG
IDYWIVKNSWDTTWGEEGYMRILRNVGGAGTCGIATMPSYPVKYNNQNHPKPYSSLINPP
AFSMSKDGPVGVDDGQRYSA
>ACE80939.1 Allergen putative allergen Pru du 1.01 [Prunus dulcis x
Prunus persica]
MGVFTYESEFTSEIPPPRLFKAFVLDADNLVPKIAPQAIKHSEILEGDGGPGTIKKITFG
EGSQYGYVKHKIDSIDKENHSYSYTLTEGDALGDNLEKISYETKLVASPSGGSIIKSTSH
YHTKGDVEIKEEHVKAGKEKASNLFKLIETYLKGHPDAYN
>ACE80955.1 Allergen Pru p 2; thaumatin-like protein [Prunus dulcis x
Prunus persica]
MMKTLVAVLSLSLTLLSFGGAHAATMSFKNNCPYTVWPASFGNPQLSTTGFELASQASFQ
LDTPVPWSGRFWARTRCSTDASGKFVCETADCDSGQLMCNGKTGIPPATLAEFTIAAGGG
QDFYDVSLVDGFNLPMSVTPQGGTGTCKMGSCAANVNLVCPSELQKIGSDGSVVACLSAC
VKFGEPQYCCTPPQETKEKCPPTNYSQIFHEQCPDAYSYAFDDNKGLFTCSGGPNYLITF
CP
>ACE80956.1 Allergen putative allergen Pru du 2.01A [Prunus dulcis x
Prunus persica]

MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFELATG
ISRSVDAPSPWSGRFFGRTRCSTDASGKFTCATADCGSGQVSCNGNGAAPPATLVEITIA
SNGGQDFYDVSLVDGFNLPMAVAPQGGTGECKASTCPADVNKVCPAQLQVKGSDGSVIAC
KSACLAFNQPQYCCTPPNDKPETCPPTDYSKIFKTQCPQAYSYAYDDKSSTFTCSASPDY
LITFCP
>ACE80957.1 Allergen Pru p 2; thaumatin-like protein [Prunus dulcis x Prunus persica]
MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFELATG
ISNSVDAPSPWSGRFFGRTRCSTDASGKFTCATADCGSGQVSCNGNGAVPPATLVEITIA
ENGGQDFYDVSLVDGFNLPMSVAPQGGTGECKASTCPADINKVCPAELQVKGSDGSVIAC
KSACLALNQPQYCCTPPNDKPETCPPTDYSKLFKTQCPQAYSYAYDDKSSTFTCSGRPDY
LITFCP
>ACE80958.1 Allergen putative allergen Pru du 2.01B [Prunus dulcis x Prunus persica]
MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFKLATG
ISRSVDAPSPWSGRFFGRTRCSTDASGKFTCATADCGSGQVSCNGNGAAPPATLVEITIA
SNGGQDFYDVSLVDGFNLPMSVAPQGGTGKCKASTCPANVNAACPAQLQVKGSDGKVIAC
KSACLAFNQPKYCCTPPNDKPATCPPTDYSRFFKTQCPQAYSYAYDDKSSTFTCNGRPDY
LITFCP
>ACE80959.1 Allergen Pru p 2; thaumatin-like protein [Prunus dulcis x Prunus persica]
MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFKLATG
ISRSVDAPSPWSGRFFGRTRCSTDASGKFTCATADCGSGQVSCNGNGAAPPATLVEITIA
SNGGQDFYDVSLVDGFNLPMSVAPQGGTGKCKASTCPADINKVCPAPLQVKGSDGSVIAC
KSACLAFNQPKYCCTPPNDKPETCPPTDYSKLFKTQCPQAYSYAYDDKSSTFTCSGRPDY
LITFCP
>ACE80972.1 Allergen putative allergen Pru du 4.02 [Prunus dulcis x Prunus persica]
MSWQTYVDDHLMCEIEGNHLSAAAIIGHDGSVWAQSATFPQLKPEEVTGILNDFNEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKSTLALLIGIYDEPMTPGQCNMIVE
RLGDYLVEQGL
>ACE80974.1 Allergen putative allergen Pru du 2.02 [Prunus dulcis]
MMKTLVVVLSLSLTLLSFGGAHAATISFKNNCPYTVWPASFGNPQLSTTGFELPSQASFP
LDTPAPWSGRFWARTGCTDASGKFVCETADCDSGQLMCNGKTGIPPATLAEFTIAAGGGQ
DYYDVSLVDGFNLRMSVTPQGGTGTCKTGSCAANVNAVCPSELQKIGSDGSVVACLSACV
KFNQPQYCCTPPQETKEKCPPTNYSQIFHDQCPDAYSYAYDDNKGLFTCSGGPNYLITFC
P
>ACE82289.1 Allergen glutathione transferase [Triticum aestivum]
MAGEKGLVLLDFWVSPFGQRVRIALAEKGLPYEYAEEDLMAGKSDRLLRANPVHKKIPVL
LHDGRPVNESLIILQYLEDAFPDAPALLPSDPYARAQARFWADYVDKKVYDCGSRLWKLK
GEPQAQARAEMLDILKTLDGALGDKPFFGGDKFGFVDAAFAPFTAWFHSYERYGEFSLPE
VAPKIAAWAKRCGERESVAKSLYSPDKVYDFIGLLKKKYGIE
>ACE82290.1 Allergen peroxiredoxin [Triticum aestivum]
MPGLTIGDTVPNLELDSTHGKIRIHDYVGNGYVILFSHPGDFTPVCTTELAAMANYAKEF
EKRGVKLLGISCDDVQSHKEWTKDIEAYKPGSRVTYPIMADPDRSAIKQLNMVDPDEKDG
QGQLPSRTLHIVGPDKVVKLSFLYPSCTGRNMDEVVRAVDSLLTAAKHKVATPANWKPGE
CVVIAPGVSDEEAKKMFPQGFETADLPSKKGYLRFTKV
>ACE82291.1 Putative profilin [Triticum aestivum]
MSWQTYVDDHLCCEIDGQHLTSAAILGHDGSVWAESPNFPKFKPEEIAGIVKDFEEPGHL
APTGLFLGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMALILGIYDEPMTPGQCNLVVE
RLGDYPVEQGF
>CAQ68366.1 Allergen Sar sa 1; parvalbumin beta [Sardinops sagax]
MALAGLVKEADITAALEACKAADSFDHKAFFHKVGMSGKSADELKKAFAIIDQDKSGFIE
EEELKLFLQNFCKKARALTDGETKKFLKAGDNVGDGKIGIDEFNHLVKH

>ACF19589.1 Allergen Cur l 4; serine protease [Curvularia lunata]
MKYSLIAALPALAAASPTFSTETIHKQSAPVLSSTSAKEVPNSYMVVFKKHVKDASKHHD
WVQSVHSKNTQERMELRKRSSDLPVSNEVFAGLKHTYELSGLKGYSGHFDDETLEAIRNH
PDVDYIERDSEVRILGGDEPETENNSPWGLARISHRDSLSFGTWNKYLYAADGGEGVDVY
VIDTGTNVDHVDFEGRAKWGKTIPNGDADEDGNGHGTHCSGTVAGKKYGVAKKAHVYAVK
VLRSNGSGTMSDVVKGVEFAAKSHSEAVSAAKNGKKKGFKGSTANMSLGGGKSTTLDMAV
NAAVDAGLHFAVAAGNDNADSCNYSPAAAENAVTVGASTLLDERAYFSNYGKCNDIFAPG
LNILSTWIGSKHATNTISGTSMASPHIAGLLAYMLSLQPAKDSAYAVADITPKKLKANLI
AIGTVGALSDVPSNTANVLAWNGGGSSNYTDIIEKGGYTVKKAASKEEEKESEFRITIPS
LSELEDDFEKAKESAGRKAHHVGGKL
>P50635.2 Allergen Aed a 1; apyrase [Aedes aegypti]
MAGRPGYSEVIFLYVVSVAVIARATDNMPVNKDVSKLFPLTLIHINDLHARFEETNMKSN
VCTQKDQCIAGIARVYQKIKDLLKEYESKNPIYLNAGDNFQGTLWYNLLRWNVTADFIKK
LKPAAMTLGNHEFDHTPKGLAPYLAELNKEGIPTIVANLVMNNDPDLKSSKIPKSIKLTV
GKRKIGIIGVLYDKTHEIAQTGKVTLSNAVEAVRREAAALKKDNIDIIVVLSHCSYEEDK
KIAAEAGDDIDVIVGAHSHSFLYSPDSKQPHDPKDKVEGPYPTLVESKNKRKIPIVQAKS
FGKYVGRLTLYFDEEGEVKNWEGYPVFIDHKVQQDPQILKDLVPWRAKVEAIGSTVVGET
MIELDRDSCRDQECTLGVLYADGFADQYTNDTFRPFAIIQAGNFRNPIKVGKITNGDIIE
AAPFGSTADLIRLKGADIWDVAEHSFALDDEGRTNCLQVSGLRIVIDISKPVRSRVKKIE
VMDYTNPKSDKLKPLDKEAEYYIVVPSYLADGKDGFSAMKRATARRTGPLDSDVFKNYVE
KIKKVDNLKLGRVIVCKGSKCT
>A5HII1.1 Allergen RecName: Full=Actinidain; Short=Actinidin; AltName:
Full=Allergen Act d 1; AltName: Allergen=Act d 1; Flags: Precursor
[Actinidia deliciosa]
MGLPKSFVSMSLLFFSTLLILSLAFNAKNLTQRTNDEVKAMYESWLIKYGKSYNSLGEWE
RRFEIFKETLRFIDEHNADTNRSYKVGLNQFADLTDEEFRSTYLGFTSGSNKTKVSNRYE
PRVGQVLPSYVDWRSAGAVVDIKSQGECGGCWAFSAIATVEGINKIVTGVLISLSEQELI
DCGRTQNTRGCNGGYITDGFQFIINNGGINTEENYPYTAQDGECNLDLQNEKYVTIDTYE
NVPYNNEWALQTAVTYQPVSVALDAAGDAFKHYSSGIFTGPCGTAIDHAVTIVGYGTEGG
IDYWIVKNSWDTTWGEEGYMRILRNVGGAGTCGIATMPSYPVKYNNQNHPKPYSSLINPP
AFSMSKDGPVGVDDGQRYSA
>ACF53836.1 Allergen Bla g 4 isoallergen 1 [Blattella germanica]
MCITGVILFAVLAVCATDTLANEDCFRHESLVPNLDYKKFIGTWVIAAGTSEALTQYKCW
NDLFFFNNALVSKYTDSKGKNRTTIRGRTKFEGNKFTIDYDDEGKAFSAPYSVLATDYDN
YAIVEGCPAAANGHVIYVQLRLTLRSFHPEQGDKEALQHYTVHQVNQHKKAIEEDLKHFN
LKYEDLHSTCH
>ACF53837.1 Allergen Bla g 4 isoallergen 2 [Blattella germanica]
MCITGVILFAVLALCATDTLADEDCFRHESLVPNLDYERFRGMWVIVAGTSEALTQYKCW
IDWFSYDDALVSKYTDSKQGNKILIGKIKFEGNKFTIDYDDEGKAFSAPYSVLATDYDNY
AIVEGCPAAANGHVIYVQLRLTWRRFHPKLGDKEMIQHYTLDQVNQHKKAIEEDLKHFNL
KYEDLHSTCH
>ACG58378.1 Allergen Der p 1 allergen precursor [Dermatophagoides
pteronyssinus]
MKITLAIASLLALSAVYARPSSIKTFEEYKKAFNKSYATFEDEEAARKNFLESVKYVQSN
GGAINHLSDLSLDEFKNRFLMSAEAFEHLKTQSDLNAETNACNINGNAPAEIDLRQMRTV
TPIRMQGGCGSCWAFSGVAATESAYLAYRNQSLDLAEQELVDCASQHGCHGDTIPRGIEY
IQHNGVVQESYYRYVAREQSCRRPNAQRFGISNYCQIYPPNVNKIREALAQTHSAIAVII
GIKDLDAFRHYDGRTIIQRDNGYQPNYHAVNIVGYSNAQGVDYWIVRNSWDTNWGDNGYG
YFAANIDLMMIEEYPYVVIL
>ACG59280.1 Allergen major allergen beta-lactoglobulin [Bos taurus]
MKCLLLALALTCGAQALIVTQTMKGLDIQKVAGTWYSLAMAASDISLLDAQSAPLRVYVE
ELKPTPEGDLEILLQKWENDECAQKKIIAEKTKIPAVFKIDALNENKVLVLDTDYKKYLL
FCMENSAEPEQSLVCQCLVRTPEVDDEALEKFDKALKALPMHIRLSFNPTQLEEQCHI
>ACG59281.1 Putative major allergen CM16 [Triticum aestivum]

MASESNCVLLLAAVLVSIFAAVAAIGNEDCTPWMSTLITPLPSCRDYVEQQACRIETPGS
PYLAKQQCCGELANIPQQCRCQALRYFMGPKSRPDQSGLMELPGCPREVQMDFVRILVTP
GYCNLTTVHNTPYCLAMEESQWS
>ACH70931.1 Allergen Sal s 2; enolase [Salmo salar]
MSITKIHAREILDSRGNPTVEVDLYTAKGRFRAAVPSGASTGVHEALELRDGDKSRYLGK
GTVKAVDHVNKDIAAKLIEKKFSVVDQEKIDHFMLELDGTENKSKFGANAILGVSLAVCK
AGAAEKGVPLYRHIADLAGHKDVILPCPAFNVINGGSHAGNKLAMQEFMILPIGASNFHE
AMRIGAEVYHNLKNVIKAKYGKDATNVGDEGGFAPNILENNEALELLKTAIEKAGYPDKI
IIGMDVAASEFYKAGKYDLDFKSPDDPARYITGDQLGDLYKSFIKGYPVQSIEDPFDQDD
WAAWTKFTAAVDIQVVGDDLTVTNPKRIQQAVEKKACNCLLLKVNQIGSVTESIKACKLA
QSNGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGAK
AKFAGKDYRHPKIN
>ACH85188.1 Putative main allergen 15 kDa oleosin [Sesamum indicum]
MAEHYGQQQQTRAPHPQLQPRAQRVVKAATAVTAGGSLLVLSGLTLAGTVIALTIATPLL
VIFSPVLVPAVITIFLLGAGFLASGGFGVAALSVLSWIYRYLTGKHPPGADQLESAKTKL
ASKAREMKDRAEQFSQQPVAGSQTS
>ACH91862.1 Allergen arachin Arah3 isoform [Arachis hypogaea]
MAKLLELSFCFCFLVLGASSISFRQQPEENACQFQRLNAQRPDNRIESEGGYIETWNPNN
QEFECAGVALSRLVLRRNALRRPFYSNAPQEIFIQQGRGYFGLIFPGCPSTYEEPAQQGR
RYQSQRPPRRLQEEDQSQQQQDSHQKVHRFNEGDLIAVPTGVAFWLYNDHDTDVVAVSLT
DTNNNDNQLDQFPRRFNLAGNHEQEFLRYQQQSRQSRRRSLPYSPYSPQSQPRQEEREFS
PRGQHSRRERAGQEEENEGGNIFSGFTPEFLAQAFQVDDRQIVQNLRGENESEEQGAIVT
VRGGLRILSPDRKRGADEEEEYDEDEYEYDEEDRRRGRGSRGSGNGIEETICTATVKKNI
GRNRSPDIYNPQAGSLKTANELNLLILRWLGLSAEYGNLYRNALFVPHYNTNAHSIIYAL
RGRAHVQVVDSNGNRVYDEELQEGHVLVVPQNFAVAGKSQSDNFEYVAFKTDSRPSIANL
AGENSVIDNLPEEVVANSYGLPREQARQLKNNNPFKFFVPPSQQSPRAVA
>CAP05019.1 Allergen Par j 4; calcium-binding protein / polcalcin
[Parietaria judaica]
MADKQIDRAEQERIFKRFDSNGDGKISSSELGEALKALGSVTADEVHRMMAEIDTDGDGA
ISLEEFSSFADANRGLIKDIAKIF
>P18153.2 Allergen Aed al 2; unknown function [Aedes aegypti]
MKLPLLLAIVTTFSVVASTGPFDPEEMLFTFTRCMEDNLEDGPNRLPMLAKWKEWINEPV
DSPATQCFGKCVLVRTGLYDPVAQKFDASVIQEQFKAYPSLGEKSKVEAYANAVQQLPST
NNDCAAVFKAYDPVHKAHKDTSKNLFHGNKELTKGLYEKLGKDIRQKKQSYFEFCENKYY
PAGSDKRQQLCKIRQYTVLDDALFKEHTDCVMKGIRYITKNNELDAEEVKRDFMQVNKDT
KALEKVLNDCKSKEPSNAGEKSWHYYKCLVESSVKDDFKEAFDYREVRSQIYAFNLPKKQ
VYSKPAVQSQVMEIDGKQCPQ
>CAQ57979.1 Allergen Tri a 12; profilin [Triticum aestivum]
MSWKAYVDDHLCCEIDGQHLTSAAILGHDGSVWAQSPNFPQFKPEEIAGIVKDFEEPGHL
APTGLFLGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMALILGIYDEPMTPGQCNLVVE
RLGDYLIDQGY
>ACI25605.1 Putative venom acid phosphatase [Apis mellifera]
MSVIAILAMVVGVQAELKQINVIFRHGDRIPDEKNEMYPKDPYLYYDFYPLERGELTNSG
KMREYQLGQFLRERYGDFLGDIYTEESVSALSSFYDRTKMSLQLVLAALYPPNKLQQWNE
DLNWQPIATKYLRRYEDNIFLPEDCLLFTIEFDRVLESPRGKYEFSKYDKLKKKLEEWTG
KNITTPWDYYYIYHTLVAEQSYGLTLPSWTNNIFPRGELFDATVFTYNITNSTPLLKKLY
GGPLLRIFTKHMLDVVSGTQKKKRKIYLFSGHESNIAAVLHALQLYYPHVPEYSSSIIME
LHNIEGTHYVKIVYYLGIPSEAGELQLPGCEVLCPLYKYLQLIENVIPSNEELICDKRFA
DESANNLSIEELDFVKLNLIRIAGTENK
>CAR82265.1 Allergen D-type LMW glutenin subunit [Triticum aestivum]
MARQLNPSNKELQSPQQSFSHQQQPFPQQPYPQQPYPSQQPYPSQQPFPTPQPQFPQQSQ
QPFTQPQQPTPLQPQQPFPQQPQQPQQPFPQPQQPFPWQPQQPFPQTQQSFPLQPQQPFP
QQPQQPFPQPQLQFPQQPEQIIPQQPQQPFLLESQQPFPQQPQQPFPQPQQLIPMQPQQP
FPQQSQQSQQPFPGPQQLFPELQQPIPQQPQQPFPLQPQQPFPQQSQQPFPQQPQQPCPL

QPQQPFPQQPQQPFPQQPQQPFPLQPQQPFPLRPQQPFSQQPQQSQQSFPQPQPQQPQQP
SILQPQQPFLQPQQQLSQQLEQTISQQPQQPFPQQPHQPQQPYPQQQPYGSSLTSIDGQ
>CAR82266.1 Allergen D-type LMW glutenin subunit [Triticum aestivum]
MGRLLSPRGKELHTPQEQFPQQQQFPQPQQFPQQQILQQHQIPQQPQQFPQQQQFLQQQQ
IPQQQIPQQHQIPQQPQQFPQQQFPQQQQFPQQHQSPQQQFPQQQFPQQQLPQQEFSQQQ
ISQQPQQLPQQQQIPQQPQQFLQQQQFPQQQPPQQHQFPQQQLPQQQQIPQQQQIPQQPQ
QIPQQQQIPQQPKQFPQQQFPQQQFPQQQFPQQEFPQQQQFPQQQIAQQPQQLPQQQFPI
PYPPQQSQEPSPYQQYPQQQPSGSDVISICGL
>CAR82267.1 Allergen D-type LMW glutenin subunit [Triticum aestivum]
MGRLLSPRGKELHTPQEQFPQQQQFPQPQQFPQQQILQQHQIPQQPQQFPQQQQFLQQQQ
IPQQQIPQQHQIPQQPQQFPQQQFPQQQQFPQQHQSPQQQFPQQQFPQQQLPQQEFSQQQ
ISQQPQQLPQQQQIPQQPQQFLQQQQFPQQQPPQQHQFPQQQLPQQQQIPQQQQIPQQPQ
QIPQQQQIPQQPKQFPQQQFPQQQFPQQQFPQQEFPQQQQFPQQQIAQQPQQLPQQQQIP
QQPQLFPQQQQFPQQQSPQQQQFPQQQFPQQQQLPQQQFPQPQQIPQQQQIPQQPQQFPQ
QQFPQQQQFPQQQEFPQQQFPQQQFHQQQLPQQQPSGSDVISICGL
>CAP17694.1 Allergen Lep w 1; parvalbumin [Lepidorhombus whiffiagonis]
MTFAGLDAAEIKAALDGCAAADSFDYKKFFGACGLAKKSAEEVKAAFNKIDQDESGFIEE
DELKLFLQNFSASARALTDKETANFLKAGDVDGDGKIGIEEFTDLVRSK
>ACI32128.1 Allergen tropomyosin [Dermatophagoides pteronyssinus]
MEAIKNKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRALQKKIQQIENELDQV
QEQLSAANTKLEEKEKAPQTAEGDVAALNRRIQLIEEDLERSEERLKIATAKLEEASQSA
DESERMRKMLEHRSITDEERMEGLENQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAHEQQIRIMTTKLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELTGY
>ACI41244.1 Putative 2S albumin [Sesamum indicum]
MAKKLALAAVLLVAMVALASATTYTTTVTTTAIDDEANQQSQQCRQQLQGRQFRSCQRYL
SQGRSPYGGEEDEVLEMSTGNQQSEQSLRDCCQQLGNVDERCRCEAIRQAVRQQQQEGGY
QEGQSQQVYQRARDLPRRCNMRPQQCQFRVIFV
>ACI47547.1 Allergen Jug r 3; lipid transfer protein (LTP) type 1
[Juglans regia]
MTGSLVLKLSGMVLLCMVVAAPVAEAVITCGQVASSVGSCIGYLRGTVPTVPPSCCNGVK
SLNKAAATTADRQAACECLKKTSGSIPGLNPGLAAGLPGKCGVSVPYKISTSTNCKAVK
>ACI68103.1 Allergen Parvalbumin beta 1 [Salmo salar]
MACAHLCKEADIKTALEACKAADTFNFKTFFHTIGFASKSADDVKKAFKVIDQDASGFIE
VEELKLFLQNFCPKARELTDAETKAFLKAGDADGDGMIGIDEFAVLVKQ
>ACJ04729.1 Allergen ovomucoid [Gallus gallus]
MAMAGVFVLFSFVLCGFLPDAVFGAEVDCSRFPNATDMEGKDVLVCNKDLRPICGTDGVT
YTNDCLLCAYSVEFGTNISKEHDGECKETVPMNCSSYANTTSEDGKVMVLCNRAFNPVCG
TDGVTYDNECLLCAHKVEQGASVDKRHDGGCRKELAAVSVDCSEYPKPDCTAEDRPLCGS
DNKTYGNKCNFCNAVVESNGTLTLSHFGKC
>ACJ23861.1 Allergen Cas s 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Castanea sativa]
MGVFTHESQETSVIPPARLFKAFVLDSDNLIPKVLPQAIKSTEIIEGNGGPGTIKKITFG
EASKYKYSKHRIDALDPENCTYSFSVIEGDVLTDIENVSTETKFVASPDGGTIMKSTTKY
QTKGDFQLKEEQVQAAIEKATGLFKAVEAYLLANPDLYK
>ACJ23862.1 Putative Cas s 1 pollen allergen [Castanea sativa]
MGVFTHESQETSVIPPARLFKAFVLDSDNLIPKVLPQAIKSTEIIEGDGGPGTIKKITFG
EASKYKYSKHRIDALDPENCTYSFSVIEGDVLTDIENVSTETKFVASPDGGTIMKSTTKY
QTKGDFQLKEEQVQAAIEKATGLFKAVEAYLLANPDLYK
>ACJ23863.1 Putative Cas s 1 pollen allergen [Castanea sativa]
MGVFTHESQETSVIPPARLFKAFVLDSDNLIPKVLPQAIKSTEIIEGNGGPGTIKKITFG
EASKYKYSRHRIDALDPENCTYSFSVIEGDVLTDIENVSTETKFVASPDGGTIMKSTTKY
QTKGDFQLKEEQVQAAIEKATGLFKAVEAYLLANPDLYK

>ACJ23864.1 Allergen Fag s 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Fagus sylvatica]
MGVFTYESETTTVITPARLFKAFVLDADNLIPKVAPQAIKSSEIIEGSGGPGTIKKITFG
EGSQFNYVKHRIDEIDNANFTYACTLIEGDAISETLEKIAYEIKLVASPDGGSILKSTSK
YHTKGDHEIKEDQIKAGKEEASGIFKAVEAYLLANPAAYH
>ACJ23865.1 Allergen Fag s 1 pollen allergen [Fagus sylvatica]
MGVFTYESETTTVITPARLFKAFVLDADNLIPKVAPQAIKSSEIIEGSGGPGTIKKITFG
EGSQFNYMKHRIDEIDNANFTYAYTLIEGDAISETLEKIAYEIKLVASPDGGSILKSTSK
YHTKGDHEIKEDQIKAGKEEASGIFKAVEAYLLANPAAYH
>ACJ23866.1 Allergen Fag s 1 pollen allergen [Fagus sylvatica]
MGVFTYESETTTVITPARLFKAFVLDADNLIPKVAPQAIKSSEIIEGSGGPGTIKKITFG
EGSQFNYVKHRIDEIDNTNFTYACTLIEGDAISETLEKIAYEIKLVASPDGGSILKSTSK
YHTKGDHEIKEDQIKAGKEEASGIFKAVEAYLLANPAAYH
>ACJ37389.1 Allergen Bla g 4 allergen [Blattella germanica]
VLALCATDTLANEDCFRHESLVPNLDYERFRGSWIIAAGTSEALTQYKCWIDRFSYDDAL
VSKYTDSQGKNRTTIRGRTKFEGNKFTIDYNDKGKAFSAPYSVLATDYENYAIVEGCPAA
ANGHVIYVQLRMTLRRFHPKLGDKEMLQHYTLDQVNQNKKAIEEDLKHFNLKYEDLHSTC
H
>ACJ37391.1 Putative Per a 4 allergen variant 1 [Periplaneta americana]
AGDDSCQIGTSFTGLDMTKYVGTWYELFRTPNSDEEDFTNCEYDKYTLDENGVIQVTSVA
YTNSIRGFITSTGTVPSWTEDTFDIAYGDDETWSSTYFMVGTDYQTYSIVAGCLDNDYSR
HLYWIASHETSFDDATKAKVNEVLAPYNLSLDDMEPVDQSYCVQYKS
>NP_001133181.1 Allergen Sal s 3; aldolase [Salmo salar]
MPHAFPFLTPDQKKELSDIALKIVAKGKGILAADESTGSVAKRFQSINTENTEENRRLYR
QLLFTADDRAGPCIGGVIFFHETLYQKTDAGKTFPEHVKSRGWVVGIKVDKGVVPLAGTN
GETTTQGLDGLYERCAQYKKDGCDFAKWRCVLKITSTTPSRLAIMENCNVLARYASICQM
HGIVPIVEPEILPDGDHDLKRTQYVTEKVLAAMYKALSDHHVYLEGTLLKPNMVTAGHSC
SHKYTHQEIAMATVTALRRTVPPAVPGVTFLSGGQSEEEASINLNVMNQCPLHRPWALTF
SYGRALQASALKAWGGKPGNGKAAQEEFIKRALANSLACQGKYVASGDSAAAGDSLFVAN
HAY
>CAT99611.1 thaumatin-like protein [Malus domestica]
ASRSVDAPSPWSGRLWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEITIA
ANGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNMACPAQLQVKAADGSVISC
KSACLAFGDSKYCCTPPNDTPETCPPTEYSEIFEKQCP
>CAT99612.1 thaumatin-like protein [Malus domestica]
ASRSVDAPSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEITIA
ANGGQDYYDVSLVDGFNLPMYVAPQGGTGECKPSSCPANVNMACPAQLQVKAADGSVISC
KSACLAFGDSKYCCTPPNDTPETCPPTEYSEIFEKQCP
>CAT99617.1 profilin [Malus domestica]
MSWQAYVDDHLMCDIDGHHLTAAAILGHDGSVWAHSSTFPKFKPEEITAIMKDFDEPGSL
APTGLHLGGTKYMVIQGEGGAVIRGKKGSGGVTVKKTGQALVFGIYEETLTPGQCNMIVE
RLGDYLIDQGV
>CAT99618.1 profilin [Malus domestica]
AQSATFPQLKPEEVTGVMNEFNEPGSLAPTGLYFGGTKYMVIPGEPGVVIRGKKGPGGVT
VKKSTMALLIGIYDEPM
>CAT99619.1 profilin [Malus domestica]
GNSLTAAAILGQDGSVWAQSATFPAFKPEEIAAILKDFDQPGTLAPTGLFLGGTKYMVIQ
GEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPLTPGQCNIVVERLGDYLIEQGL
>ACK76291.1 Putative Der f 3 allergen [Dermatophagoides farinae]
MMILTIVVLLAANTWATPILPSSPNATIVGGVKAKAGDCPYQISLQSSSHFCGGSILDEY
RILTAAHCVNGQSAKKLSIRYNTLKHASGGEKIQVAEIYQHENYDSMTIDNDVALIKLKT
PMTLDQTNAKPVPLPPQGSDVKVGDKIRVSGWGYLQEGSYSLPSELQRVDIDVVSREQCD
QLYSKAGADVSENMICGGDVANGGVDSCQGDSGGPVVDIATKQIVGIVSWGYGCARKGYP
GVYTRVGNFVDWIESKRSQ

>ACK76292.1 Putative Der f 3 allergen [Dermatophagoides farinae]
MMILTIVVLLAANTWATPILPSSPNATIVGGVKAKAGDCPYQISLQSSSHFCGGSILDEY
WILTAAHCVNGQSAKKLSIRYNTLKHASGGEKIQVAEIYQHENYDSMTIDSDVALIKLKT
PMTLDQTNAKPVPLPPQGSDVKVGDKIRVSGWGYLQEGSYSLPSELQRVDIDVVSREQCD
QLYSKAGADVSENMICGGDVANGGVDSCQGDSGGPVVDIATKQIVGIVSWGYGCARKGYP
GVYTRVGNFVDWIESKRSQ
>ACK76296.1 Putative Der f 6 allergen [Dermatophagoides farinae]
MIKIFLVTILIVITVTVDARFPRSLQPKWAYLDSNEFSRSKIGDSPIACVVGGQDADLAE
APFQISLLKDYLIMKSHMCGGSLISESTVVTAAHCTYGQKASSLSVRYGTNQRTSSSYGD
LKVKTIIQHESYDPDTIQNDISLLILSKPVVPSTNVRMIEIETDDIVDGDKVTIYGWGLT
DGNGKDLPDKLQKGSMTIVGNDRCNEKWGSINAIHPGMICALDKTQSGCNGDSGGPLVSA
NRKLTGIVSWGPSKCPPGEYMSVFTRPKYYLDWITKNIV
>ACK76297.1 Putative Der f 6 allergen [Dermatophagoides farinae]
MIKIFLVTILIVITVTVDARFPRSLQPKWAYLDSNEFSRSKIGDSPIAGVVGGQDADLAE
APFQISLLKDYLIMKSHMCGGSLISESTVVTAAHCTYGQKASSLSVRYGTNQRTSSSYGD
LKVKTIIQHESYDPDTIQNDISLLILSKPVVPSTNVQMIEIETDDIVDGDKVTIYGWGLT
DGNGKDLPDKLQKGSMTIVGNDRCNEKWGSIDAIHPGMICALDKTQSGCNGDSGGPLVSA
NRKLTGIVSWGPSKCPPGEYMSVFTRPKYYLDWITKNIV
>ACK76299.1 Allergen Der f 7 allergen [Dermatophagoides farinae]
MMKFLLIAAVAFVAVSADPIHYDKITEEINKAIDDAIAAIEQSETIDPMKVPDHADKFER
HVGILDFKGELAMRNIEARGLKQMKRQGDANVKGEEGIVKAHLLIGVHDDIVSMEYDLAY
KLGDLHPTTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFANVVNHIGGLSILDPIFG
VLSDVLTAIFQDTVRKEMTKVLAPAFKRELEKN
>BAH09387.1 allergen [Arthroderma vanbreuseghemii]
MAAAKWLIASLAFASSGLAFTPEDFISAPRRGEAIPDPKGELAVFHVSKYNFDKKDRPSG
WNLLNLKNGDISVLTTDSDVSEITWLGDGTKIVYVNGTDSVKGGVGIWISDAKNFGNAYK
AGSVNGAFSGLKLAKSGDKINFVGYGQSTTKGDLYNEAAAKEAVSSARIYDSLFVRHWDT
YVGTQFNAVFSGALTKSGDKYSFDGKLKNLVHPVKYAESPYPPFGGSGDYDLSSDGKTVA
FMSKAPELPKANLTTTYIFVVPHDGSRVAEPINKRNGPRTPQGIEGASSSPVFSPDGKRI
AYLQMATKNYESDRRVIYIAEVGSNKPVQRIASNWDRSPEVVKWSSDGRTLYVTAEDHAT
GKLFTLPADARDSHKPAVVKHDGSVSSFYFVGSSKSVLISGNSLWSNALFQVATPGRPNR
KLFYANEHDPELKGLGPNDIEPLWVDGARTKIHSWIVKPTGFDKNKVYPLAFLIHGGPQG
SWGDSWSTRWNPRVWADQGYVVVAPNPTGSTGFGQKLTDDITNDWGGAPYKDLVKIWEHV
RDHIKYIDTDNGIAAGASFGGFMVNWIQGHDLGRKFKALVSHDGTFVGSSKIGTDELFFI
EHDFNGTFFEARQNYDRWDCSKPELVAKWSTPQLVIHNDFDFRLSVAEGVGLFNVLQEKG
IPSRFLNFPDETHWVTKPENSLVWHQQVLGWINKWSGINKSNPKSIKLSDCPIEVVDHEA
HSYFDY
>BAH10157.1 Putative tropomyosin [Venerupis philippinarum]
MDAIKKKMQAMKLEKENALDKAEQLEQKLRDVEETKAKAEEDLTLLQKKYTNLENEFDQV
NEKYNEGVNKLEVSEKRVTEAEDEIKGYTRRIQLLEDDLERTQVKLDEATSKLEDATKTA
DESERGRKVLESRSIADDDRIDALEKQVKDAKYVAEEADRKYDEAARKLAITEVDLERSE
TRLEAAEAKITELSEELAVVGNNCKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAA
EAERVVNKLQKEVDRLEDELLAEKEKYKAISDELDQTFAELAGM
>BAH10148.1 Putative tropomyosin [Haliotis discus discus]
MDAIKKKMLAMKMEKENAVDRAEQNEQKLRDTEEQKAKIEEDLNNLQKKCANLENDFDNV
NEQLQEAMAKLETSEKRVTEMEQEVSGTTRKITLLEEDLERNEERLQTATERLEEASKAA
DESERGRKVLESRSLADDERIDQLEAQLKEAKYIAEDAERKYDEAARKLAITEVDLERAE
ARLEAAEAKILELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQRLKDAENRAT
EAERTVSKLQKEVDRLEDELLAEKEKYKAISDELDQTFAELAGY
>BAH10149.1 tropomyosin [Turbo cornutus]
MDAIKKKMLAMKMEKENALDRAEQLEQKLRDTEEQKAKIEEDLNNLQKKCANLENDFDNV
NEQLQDALSKLENSEKRVTEMEQEVSGTTRKITLLEEDLERNEEGLQTATERLEEASKAA
NESERGSLADDERIDQLEAQLKEAKYIAEDAKYIAEDAERKYDEAARKLAITEVDLERAE
ARLEAAEAKILELEEELKVVGNNMKSLEISEQEASQREDSYEETIRDLTQRLKDAENRAT

EAERTVSKLQKEVDRLEDELLAEKEKYKAISDELDQTFAELAGY
>BAH10150.1 Putative tropomyosin [Neptunea polycostata]
MDLIKKKMLSMKMDKENALDRADVMEQKFRDAEDQKSKLEDDLNLLQKKYSQLENEFDRV
NEGLLDANAKLETQDKRVNEMEQEISGLNRRIQLLEEDLERSEERLQTATEKLEEATKAA
DESERARKVLESKNQTAEESADSLEAQLKESKYIAEDAERKYDEAARKLAITEIDLERAE
TRLEAAEAKCYELDEQLHVVGNNIKTLSIQNDQASQREDSYEETIRDLTQRLKDAENRAQ
EAERTVTKLQKEVDRLEDELLAEKERYKNISDELDQTFAELAGY
>BAH10151.1 Putative tropomyosin [Scapharca broughtonii]
MDSIKKKMIAMKMEKENALDRSEQLEQKLRDTEEQKAKVEEELGAYQKKFSILENDFDTV
NTKWEDASVKLEEAEKKLTESEQEIASLTRKTTLLEDDIAKNEEKLMSATQKLEEASHAA
DESERGRKVLESRSFADDERIDALEAQLKEAKYIAEDADRKYDEAARKLAITEVDLERAE
ARLEAAEAKIIELEEELTVVGANIKTLQVQNDQASQREDSYEETIRDLTANLKDAENRAT
EAERTVSKLQKEVDRLEDELLAEKERYKAISDELDQTFAELAGY
>BAH10152.1 Allergen Cra g 1; tropomyosin [Crassostrea gigas]
MDSIKKKMIAMKMEKENAQDRAEQLEQQLRDTEEQKAKIEEDLTSLQKKHSNLENEFDTV
NEKYQECQTKLEEAEKTASEAEQEIQSLNRRIQLLEEDMERSEERLQTATEKLEEASKAA
DESERNRKVLENLNNASEERTDVLEKQLTEAKLIAEEADKKYDEAARKLAITEVDLERAE
ARLEAAEAKVYELEEQLSVVANNIKTLQVQNDQASQREDSYEETIRDLTQRLKDAENRAT
EAERTVSKLQKEVDRLEDELLAEKERYKAISDELDQTFAELAGY
>BAH10153.1 Putative tropomyosin [Fulvia mutica]
MEAIKKKMQSMKNEKENAIDKAEQLEIKLKDTEDSKAKIEEDLTSLQKKYTNLENEFDQV
NEKHADSVAKLEAAEKRLTETEDEIKGYTRKIQLLEDDLERTQTKLDEATGKLEEATKSA
DESERGRKVLESRSLADDDRIDGLEKQVKDAKYVAEESDRKYDEAARKLAITEVDLERAE
TRLEAAEAKIVELTEELSVVGNNLKGLQNAVDQASQREDSYEETIRDLTQRLKDAENRAS
EAERVVIKLQKEVDRLEDELLQEKEKYKQISDELDQTFAELAGM
>BAH10154.1 tropomyosin [Pseudocardium sachalinense]
MDSIKKKMQAMKIEKENALDKSEQLDQKLKDVEETKAKVEEDLSSLQKKYTNLENEFDKV
NEQYNESVVKLEASEKRVTECEDEIKGYTRRIQLLEDDLERTQVKLDEALLKLEDATKTA
DESERGRKVLESRSIADDDRIDGLEKQVKDAKYVAEEADRKYDEAARKLAITEVDLERAE
TRLEAAEAKITELSEELSVVANNCKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAA
EAERVVNKLQKEVDRLEDELLAEKEKYKTISDELDQTFAELAGM
>BAH10155.1 Putative tropomyosin [Tresus keenae]
MDSIKKKMQAMKIEKENALDKAEQLDQKLKDTEDSKAKIEEDLSSLQKKYTNLENEFDQV
NEKYNDGVVKLESSEKRVTECEDEIKGYTRRIQLLEDDLERTQVKLEEATLKLEDATKTA
DESERGRKVLESRSIADDDRIDQLEKQVKDAKYVAEEADRKYDEAARKLAITEVDLERAE
TRLEAAEAKITELSEELSVVANNCKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAS
EAERVVNKLQKEVDRLEDELLAEKEKYKQISDELDQTFAELAGM
>BAH10156.1 Putative tropomyosin [Solen strictus]
MDSIKKKMQAMKLEKENALDKSEQLEQKLKETEDSKARAEEDLSSLQKKFTNLENEFDKV
NEQYQEGVIKLEASEKRVTECEDEIKGFTRRIQLLEDDLERTQAKLDEALLKLEDASKTA
DESERGRKVLESRSIADDDRIDQLEKQVKDAKYVAEEADRKYDEAARKLAITEVDLERAE
TRLEAAEAKITELSEELQVVGNNSKALQNAVDQASQREDSYEETIRDLTQRLKDAENRAA
EAERVVNKLQKEVDRLEDELLAEKEKYKQISDELDQTFAELAGM
>ACL36923.1 Allergen Tyr p 34; troponin C [Tyrophagus putrescentiae]
MSVEELSKEQVQMLRKAFDMFDRDKKGYIHTNMVSTILRTLGQTFEENDLQQLIIEIDAD
GSGELEFDEFLTLTARFLVEEDTEAMQEELREAFRMYDKEGNGYIPTSALREILRALDDK
LTEDELDEMIAEIDTDGSGTVDFDEFMEMMTGD
>ACM24358.1 Putative arginine kinase [Blattella germanica]
MVDAAVLEKLEAGFAKLAASDSKSLLKKYLTKEVFDNLKTKKTPSFGSTLLDVIQSGLEN
HDSGVGIYAPDAEAYAVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYI
ISTRVRCGRSMQGYPFNPCLTEAQYKEMEDKVSSTLSGLEAELKGQFYPLTGMTKEVQQK
LIDDHFLFKEGDRFLQAANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVTAVNDIEKRIPFSHDDRLGFLTFCPTNLGTTVRASVHIKVPKLAADKAKLEEV
AGKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKEMNDGIAELIKLESSL

>CAR48256.1 Allergen Xip g 1; parvalbumin beta [Xiphias gladius]
MAFAGVLSDADVAAALEACKDAGTFDYKKFFKSCGLAAKSTDDVKKAFAIIDQDKSGFIE
EDELKLFLQNFKAAARPLTDAETEAFLKAGDSDGDGKIGAEEFAALVTA
>ACM89179.1 Allergen Lit v 4; calcium-binding protein, sarcoplasmic calcium-binding protein [Litopenaeus vannamei]
MAYSWDNRVKYVVRYMYDIDNNGFLDKNDFECLAVRNTLIEGRGEFSADAYANNQKIMRN
LWNEIAELADFNKDGEVTVDEFKQAVQKHCQGKKYGDFPGAFKVFIANQFKAIDVNGDGK
VGLDEYRLDCITRSAFAEVKEIDDAYNKLTTEDDRKAGGLTLERYQDLYAQFISNPDESC
SACYLFGPLKVVQ
>ACN32322.1 Allergen Asc l 3; tropomyosin [Ascaris lumbricoides]
MDAIKKKMQAMKIEKDNALDRADAAEEKVRQMTDKLERIEEELRDTQKKMMQTENDLDKA
QEDLSVANSNLEEKEKKVQEAEAEVAALNRRMTLLEEELERAEERLKLATEKLEEATHTA
DESERVRKVMENRSFQDEERANTVESQLKEAQMLAEEADRKYDEVARKLAMVEADLERAE
ERAEAGENKIVELEEELRVVGNNLKSLEVSEEKALQREDSYEEQIRTVSARLKEAETRAE
FAERSVQKLQKEVDRLEDELVHEKERYKSISEELDQTFQELSGYRSD
>3C3V_A Allergen Chain A, Crystal Structure Of Peanut Major Allergen Ara H 3 [Arachis hypogaea]
ISFRQQPEENACQFQRLNAQRPDNRIESEGGYIETWNPNNQEFECAGVALSRLVLRRNAL
RRPFYSNAPQEIFIQQGRGYFGLIFPGCPSTYEEPAQQGRRYQSQRPPRRLQEEDQSQQQ
QDSHQKVHRFNEGDLIAVPTGVAFWLYNDHDTDVVAVSLTDTNNNDNQLDQFPRRFNLAG
NHEQEFLRYQQQSRQSRRRSLPYSPYSPQSQPRQEEREFSPRGQHSRRERAGQEEEHEGG
NIFSGFTPEFLAQAFQVDDRQIVQNLRGENESEEQGAIVTVRGGLRILSPDRKRGADEEE
EYDEDEYEYDEEDRRRGRGSRGSGNGIEETICTATVKKNIGRNRSPDIYNPQAGSLKTAN
ELNLLILRWLGLSAEYGNLYRNALFVPHYNTNAHSIIYALRGRAHVQVVDSNGNRVYDEE
LQEGHVLVVPQNFAVAGKSQSDNFEYVAFKTDSRPSIANLAGENSVIDNLPEEVVANSYG
LPREQARQLKNNNPFKFFVPPSQQSPRAVA
>ACN62248.1 Allergen Ara h 2.01 allergen [Arachis hypogaea]
MLTILVALALFLLAAHASARQQWELQGDRRCQSQLERANLRPCEQHLMQKIQRDEDSYER
DPYSPSQDPYSPSPYDRRGAGSSQHQERCCNELNEFENNQRCMCEALQQIMENQSDRLQG
RQQEQQFKRELRNLPQQCGLRAPQRCDLDVESGGRDRY
>ACN87223.1 Allergen Pro c 1; tropomyosin [Procambarus clarkii]
MDAIKKKMQATKLEKDNAMDRADTLEQQNKEANIRAEKAEEEVHNLQKRMQHLENDLDQV
QESLLKANTQLEEKDKAISNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELTGY
>ACO34813.1 Putative Sal k 1 pollen allergen [Salsola kali]
QLIPPNPAELESWFQGAVKPVSEQKGLEPSVVQAESGGVETIEVRQDGSGKFKTISDAVK
HVKVGNTKRVIITIGPGEYREKVKIERLHPYITLYGIDPKNRPTITFAGTAAEFGTVDSA
TLIVESDYFVGANLIVSNSAPRPDGKRKGAQASALRISGDRAAFYNCKFTGFQDTVCDDK
GNHLFKDCYIEGTVDFIFGEARSLYLNTELHVVPGDPMAMITAHARKNADGVGGYSFVHC
KVTGTGGTALLGRAWFEAARVVFSYCNLSDAVKPEGWSDNNKPAAQKTIFFGEYKNTGPG
AAADKRVPYTKQLTEADAKTFTSLEYIEAAKWLPPPPKV
>ACO34814.1 Allergen Sal k 3; methyltransferase [Salsola kali]
MASHVVGYPRMGPKRELKFALESFWDGKSSAEDLKKVAADLRSSIWKQMADAGIKYIPSN
TFAYYDQVLDTTAMLGAVPARYGFNGGEIGFDLYFSMARGNASLPAMEMTKWFDTNYHYI
VPELGPEVKFAYSSHKAVDEYKEAKALGVDTVPVLVGPVSYLLLSKAAKGVEKSFPLLSL
LPKILPVYKEVIAELKAAGASTIQFDEPTLVMDLESHQLKAFTDAYADLESTLSGLNVLV
ETYFADLTPEAYKTLVSLNGVTAFGFDLVRGTKTLDLIKSGFPSGKYLFAGVVDGRNIWA
NDLAASLATLQSLESIVGKDKLVVSTSCSLLHTAVDLVNETKLDDEIKSWLAFAAQKVLE
VNALAKALAGQKDEAFFSANAAALASRKSSPRVTNEAVQKAAAGLKGSDHRRATTVSARL
DAQQKKLNLPVLPTTTIGSFPQTVELRRVRREYKAKKISEEEYVKAIKEEISKVVKLQEE
LDIDVLVHGEPERNDMVEYFGEQLSGFAFTVNGWVQSYGSRCVKPPIIYGDVSRPKAMTV
FWSSLAQSMTSRPMKGMLTGPVTILNWSFVRNDQPRHETCYQIALAIEDEAEDLEKAGIN

VIQIDEAALREGLPLRKSGHGFYLQWAVHSFRITNVGIQDTTQIHTHMCYSNFNDIIHSI
IDMDADVITIENSRSDEKLLSVFREGVKYGAGIGPGVYDIHSPRIPPTEELADRIRKMLA
VLESNVLWVNPDCGLKTRKYNEVNPALSNMVYAAKPI
>CAX32963.1 Allergen Gal d 8; parvalbumin [Gallus gallus]
MAMTDVLSAEDIKKAVGAFSAAESFNYKKFFEMVGLKKKSPEDVKKVFHILDKDRSGFIE
EEELKFVLKGFTPDGRDLSDKETKALLAAGDKDGDGKIGADEFATMVAES
>ACO56333.1 Allergen Cor a 14; 2S albumin [Corylus avellana]
MARLATLAALFAALLLVAHAAAFRTTITTVDVDEDIVNQQGRRGESCREQAQRQQNLNQC
QRYMRQQSQYGSYDGSNQQQQQELEQCCQQLRQMDERCRCEGLRQAVMQQQGEMRGEEMR
EVMETARDLPNQCRLSPQRCEIRSARF
>ACP43298.1 Allergen Ama r 2; profilin [Amaranthus retroflexus]
MSWQAYVDDHLMCEIEGTTNHLTGAAILGLDGSVWAQSADFPQFKPDEIAAIVEDFDEPG
TLAPTGLHLGGTKYMVIQGEPGAVIRGKKGAGGICVKKTGQALVMGIYDEPVTPGQCNMI
VERLGDYLIEQGY
>BAH59276.1 Putative cochineal major allergen [Protortonia cacti]
MPVRMLFSILISLILVSVVVGNEHYPKVSPAQFSAAFHGYELPQKECRADEVDSNEVKFY
LYTRQNLHKYELHTGYNCSNSYESLRNSTYNVRKETKFLIHAWTQSPKDINDIIYIYLYA
ENVNVIMVDWSMYSQTCNYNSTSYVVIPKVAKALSDLMKLLTGYGAVPQKNFHVIGFLHG
AHIAGIAGKYISPLRISRISGLDPVGYNIDGTALPVLQNGDADFIDVIYTSIEYYGTQRQ
IGDLSFYPDRGTHPQKQCPPDPNEWVCSALASIKYWRESITSPTAFSAIRCDNYVQYHES
RCPGPNTTMGEYASRNAPFGKYYLNTNPEPPYSQS
>ACR43473.1 Allergen Cra c 1; tropomyosin [Crangon crangon]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVFSLQKRMQQLENDLDSV
QEALLKANAHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>ACR43474.1 Allergen Cra c 2; arginine kinase [Crangon crangon]
MVDAEVLEKLEAGYKKLEAATDCKSLLKKYLTKEVFDELKTKKTALGATLLDVIQSGVEN
LDSGVGIYAPDAEAYTLFAPLFDPIIEDYHVGFKQSDKHPGKDFGDLEKFVNVDPEGTFV
VSTRVRCGRSMEGYPFNPCLTEAQYKEMESKVSSTLSSLEGELKGTYYPLTGMSKDVQQK
LIDDHFLFKEGDRFLQAANACRYWPAGRGIYHNDNKTFLVWVNEEDHLRIISMQMGGDLG
QVFRRLTSAVNEIEKRIPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANRDKLESV
AGKYNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILEPIKMEKEM
>ACR43475.1 Allergen Cra c 4; sarcoplasmic calcium binding protein
[Crangon crangon]
MAYTWDNRVKYVVRYMYDIDNNGFLDKNDFECLAVKNTLIECRGEWSAEKYAANQKIMSN
LWNEIAELADFNKDGEVTVEEFKQAVQKHCNGKPFGDFPSAFKTFIANQFKTIDVNGDGL
VGVDEYRLDCISRSAFSCIKEIDDAYNLLCTEEDKKAGGINIARYQELYAQFISNPDEKC
NAVYLFGPLKEVV
>ACR43476.1 Allergen Cra c 8; triosephosphate isomerase [Crangon crangon]
MSGSRKFFVGGNWKMNGDKAAIDGIVDFMKKGPLNPNTEVVVGCPQCYLSYTREKLPAEI
GVAAQNCYKVAKGAFTGEISPAMVKDCGCEWVILGHSERRNVFNEPDQLISEKVGHALEA
GLKVIPCIGEKLDERESNRTEEVVFAQMKALVPNISDWSRVVIAYEPVWAIGTGKTASPE
QAQDVHAKLRQWLTENVSAEVAESCRIIYGGSVSPSNCAELAKMGDIDGFLVGGASLKPD
FVTIINARG
>ACR43477.1 Allergen Cra c 5; myosin light chain 1 [Crangon crangon]
MAADLSARDVERVKFAFSIYDFEGNGQIDAFYIGDCLRALNLNPTLALIAKLGGTEKRKE
KMIKLDDFMPLFAQVKKDKDAGSYEDFIEVLKLYDKAENGTMMYAELEHILLSLGERLDK
AELEPILRECCPPEDDEGLIPFEPFVKKLTQLL
>ACR43478.1 Allergen Cra c 6; troponin C [Crangon crangon]
MDSLEPDQIDALKKAFDSFDTENQGFITADTVATILRMMGVKISDKNLAEVIAETDEDGS
GQLEFEEFVDLSSKFLIEEDEEALKAELREAFRIYDKEGQGFITTDVLKEILTEIDNKLT
PEDLDGIIEEVDEDGSGTLDFDEFMEMMSG

>ACR77509.1 Allergen Che a 2 pollen allergen [Chenopodium album]
MSWQTYVDDHLMFPIEETGNHLTAAAIVGLDGSVWAQSSTFPQLKQEEVKAICNEFDVPN
TLAPTGLFLGGEKYMVIQGEPGAVIRGKKGPGGVCIKKTNQALVFGIYNEPVTPGQCNMV
VEKLGDYLVEQGM
>ACS14052.1 Allergen Per a 7; tropomyosin [Periplaneta americana]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANLRAEKAEEEARSLQKKTQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAD
DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKFICDDLDMTFTELVGY
>ACS34771.1 Allergen Sal k 4; profilin [Salsola kali]
MSWQTYVDDHLMCEIEGTNNHLTAAAILGVDGSVWAQSANFPQFKPDEISAVVKEFDEAG
TLAPTGLHLGGTKYMVIQGEAGQVIRGKKGPGGICVKKTGQALIFGIYDEPVTPGQCNMI
VERLGDYLVEQGM
>CAQ72968.1 Allergen Seb m 1; parvalbumin beta [Sebastes marinus]
MALAASLNAADITAALAACSGVDTFKHKDFFGKVGLSAKSADDIKNAFKVIDQDKSGFIE
EEELKLFLQNFSATARALTEAETTAFLKAGDSDGDGMIGMDEFAAMVKG
>CAQ72969.1 Allergen Seb m 1; parvalbumin beta [Sebastes marinus]
MAFASVGLKDADIAAALDGCKDAGKFNHKTFFKTCGLSGKSSDEVKKAFAIIDQDISGFI
EEEELKLFLQTFKAGARALSDAETKEFLKAGDSDGDGKIGADEWAAMVKQ
>CAQ72970.1 Allergen Clu h 1; parvalbumin beta [Clupea harengus]
MALASLLKGADIDAALKACEAKDSFKHKDFFAKIGLATKSAADLKKAFEIIDQDKSGFIE
EEELKLFLQNFKAGARALTDAETKAFLKAGDADGDGMIGVDEFAVMIKP
>CAQ72971.1 Allergen Clu h 1; parvalbumin beta [Clupea harengus]
MAFAGLLSDADIAAALGACTAADTFDHKSFFKKVGLSGKSADDVKKPFYIIDQDKSGFIE
EEELKLFLQNFKAGARALSDKETKAFLAAGDADGDGMIGVDEFAVMVKAR
>CAQ72972.1 Allergen Clu h 1; parvalbumin beta [Clupea harengus]
MAFAAFLKEADITAALGACKGADSFDHKAFFAKVGLKGKSGDELKKAFEIIDQDKSGFIE
EEELKLFLQNFCKGARALTDGETKKFLKAGDSDNDGKIGIDEFAALINH
>CAZ76054.1 Allergen Tri a 34; glyceraldehyde-3-phosphate-dehydrogenase
[Triticum aestivum]
MGKIKIGINGFGRIGRLVARVALQSDDVELVAVNDPFITTEYMTYMFKYDTVHGHWKHSD
IKLKDDKTLLFGEKPVTVFGVRNPEEIPWGEAGADYVVESTGVFTDKDKAAAHLKGGAKK
VVISAPSKDAPMFVVGVNEDKYTSDVNIVSNASCTTNCLAPLAKIINDNFGIIEGLMTTV
HAITATQKTVDGPSSKDWRGGRAASFNIIPSSTGAAKAVGKVLPELNGKLTGMSFRVPTV
DVSVVDLTVRTEKAASYDDIKKAIKAASEGKLKGIMGYVEEDLVSTDFVGDSRSSIFDAK
AGIALNDHFVKLVSWYDNEWGYSNRVVDLIRHMAKTQ
>CAZ76052.1 Allergen Tri a 29; alpha amylase inhibitor [Triticum
aestivum]
TGPYCYAGMGLPINPLEGCREYVAQQTCGISISGSAVSTEPGNTPRDRCCKELYDASQHC
RCEAVRYFIGRRSDPNSSVLKDLPGCPREPQRDFAKVLVTPGHCNVMTVHNAPYCLGLDI
>ACT37324.1 Allergen Sta c 3; exodesoxyribonuclease [Stachybotrys
chartarum]
ASVTFWTLDNVDRTLVFTGNPGSAAIETITVGPAENTTVEFPGSWVGNWYAYPTDAEDVP
GMLGEVQFGGWNGLTYFDVSAIVNPTDHDNVKQMWPAESRKPMSGCEVFPCDNAYWLPDD
IQTKVTHEVDLWTTLGAGSTGLTF
>CAQ68249.1 Allergen Der p 2; NPC2-like protein [Dermatophagoides
pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEAVFEANQNSKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVMGDNGVLACA
IATHAKIRD
>CAQ68250.1 Allergen Der p 1; cysteine protease [Dermatophagoides
pteronyssinus]
RPSSIKTFEEYKKAFNKSYATFEDEEAARKNFLESVKYVQSNGGAINHLSDLSLDEFKNR

FLMSAEAFEHLKTQFDLNAETNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFSGV
AATESAYLAYRNQSLDLAEQELVDCASQHGCNGDTIPRGIEYIQHNGVVQESYYRYVARE
QSCRRPNAQRFGISNYCQIYPPNANKIREALAQTHSAIAVIIGIKDLDAFRHYDGRTIIQ
RDNGYQPNYHAVNIVGYSNAQGVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPYVV
IL
>ACV04796.1 Allergen Api g 2; lipid transfer protein [Apium graveolens]
MGVSKVAIAVAVMLMVVVINHPAVVEGLTCGQVTGKLGGCLGYLKGGGYPSPACCGGVKG
LNSLAKTPADRKQACACLKTLAGSVKGINYGAASALPGKCGIRIPYPISPSTDCSRVN
>BAD74060.2 Allergen group 2 allergen [Dermatophagoides farinae]
MISKILCLSLLVAAVVADQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFDA
NQNTKTAKIEIKASLDGLEIDVPGIDTNACHFMKCPLVKGQQYDAKYTWNVPKIAPKSEN
VVVTVKLVGDNGVLACAIATHGKIRD
>ACV04860.1 Allergen Blo t 8; glutathione S-transferase [Blomia tropicalis]
MAPLKIGYWDVRGFAEPIRMLLKHLNIEFEETRYGFGNDSEESLPNRDEWLAEKFTLGLE
FPNLPYLFDGDFKMTESVAILKRLARANGMIATTEPALSYSEMIEAMIIDIRNRLINVVY
AENSGTPEEFEQKLADLRERLETSLGQLEAFFQKHGSQWVAGDKLTYVDFLAYEYLDWYR
VFVKSTPIFEKFAKVSDYMKRFEELPSLKEYIARDEHRSASCLSPFARIGHRWAKE
>ACY01951.1 Putative putative Cup a 4 allergen [Cupressus arizonica]
MDEVPSSDESKSASSGKRVLEQSVHELEEVFKKFDANGDGKISGSELADILRSMGSEVDE
AEVKAMMEEADTDGDGYVSLQEFVDLNIKGATVKDLKNAFKVFDRDCNGTISPAELCETL
KSVGEPCTIEESKNIIHNVDKNGDGLINVEEFQTMMTSEMTDKSK
>ACY38525.1 Allergen Can f 4; lipocalin [Canis familiaris]
MKILLLCLALVLASDAQLPLPNVLTQVSGPWKTLYISSNNLDKIGDNGPFRIYMRGINVD
IPRLKMSFNFYVKVDGECVENSVGASIGRDNLIKGEYNGGNYFRIIDMTPNALIGYDVNV
DSKGKITKVALLMGRGAHVNEEDIAKFKKLSREKGIPEENIIYLGDTDNCPNHE
>ACY40650.1 Putative allergen Bla g 3 isoform 1 precursor [Blattella germanica]
IPADKVFLRKQWDVLRLVHRIHQHSIIPEQVTVGDSYDIEANINNYKNPRVVKNFMALYK
KDPVKRGEPFSTYYIKHREQAIMLFELFYYANDYDTFYKTACWARDRVNEGMFLYSFNIA
IMHREDMQDIVIPAFYEIYPFLFVENDVIQKAYDYKMKESGHLNEPHTHVIPVNFTLRNQ
EQLLSYFTEDVFLNAFNTYFRYMYPTWFNYTKYEYDVPRHGEQFYYFYQQIYARYMLERY
SNDMPDIKPFTYNKAFKTPYNPQLRYPNGQEVPARPAYMVPQDFDLYYVSDIKNYERRVA
DAIDFGYVFCDKMISHSLYNDKKGFEMLAEIIEGNSMHPDYYGHIFHMYRSLLGHVTDPF
HKNGEAPSALEHPETALRDPAFYQIWKRVQHYFYKFQMKLPYYTREELTFDGVKIDNVDV
GKLYTYFEPYEMSLGYSVKVENIQDAANVDIRARNYRLNHKPFTYNIEVTSEKETPVYVR
VFLGPKYNYYGHEYDLNERRNKFVEIDRFPYQLHAGKNAIERNSHESTVVAKEQDTPKVL
YKKVNEAYEGKATYNYDKQTKFCGLPEHLLIPKGKKGGQAFTVYVIVTPYDKAVEKEEHH
FKAYSYCGVGPHDTYPDDKPLGFPFDRPIHSYDFVTPNMFMKDVFIFHKKYEEVEQH
>ACY40651.1 Allergen Bla g 3; hemocyanin, arylphorin [Blattella germanica]
IPADKVFLRKQWDVLRLVHRIHQHSIIPEQVTVGDSYDIEANINNYKNPRVVKNFMALYK
KDPVKRGEPFSTYYIKHREQAIMLFELFYYANDYDTFYKTACWARDRVNEGMFLYSFNIA
IMHREDMQDIVVPAFYEIYPFLFVENDVIQKAYDYKMKESGHLNEPHTHVIPVNFTLRNQ
EQLLSYFTEDVFLNAFNTYFRYMYPTWFNYTKYEYDVPRHGEQFYYFNQQMFARYMLERY
SNDMPEIQPFTYTKPFKTPYNPQLRYPNGQEVPARPAYMMPQDFDLMYVSDIKNYEKRVA
DAVDFGYVFCDKMISHSLYNNEKGLEWLGQIVEGNSMHPDFYGHIFHMYRSLLGHITDPF
HKHGVAPSALEHPETSLRDPAFYQIWKRVQHYFNKFQMKQPYYTREELAFDGVKIDNVDV
GKLYTYFEPYEMGLSNAVKVGKLEDVPNVDIRARNYRLNHKPFTYNVEVTSEKDTPVYVR
VFLGPKYNYYGHEYDLNERRNYFVEIDRFPYQLHTGKNTIQRNSHDSSVVAQEQDTYKVL
YKKVNEAYEGKTTYTYEKQDKYCGLPEHLLIPKGKKGGQAFTVYVIVTPYDKAVEKEEHH
FKAYSYCGVGPHDSVYDKKPLGFPFDRPIHSYDFVTPNMFMKDVFIFHKKYEEVEQH
>ACY91851.1 Allergen beta-1,3-glucanase form 'RRII Gln 2' [Hevea brasiliensis]

MAICSSTSGTSSSLPSRTTVMLLLFFFTASVGITDAQVGVCYGMQGNNLPPVSEVIALYK
KSNITRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNAKSWVQKNVRGFWSSV
RFRYIAVGNEISPVNRGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLNPIIRFLSSIRSPLLANIYPYFTYAGNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKRGTPKRPKRAIETYLFAMFDENKKQPEVEKHFGLFFPNKWQKYNLNFSAEKNWDIS
TEHNATILFLKSDM
>ACZ57582.1 Allergen Ole e 11; pectin methylesterase [Olea europaea]
MSCIAVEAVLLGILLYIPIVLSDDRAPIPSNSAQLNSWFDGIIQPVAVRKATMDPALVTA
EGQTKVIKLKSDGSGDFKSINEAIKSIPDDNTKRVILSLAPGNYSEKVKIGMYKHYITFY
GEDPNNMPILVFGGTAAEYGTVDSATLIVESNYFSAVNLKIVNSAPRPDGKRVGAQAAAL
RISGDKASFYNVKIYGFQDTLCDDKGKHFYKDCYIEGTVDFIFGSGKSIFLNTELHAVPG
DQPAIITAQARKTDSEDTGYYFVNCRVTGGGAFLGRSWMPAAKVVFAYTEMVDAIHPEGW
ILVKPEHESTVRFSEYNNKGPGANMEKRAKFVKRLSDAEAKQSISLGSIEASKWLLPPRV
VGLP
>ACZ74626.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAMLSSTSRTTGSLLSRTPVMLLLILYIASLGITDAQVGVCYGKLGNNLPPASEVIALYK
QSNIKRMRIYDPNQEVLQALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRDFWSSV
RLRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLMGNTY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLANIYPYFTYAGNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPDRAIETYLFAMFDENQKQPEVEKHFGLFFPDKRPKYNLNFSAKKNWDIS
TEHNATVLFLKSDM
>ACZ95445.1 Allergen Ani s 10; unknown function [Anisakis simplex]
MHLITALVLLLQLIHFITSSPIPQEVVGGPGPVVGGSGIGNVWEKANEQAAEQQNIGGPG
PVISGSGIGDVWNKANEPAEQQENIGGPGPVVSGSGIGNVWEKANEQAAHQQSIEGPGPV
VSGSGIGNVWEKANEQAAHQQSIEGPGPVVSGSGIGDVWNKANEQAAEQQNIGGPGPVIS
GSGIGNVWEKANEQAAEQQNIGVGGPGPVKSGSGIGNVWEETNEEAASMQA
>CAM31908.1 Allergen Act c 8; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Actinidia chinensis]
MGVVTYDMEIPSKVPPVKLYKAFILDGDTLVPKVLPHAIKCVKILEGDGCAGTIKEVTFG
EGSHHKCVKQRVDAIDKDNLTYSYTIIEGDVLAEKFESISYHIKIVACPDGGSICKNRSI
YTTKGDCKVSEEEIKLGKEKAAEIFKALEAYLLANPDYC
>CAM31909.1 Allergen Act d 8; pathogenesis related protein / PR-10 / Bet
v 1-like protein [Actinidia deliciosa]
MGAITYDMEIPSSISAEKMFKAFVLDGDTIIPKALPHAITGVQTLEGDGGVGTIKLTTFG
EGSVHKSVKHRIDGLDKENFTYSYSIIEGGALDVFESISYHIKIVATPDGGCICKNRSIY
TPKCDAQVSEEEIKAGKERASGIFKKVEAYLLANPDC
>CBA13559.1 Allergen Tri a 29; alpha amylase inhibitor [Triticum
aestivum]
TGPYCYPGMGLPSNPLEGCREYVAQQTCGVGIVGSPVSTEPGNTPRDRCCKELYDASQHC
WCEAVRYFIGRTSDPNSGVLKDLPGCPREPQRDSAKVLVTPGHCNVMTVHNTPYCLGLDI
>CBA13560.1 Allergen Tri a 15; alpha amylase inhibitor [Triticum
aestivum]
SGPWSWCDPATGYKVSALTGCRAMVKLQCVGSQVPEAVLRDCCQQLADVNNEWCRCEDLS
SMLRSVYQELGAREGKEVLPGCRKEVMKLTAASVPEVRKVPIPNPSGDRAGVCYWAAYPD
V
>CAY54134.1 Allergen Tri a 21; alpha/beta gliadin [Triticum aestivum]
VRVPVPQLQPQNPSQQQPQEQVPLVQQQQFLGQQQQHFPGQQQPFPPQQPYPQPQPFLPQ
LPYPQPQPFPPQQSYPQPQPQYPQPQQPISQQQAQLQQQQQQQQQQILQQILQQQLIPCR
DVVLQQPNIAHASSQVSQQSYQLLQQLCCQQLWQTPEQSRCQAIHNVIHAIILHHQQQQQ
QQQQQQQQQQQQQQQQQQQQQQQPSSQVSYQQPQQQYPSGQGSFQPSQQNPQAQGFVQPQ
QLPQFEEIRNLALQTLPAMCNVYIPPYCSTTIAPFGIFSTN

>3FT1_A Allergen Chain A, Crystal Structure Of Pollen Allergen Phl P 3 [Phleum pratense]
AVQVTFTVQKGSDPKKLVLDIKYTRPGDSLAEVELRQHGSEEWEPLTKKGNVWEVKSSKP
LVGPFNFRFMSKGGMRNVFDEVIPTAFSIGKTYKPEEQEF
>ADB92492.1 Allergen major allergen Cr-PII [Periplaneta americana]
MKLPIMILAVLGVAFGKSLPTRNLQDDLNDFLALVPTDEIVAIVMDYLANDAEVQEAVAY
LQGDEFHKIVSTVEGLQEFTNFVQFLEDHGLDAVGYINQLHSVLGWDPYVPPSQRKHARR
GVGVDGLIDDIIAILPIDDLKALFQEKLETSPDFKAFYDAIRSPEFQSIVQTLNAMPEYQ
ELLQKLRDKGVDVDHYIELIRALFGLSRATRNLQDDLNDFLALIPTDQILAIAMDYLAND
AEVQELVAYLQSDDFHKIITTVEGLDAFNNFYNFMKEHGLDVVDYINEIHSIIGLPPFVP
PTRRHARRGVGINGLIDDVIAILPVDELKALFQEKLETSPDFKALYDAIRSPEFQSIIST
LNAMPEYQELLQNLRDKGVDVDHFIELIRSLFGLP
>ADB92493.1 Allergen major allergen Cr-PI [Periplaneta americana]
MKTALVFAAVVALVACAAFPAHKDYKQLADKQFLAKQRDVLRLFHRVHQHNILNDQVEVG
NTYDIEANIGNYKYPRVVKQFMAYFKKGMLPRGEPFSVYFEKHREQAIMLYNLFYFANDY
DTFYKTACWARDRVNEGMFMYSFSIAVFHRDDMQGVMLPPPYEVYPYLFVDHDVIHMAQK
YWMKNAGSNEHHSYVIPVNFTLKNQDQLLAYFTSDVNLNAFNTYYRYYYPSWYNTTLYGH
TIDRRGEQFYYTYKQIYARYFLERLSNDLPDVYPFYYSKPVKSAYNPNLRYHNGEEMPVR
PSNLYVTNFDLYYIADIKNYEKRVEDAIDFGYVFDEHVKPHSLYHDVHGMEYVADMIEGN
MDSPNFYFYGSIYHMYHSMIGHIVDPYHKMGLAPSALEHPETVLRDPAFYQLWKRVDHLF
QKYKNRLPRYTHDELAFEGVKVENVDVGKLYTYFEQYDVSLDMSVYVNKVDQIPNVDVHA
RQYRLNHKPFTYNIEVSSDKAQDVYVRVFLGPKYDYLGREYDLNDRRHYFVEMDRFPHHV
EAGKTVIERNSHDSNIVAPERDSYRTFYKKVQEAYEGKSQYYVDKGHNYCGYPENLLIPK
GKKGGQAYTFYVIVTPYVKQDEHDFEPYNYKAFSYCGVGSNRKYPDNMPLGYPFDRKIYS
NDFYTPNMYFKDVIIFHKKYDEVGVQGH
>ADB96066.1 Allergen profilin [Arachis hypogaea]
MSWQTYVDNHLLCEIEGNHLSSAAILGQDGSVWAQSSNFPQFKPEEITAIMNDFAEPGSL
APTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTIKKTNQALIIGIYDEPMTPGQCNMIVE
RLGDYLIDTGL
>CBJ24286.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
MAAGLLVFVLAFSEIASVKGKLCEKPSLTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKR
DSKATCFCYFDCDPTKNPGPPPGAPKGKAPAPSPPSGGGAPPPSGGEGGDGPPPPEGGEG
GGDGGGEGGGEGGGDGGGEGGGEGGGDGGGDGGGEGGGEGGGER
>CAX32965.1 Allergen Sco s 1; parvalbumin beta [Scomber scombrus]
MAFASVLKDAEITAALDGCKAAGSFDHKKFFKACGLSGKSADEVKKAFAIIDQDKSGYIE
EEELKLFLQNFKAGARALSDAETKAFLKAGDSDGDGKIGVDEFAAMIKG
>CAX32966.1 Putative parvalbumin [Salvelinus fontinalis]
MACAHLCKEADIKTALEACKAADSFNFKTFFHTIGFASKSADDVKKAFKVIDQDASGFIE
VEELKLFLQNFCPKARVLTDAETKAFLKAGDADGDGMIGIDEFAVWVKQ
>CAX32967.1 Putative parvalbumin [Salvelinus fontinalis]
MAFAGLNDADVAAALAACTAADSFNHKAFFAKVGLAGKSNDDVKKAFYVIDQDKSGFIEE
DELKLFLQNFSASARALTDAETKAFLADGDKDGDGMIGVDEFAAMIKG
>P86431.1 Allergen Onc m 1; parvalbumin beta [Oncorhynchus mykiss]
ACAHLCKEADLKTALEACKAADSFNFKTFFHTLGFASKXXDDVKKXXXVLDQDASGFLEV
EELKLFLQNFCPKXXXLTDAETKAFLKAGDADGDGMLGLDEFAVLVKQ
>P86432.1 Allergen Onc m 1; parvalbumin beta [Oncorhynchus mykiss]
SFAGLNDADVAAALAACAAADSFNHKAFFAKXXXXXXSPDDLKKXXXXLDQDKSGFLEED
ELKLFLQNFSASARALTDAETKXXXXAGDADGDGMLGLDEFAVLVKQ
>P85894.1 Allergen Mor n 3; lipid transfer protein [Morus nigra]
ITCGQVSSSLAPCINYLRAGGVVPANCCNGVRSLNNAAKTTADRQAACNCLKSAFNSIKG
LNLNLAAGLPGKCGVSVPYKISPSTDCKSVK
>ADC55380.1 Allergen Mac r 1; tropomyosin [Macrobrachium rosenbergii]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDSV

QEALLKANQHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>CAA31395.4 Allergen Tri a 26; HMW glutenin [Triticum aestivum]
MAKRLVLFVAVVVALVALTVAEGEASEQLQCERELQELQERELKACQQVMDQQLRDISPE
CHPVVVSPVAGQYEQQIVVPPKGGSFYPGETTPPQQLQQRIFWGIPALLKRYYPSVTCPQ
QVSYYPGQASPQRPGQGQQPGQGQQGYYPTSPQQPGQWQQPEQGQPRYYPTSPQQSGQLQ
QPAQGQQPGQGQQGQQPGQGQPGYYPTSSQLQPGQLQQPAQGQQGQQPGQAQQGQQPGQG
QQPGQGQQGQQPGQGQQPGQGQQGQQLGQGQQGYYPTSLQQSGQGQPGYYPTSLQQLGQG
QSGYYPTSPQQPGQGQQPGQLQQPAQGQQPGQGQQGQQPGQGQQGQQPGQGQQPGQGQPG
YYPTSPQQSGQGQPGYYPTSSQQPTQSQQPGQGQQGQQVGQGQQAQQPGQGQQPGQGQPG
YYPTSPQQSGQGQPGYYLTSPQQSGQGQQPGQLQQSAQGQKGQQPGQGQQPGQGQQGQQP
GQGQQGQQPGQGQPGYYPTSPQQSGQGQQPGQWQQPGQGQPGYYPTSPLQPGQGQPGYDP
TSPQQPGQGQQPGQLQQPAQGQQGQQLAQGQQGQQPAQVQQGQRPAQGQQGQQPGQGQQG
QQLGQGQQGQQPGQGQQGQQPAQGQQGQQPGQGQQGQQPGQGQQGQQPGQGQQPGQGQPW
YYPTSPQESGQGQQPGQWQQPGQGQPGYYLTSPLQLGQGQQGYYPTSLQQPGQGQQPGQW
QQSGQGQHWYYPTSPQLSGQGQRPGQWLQPGQGQQGYYPTSPQQPGQGQQLGQWLQPGQG
QQGYYPTSLQQTGQGQQSGQGQQGYYSSYHVSVEHQAASLKVAKAQQLAAQLPAMCRLEG
GDALSASQ
>ADC80502.1 Allergen Pha v 3; lipid transfer protein (LTP) type 1
[Phaseolus vulgaris]
MASVKFACVVVLCMVVVGAHTAQGMTCGQVQSNLVPCVTFLQNGGFVPAGCCNGVRNIMN
SARSTADRRGICNCLKTAAGAVRGLNPNNAQALPGKCGVNIPYKISTSTNCASIN
>ADC80503.1 Allergen Pha v 3; lipid transfer protein (LTP) type 1
[Phaseolus vulgaris]
MATLNSACVVAVLCLVVLTAPTAHAAISCGQVTSSLASCIPFLTKGGPVPASCCSGVRSL
NAAAKTTPDRQAVCNCLKSAAGAIPGFNANNAGILPGKCGVSIPYKISTSTNCATIKF
>ADD17628.1 Allergen Per a 3 allergen [Periplaneta americana]
MKTALVFAAVVAFVAARFPDHKDYKQLADKQFLAKQRDVLRLFHRVHQHNILNDQVEVGI
PMTSKQTSATTVPPSGEAVHGVLQEGHARPRGEPFSVNYEKHREQAIMLYDLLYFANDYD
TFYKTACWARDRVNEGMFMYSFSIAVFHRDDMQGVMLPPPYEVYPYLFVDHDVIHMAQKY
WMKNAGSGEHHSHVIPVNFTLRTQDHLLAYFTSDVNLNAFNTYYRYYYPSWYNTTLYGYF
LERLSNDLPDVYPFYYSKHNIDRRGEQFYYTYKQIYARPVKSAYNPNLRYHNGEEMPVRP
SNMYVTNFDLYYIADIKNYEKRVEDAIDFGYAFDEHMKPHSLYHDVHGMEYLADMIEGNM
DSPNFYFYGSIYHMYHSMIGHIVDPYHKMGLAPSLEHPETVLRDPVFYQLWKRVDHLFQK
YKNRLPRYTHDELAFEGVKVENVDVGKLYTYFEQYDMSLDMAVYVNNVDQISNVDVQLAV
RLNHKPFTYNIEVSSDKAQDVYVAVFLGPKYDYLGREYDLNDRRHYFVEMDRFPYHVGAG
KTVIERNSHDSNIIAPERDSYRTFYKKVQEAYEGKSQYYVDKGHNYCGYPENLLIPKGKK
GGQAYTFYVIVTPYVKQDEHDFEPYNYKAFSYCGVGSERKYPDNKPLGYPFDRKIYSNDF
YTPNMYFKDVIIFHKKYDEVGVQGH
>ADD18879.1 Putative salivary antigen 5 precursor [Glossina morsitans
morsitans]
MKFVLATLNLLVLVSAGSVDYCNLCEKHVACVSQNVFQSGCSSDAKMIDLKKYQTTLLDA
HNKKRDNVAGGGESKLKRACRMATMKWNSELAKLAEYNVRQCEMNHDKCRNTNTFKYAGQ
NLAELGRSGAGTPDYGQLIQKAVDSWYEEVNDCNQGYIDSYPKDYKGPAIGHFTVMVAER
NTHMGCAASQYTRSNGFTYFLLACNYATTNMMEFPIYKSCSASAQDCKTGKNSKYQNLCS
ANEKYEVNRWFKDGVEYQ
>ADD19985.1 Putative antigen 5 precursor [Glossina morsitans morsitans]
MNFVLATLSLLILLSAAVSADYCGLCDNHVACVMQNVFQSGCPSGAKMIDLNKYQSTLLD
AHNKKRNHVAGGGESKLKRACQMATMKWDPELAKLAEYNVKQCQMNHDKCRNTVKFKYAG
QNLAELGRSGGPDPDYGQLIQKAVDKWYEEVKDCNQGYIDAYPMNYRGPAIGHFTVLVAE
RNTHMGCAASEYTKSNGFKYFLMACNYATTNMMDFPIYKSCGSSAQDCKSGKNSKYPNLC
SPNEKYEVNKWIKNGMEYH

>ADD19989.1 Putative salivary antigen 5 precursor variant [Glossina morsitans morsitans]
MNFVLATLSLLILGSAAVGGDYCGLCDNHVACVMQNVFQSGCPSGAKMIDLNKYQSALLD
AHNKKRNHVAGGGESKLKRACQMATMKWDSELAKLAEYNVKLIEKAVDKWYEEVKDCNQG
YIDSYPMNYRGPAIGHFTVMVAERNTHVGCAASEYTKSNGFQYFLMACNYATTNMMEFPI
YKSCGSSAQDCKSGKNSKYPNLCSPNEKYEVNKWIKNGVEYH
>ADD74392.1 Putative Sol s 2 allergen [Solenopsis saevissima]
MKTFVLVSCLLVFTQIIYALDIKEISIMNRILEKCIRTVPKHENDPINPLRNVNVWYCAF
TKRGIFTPKGVNTKQYINYCEKTAISPADIKLCKKIASKCVKKVYDRPGPIIERSKNLLS
CVLKKGLLELTVYGKKK
>CAX62602.1 Allergen aldolase A [Thunnus albacares]
MTHQFPSLSPEQKKELSDIAQRIVAPGKGILAADESTGTMGKRLQKINVENNEENRRYFR
DLLFSSDASISNCVGGVIFFHETLYQKADSGKLFPQVIKDKGIVVGIKVDKGTAGLNGTD
GETTTQGLDGLSERCAQYKKDGCDFAKWRCVLKISDGCPSALGIAENANVLARYASICQQ
NGLVPIVEPEILPDGEHDLLRCQYVTEKVLAAVYKALSDHHVYLEGTLLKPNMVTAGHSC
TKKYTPQEVAMATVTALRRTVPAAVPGICFLSGGQSEEEASLNLNAINQVPLHRPWKLTF
SYGRALQASALAAWQGKAANKTAAQEAFCNRAKINGLAAKGEYKPSGSADKASMQSLYTA
SYVY
>CBK52317.1 Allergen Amb a 4; defensin-like protein linked to polyproline-rich region [Ambrosia artemisiifolia]
MAAGLLVFVLAISEIASVKGKLCEKPSVTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKR
DSKATCFCYFDCDPTKNPGPPPGAPKGKAPAPSPPSGGGAPPPSGGEGGDGPPPPEGGEG
GGDGGGEGGGEGGGDGGGEGGGEGGGDGGGDGGGEGGGEGGGER
>CBK62693.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
MAAGLLVFVLAISEIASVKGKLCEKPSLTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKR
DSKATCFCYFDCDPTKNPGPPPGAPKGKAPAPSPPSGGGAPPPSGGEGGER
>CBK62694.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
KLCEKPSLTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKRDSKATCFCYFDCDPTKNPGP
PPGAPKGKAPAPSPPSGGGAPPPSGGEGGDGPPPPEGGEGGGDGGGEGGGDGGGEGGGEG
GGDGGGDGGGEGGGEGGGER
>CBK62695.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
KLCEKPSVTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKRDSKASCFCYFDCDPTKNPGP
PPGAPKGKAPAPSPPSGGGAPPPSGGEGGGDGGGEGGGEGGGGGEGGGEGGGGGEGGGEG
GGGGEGGGEGGGER
>CBK62697.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
KLCEKPSVTWSGNKVKQTDKCDKRCIEWEGAKHGACHKRDSKASCFCYFDCDPTKNPGPP
PGAPKGKAPAPSPPSGGGAPPPSGGEGGGDGGGGRR
>CBK62698.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
MAAGLLVFVLAISEIASVKGKLCEKPSVTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKR
DSKASCFCYFDCDPTKNPGPPPGAPKGKAPAPSPPSGGGGEGGGEGGGER
>CBK62699.1 Putative ragweed homologue of Art v 1 precursor [Ambrosia artemisiifolia]
MAAGLLVFVLAISEIASVKGKLCEKPSVTWSGKCKVKQTDKCDKRCIEWEGAKHGACHKR
DSKASCFCYFDCDPTKNPGPPPGAPKGKVVKEVVVEGGGEGGGGGEGGGGEGGGER
>BAI94503.1 Putative pollen allergen CJP-8 [Cryptomeria japonica]
MAMRMKSSSMSSYRFSYCQMMLVLMVMTLVQIGAAQSDTNSCVNSLVPCASYLNATTKPP
DSCCVPLLNVIQTQQQCLCNLLNSSIVKQSSINITQALNIPRLCGDTNVSTDACSTNATA
NAPSASTTPSVPADTGDSSGIGATSLQIFLPLLAVFFLGVFKSFP
>BAJ04354.1 Putative pollen allergen CPA63 [Cryptomeria japonica]

MARRLCSFLLSFLIIVSVWAENSKFARLNLASFTWKDAEDNKNCSAGELETSSLSVMHIQ
GKCSPFRLLNSSWWTAVSESIKGDTARYRAMVKGGWSAGKTMVNPQEDADIPLASGQAIS
SSNYIIKLGFGTPPQSFYTVLDTGSNIAWIPCNPCSGCSSKQQPFEPSKSSTYNYLTCAS
QQCQLLRVCTKSDNSVNCSLTQRYGDQSEVDEILSSETLSVGSQQVENFVFGCSNAARGL
IQRTPSLVGFGRNPLSFVSQTATLYDSTFSYCLPSLFSSAFTGSLLLGKEALSAQGLKFT
PLLSNSRYPSFYYVGLNGISVGEELVSIPAGTLSLDESTGRGTIIDSGTVITRLVEPAYN
AMRDSFRSQLSNLTMASPTDLFDTCYNRPSGDVEFPLITLHFDDNLDLTLPLDNILYPGN
DDGSVLCLAFGLPPGGGDDVLSTFGNYQQQKLRIVHDVAESRLGIASENCDG
>ADE74975.1 Allergen Asp v 13; alkaline serine protease [Aspergillus versicolor]
MYSIKRTILLLGALLPAVFGAPILEARRQTEKVPGKYIVTFKSGLQAEQIDAHTTWASNV
HKRNLERRDLTDRDLYPGIEKNFKIHKFAAYVGSFDDATIEEIRNHKDVAHVEEDQVWYL
DALTTQSDAPWGLGAISHQGDASSDYIYDTSAGADTYAYVVDTGINVDHSEFDGRASLAY
NAAGGQHVDSVGHGTHVAGTIGGKTFGVSKKANLLSVKVFEGESSSTSIILDGYNWAAND
IVSKSRTGKSAINLSLGGGYSYAFSNAVESAFDEGVLSVVAAGNENVDASNTSPASAPNA
LTVAASTERNARASFSNYGEVVDIFAPGEDILSAWIGGNSATNTISGTSMATPHIVGLSL
YLIALEGLSSPGDVTSRIKELATQGALSGVSGSPNALAYNGAE
>BAJ07603.1 Allergen Onc k 5; vitellogenin / partial [Oncorhynchus keta]
SMTDLSPFDDNIVNKIHYLFSEVNAVKCSMVGDTLTTFNNRKYPVNMPLSCYQVLAQDCT
IELKFMVLLKKDHASEQNHINVKISDIDVDLYTEDHGVMVKVNEMEISKDNLPYTDPSGS
IMIKQKGEGVSLYAKSHGLQEVYFDSNSWKIKVVDWMKGQTCGLCGKADGEHRQEYRTPS
GRLTKSSVSFAHS
>ADH10372.1 Allergen Cof a 1; chitinase (class III) [Coffea arabica]
AGIVRYWGRGHDEPSSLAEFGRQEFATDVNIAFLEDFGGGRMPELNISHPLPSASDIEYC
QKHQTKVFISIAGQPSLSSVEDAEEVAAYVWNTYLGGKSSDRPFGKAVLDGVELHIHSGN
TTYLDDLARALKGYSNVISAVAAECPIPDPALDTTIRTGVVDQVRVEFFDNPSCQFTPPK
DTSLLFPSWDNWSDYPGVHKLYLGIPISPTIAPEGGYIPPNELVYHVLPYLKKSPVYGGI
MVFPYLHHEVNFQSMLRSYARAA
>ADK22841.1 Allergen Sal k 4; profilin [Salsola kali]
MSWQAYVDEHLMCNIEDTGNHLTSSAIVGVDGSIWAQSSNFPQVKPQEIEAINKEFDGPN
TLAPTGLFLGGEKYMVIQGEPGAVIRGKKGPGGVCIKKTTQALIFGIYDEPVAPGQCNMV
VERLGDYLIEQGL
>ADK22842.1 Allergen Sal k 5; Ole e 1-like protein [Salsola kali]
KGKGGHNLYHVKGMVYCDTCRIQFITRVSTMMEGATVSLQCRNLTAGTETFKAEAVTDKL
GMYTIKVDGDHEDDICQIVLVKSPGQECSEIPNDVYSEQAAKVTLTSNNGEASDVRNANA
LGFLKKAPLPECPEVLKELDMYDVPGSVTQN
>ADK27483.1 Allergen Pen ch 35; aldolase [Penicillium chrysogenum]
MSSSLEQLKASGTTVVCDSGDFATIGKYKPQDATTNPSLILAASKKPEYAALIDTAVAYG
KQNGKTLDEQVEATLDRLLVEFGKEILKIIPGKVSTEVDAKLSFDTQGSVNKALEIIKLY
ADNGISKDRVLIKIASTYEGIKAAHILQTQHGINCNLTLMFSLVQAIAAAEAGAYLISPF
VGRILDWYKAAHKRDYTPQEDPGVKSVQDIYNYYKKFGYNTIVMGASFRNVGEITELAGC
DYLTISPNLLEDLFNSTDAVPQKLNPAGAASLEIKKREYLNNEADFRFDFNEEAMGVEKL
REGISKFAADAVTLKQLLAQKIQA
>ADK39021.1 Allergen Ost c 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Ostrya carpinifolia]
MGVFNYEAETPSVIPAARLFKSYVLDGDKLIPKVAPQAISKVENVGGNGGPGTIKNITFA
EGSPFKFVKERVDEVDNANFKYNYTVIEGDVLGDKLEKVSHELKIVAAPGGGSILKISSK
FHAKGDHEVNAEEMKGAKEMAEKLLRAVESYLLAHTAEYN
>ADK47394.1 Allergen Cla c 14; aldolase [Cladosporium cladosporioides]
MSSSLDQLKASGTTVVCDSGDFATIGKYKPQDATTNPSLILAASKKPEYAKLIDDAVAYG
MKHGKTTEEKIDATFDNLLVQFGSEILKIVPGKVSTEVDARFSFDKDVSIQKALRIIDLY
KEAGIDKERVLIKLASTWEGIQAAHELQTKHGINCNLTLMFSLPQAIAAAEAGAYLISPF
VGRILDWYKANTKQEYNASNDPGVKSVVDIFNYYKKYDYKTIVMGASFRNIGEITELAGC
DYLTIAPALLEQLYNSTDAVPQKLKAEDVAKLDIEKKSYLKDEALFRFDFNEDPMAVNKL

SEGISKFAADAVTLKDILREKIEKA
>ADK47876.1 Allergen Tha p 1; unknown function [Thaumetopoea pityocampa]
MKLLILALTCAAAVWARPGETYSDKYDTIDVNEVLQSERLLKGYVECLLDKGRCTPDGKE
LKDTLPDALEHECSKCTEKQKSGADTVIRHLVNKRPELWKELAVKYDPENIYQERYKDRL
ESVKEH
>ADK56160.1 Allergen Fel d 7; lipocalin [Felis catus]
MKALLLAVGLSLITVLQAQDPPASGEDTMAMSGKWYLKAMITDRETSWKKPELVTPMTLT
VLEGGNLKAETTLLTNGQCKEVELILEKTSEPKKYTTYGGKRVVYIEPTEVKDHYIFYCE
GEMQGEQARMAKLVGRDPESNEEALENFREFLRAKGFNQEIFSPKQSDTCPPGTDQEPEV
>ADK92390.1 Allergen Der p 13; fatty acid-binding protein
[Dermatophagoides pteronyssinus]
MASIEGKYKLEKSEKFDEFLDKLGVGFMVKTAAKTLKPTFEVAKENDQYVFRSLSTFKNT
EIKFKLGEEFEEDRADGKRVKTVINKDGDNKFVQTQFGDKEVKIVREFNGDEVVVTASCD
GVTSVRTYKRI
>CBW30986.1 Allergen putative pectate lyase precursor [Ambrosia
artemisiifolia]
MGIKHCCYILYFTLALVTLLQPVRSAEDLQEILPVNETRRLTTSGAYNIIDGCWRGKADW
AENRKALADCAQGFGKGTVGGKDGDIYTVTSDLDDDVANPKEGTLRFGAAQNRPLWIIFE
RDMVIRLDKEMVVNSDKTIDGRGAKVEIINAGFTLNGVKNVIIHNINMHDVKVNPGGLIK
SNDGPAAPRAGSDGDAISISGSSQIWIDHCSLSKSVDGLVDAKLGTTRLTVSNSLFTQHQ
FVLLFGAGDENIEDRGMLATVAFNTFTDNVDQRMPRCRHGFFQVVNNNYDKWGSYAIGGS
ASPTILSQGNRFCAPDERSKKNVLGRHGEAAAESMKWNWRTNKDVLENGAIFVASGVDPV
LTPEQSAGMIPAEPGESALSLTSSAGVLSCQPGAPC
>CBW30987.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLLQPVRSAEDVEEFLPSANETRRSLKACEAHNIIDKCWRCKA
DWANNRQALADCAQGFAKGTYGGKHGDVYTVTSDKDDDVANPKEGTLRFAAAQNRPLWII
FKRNMVIHLNQELVVNSDKTIDGRGVKVNIVNAGLTLMNVKNIIIHNININHDIKVCPGGM
IKSNDGPPILRQQSDGDAINVAGSSQIWIDHCSLSKASDGLLDITLGSSHVTVSNCKFTQ
HQFVLLLGADDTHYQDKGMLATVAFNMFTDHVDQRMPRCRFGFFQVVNNNYDRWGTYAIG
GSSAPTILSQGNRFFAPDDIIKKNVLARTGTGNAESMSWNWRTDKDLLENGAIFLPSGSD
PVLTPEQKAGMIPAEPGEAVLRLTSSAGVLSCHQGAPC
>CBW30988.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEALNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNININHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQIKKNVLARTGTGAAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVLSCRPGAPC
>CBW30989.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEAYNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNININHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQIKKNVLARTGTGAAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVLSCRPGAPC
>CBW30990.1 Allergen putative pectate lyase precursor [Ambrosia
artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEAYNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNININHDVKVLPGGMI
KSNDGPPIFRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG

SSAPTILCQGNRFLAPDDQMKKNVLARTGTGVAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVLSCRPGAPC
>CBW30991.1 Allergen putative pectate lyase precursor [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEALNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNINIHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQMKKNVLARTGTGVAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVLSCRPGAPC
>CBW30992.1 Allergen putative pectate lyase precursor [Ambrosia artemisiifolia]
MGIKQCCYILYFTLALVALLQPVRSAEGVGEILPSVNETRSLQACEAYNIIDKCWRGKAD
WENNRQALADCAQGFAKGTYGGKWGDVYTVTSNLDDDVANPKEGTLRFAAAQNRPLWIIF
KNDMVINLNQELVVNSDKTIDGRGVKVEIINGGLTLMNVKNIIIHNINIHDVKVLPGGMI
KSNDGPPILRQASDGDTINVAGSSQIWIDHCSLSKSFDGLVDVTLGSTHVTISNCKFTQQ
SKAILLGADDTHVQDKGMLATVAFNMFTDNVDQRMPRCRFGFFQVVNNNYDRWGTYAIGG
SSAPTILCQGNRFLAPDDQMKKNVLARTGTGVAESMAWNWRSDKDLLENGAIFVTSGSDP
VLTPVQSAGMIPAEPGEAAIKLTSSAGVLSCRPGAPC
>CBW30993.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
CCYILYFTLALVILLQPVRSAEDLQQILPSVNETRSLTTCGTYNIIDGCWRGKADWAENR
KALADCAQGFAKGTIGGKDGDIYTVTSELDDDVANPKEGTLRFGAAQNRPLWIIFARDMV
IRLDRELAINNDKTIDGRGAKVEIINAGFAIYNVKNIIIHNIIMHDIVVNPGGLIKCNDG
PPAPRKGSDGDAIGISGGSQIWIDHCSLSKAVDGLIDAKHGSTHFTVSNCLFTQHQYLLL
FWDFDERGMLCTVAFNKFTDNVDQRMPNLRHGFVQVVNNNYERWGSYALGGSAGPTILSQ
GNRFLASDIKKEVVGRYGESAMSESINWNWRSYMDVFENGAIFVPSGVDPVLTPEQNAGM
IPAEPGEAVLRLTSSAGVLSCQPGTPC
>CBW30994.1 Allergen putative pectate lyase precursor [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLVQAGRLGEEVDILPSPNDTRRSLQGCEAHNIIDKCWRCKPD
WAENRQALGDCAQGFGKATHGGKWGDIYMVTSDQDDDVVNPKEGTLRFGATQDRPLWIIF
QRDMIIYLQQEMVVTSDKTIDGRGAKVELVYGGITLMNVKNVIIHNIDIHDVRVLPGGRI
KSNGGPAIPRHQSDGDAIHVTGSSDIWIDHCTLSKSFDGLVDVNWGSTGVTISNCKFTHH
EKAVLLGASDTHFQDLKMHVTLAYNIFTNTVHERMPRCRFGFFQIVNNFYDRWDKYAIGG
SSNPTILSQGNKFVAPDFIYKKNVCLRTGAQEPEWMTWNWRTQNDVLENGAIFVASGSDP
VLTAEQNAGMMQAEPGDMVPQLTMNAGVLTCSPGAPC
>CBW30995.1 Allergen Amb a 1; pectate lyase [Ambrosia artemisiifolia]
MGIKHCCYILYFTLALVTLVQAGRLGEEVDILPSPNDTRRSLQGCEAHNIIDKCWRCKPD
WAENRQALGDCAQGFGKATHGGKWGDIYMVTSDQDDDVVNPKEGTLRFGATQDRPLWIIF
QRDMIIYLQQEMVVTSDTTIDGRGAKVELVYGGITLMNVKNVIIHNIDIHDVRVLPGGRI
KSNGGPAIPRHQSDGDAIHVTGSSDVWIDHCTLSKSFDGLVDVNWGSTGVTISNCKFTHH
EKAVLLGASDTHFQDLKMHVTLAYNIFTNTVHERMPRCRFGFFQIVNNFYDRWDKYAIGG
SSNPTILSQGNKFVAPDFIYKKNVCLRTGAQEPEWMTWNWRTQNDVLENGAIFVASGSDP
VLTAEQNAGMMQAEPGDMVPQLTMNAGVLTCSPGAPC
>ADL09135.1 Putative hyaluronidase precursor [Polybia paulista]
SWVEFALSERPKRVFNIYWNVPTFMCHQYGINFDEVTDFNIKHNSKDNFRGETLAIYYDP
GNFPALIPVNNGKYKERNGGVPQRGNITIHLQQFNEDLDKMTPDKSFGGIGVIDFERWRP
VFRQNWGNTEIHKEYSIELVRKEHPKWSKSMIEAEATKKFEKYARYFMEETLKLAKKTRK
RAKWGYYGFPYCYNASPNNPGPSCDAKAIIENDRMSWMYNNQEILLPSVYVRHKQDPEER
IYLVQGRVKEAVRVSNNLEHSPSVLPYWWYVYQDEMEIFLSETDVKKTFQEIVTNGGDGI
IIWGSSSDVNSLSKCKRLREYLLNTLGPIAVNVTETVNRRSSLNF
>ADL32660.1 Allergen Dau c 1; pathogenesis-related protein /PR-10 /Bet v 1 -like protein [Daucus carota]

MGVQKHEQEITSSVPAEKMFHGLILDIDNILPKAAPGAYKNVEIKGDGGVGTIKHITLPD
GGPVTTMTLRTDGLDKKGFTIDYSVIDGDVLMGFIDKIENHLSVVPTADGGSTTKTTAIF
HTKGDAVVPEENIKYAEAQNTMLFKAVEAYLIAN
>ADL32661.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNILPKAAPGAYKNVEIKGDGGVGTIKHITLPD
GGPVTTMTLRTDGLDKKGFTIDYSVIDGDVLMGFIDKIENHLSVVPTADGGSTTKTTAIF
HTKGDAVVPEENIKYAEEQNTLLFKAVEAYLIAN
>ADL32662.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNVLPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTLRTDGLDKKNCTIDYSYIDGDILMGFIDKIENHLSVVPNADGGSTTKTTAIF
HTKGDAVVPEENIKYAEAQNTMLFKAVEAYLIAN
>ADL32663.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNVLPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTLRTDGLDKKNCTIDYSYIDGDILMGFIDKIENHLSVVPNADGGSTTKTTAIF
HTKGDAVVPEENIKFAEAQNTMLFKAVEAYLIAN
>ADL32664.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNVLPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTQRTDGLDKKNCTIDYSYIDGDILMGFIDKIENHLSVVPNADGGSTTKTTAIF
HTKGDAVVPEENIKYAEAQNTMLFKAVEAYLIAN
>ADL32665.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNILPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTLRTDGLDKKGFTIDYSVIDGDVLLGFIDKIENHLSVVPTADGGSTTKTTAIF
HTKGDAVVPEENIKYAEEQNTMLFKAVEAYLIAN
>ADL32666.1 Allergen PRP-like protein [Daucus carota]
MGVQKHEQEITSSVPAEKMFHGLILDIDNILPKAAPGAYKNVEIKGDGGVGTIKHITLPE
GGPVTTMTLRTDGLDKKGFTIDYSVIDGDVLMGFIDKIENHLSVVPTADGGSTTKTTAIF
HTKGDAVVPEENIKYAEEQNTMLFKAVEAYLIAN
>P86687.1 Allergen Poly p 2; hyaluronidase [Polybia paulista]
GETISIYYDPGKFPALMPLKNGNYEERNGGVPQRGNITIHLQQFNEDLDKMTPDKNFGGI
GVIDFERWKPIFRQNWGNTEIHKKYSIELVRYEHPKWSESMIEAEATKKFEKYARLFMEE
TLKLAKKTRKRAKWGYYGFPYCYNYTPNNPGPDCDAKAMIENDRLSWMYNNQEILFPSVY
VRHELTPDQRVYLVQGRIKEAVRISNNLKHSPKVLSYWWYVYQDKMDIFLSETDVKKTFQ
EIVTNGGDGIIIWGSSSDVNSLSKCKRLREYLLNTLGPFAVNVTETVN
>P86686.1 Allergen Poly p 5; unknown function, antigen 5 [Polybia
paulista]
NKYCNIKCSKVAHTVCQTGESTKPSSKNCAKVSITSVGVTEEEKKLIVDEHNRFRQKVAQ
GLETRGNPGPQPAASDMNNLVWNDELAYIAQVWASQCQFFVHDKCRNTAQYQVGQNIAYS
ASTAAYPGVVKLIVLWENEVKDFNYNTGITKENFAKVGHYTQVVWAKTKEVGCGSIKYIE
KGMKSHYLVCNYGPAGNVLGAQIYEIK
>XP_003030591.1 Allergen Sch c 1; glucoamylase [Schizophyllum commune H4-
8]
MGLASTVSLALLGLCSLARAQTSAADAYVSAESPIAQAGILANIGPSGSKSHGAASGVII
ASPSTSNPDYLYTWTRDAALVSRALVDEFIEGESSLQSVIDSYVSSQQKLQRVDNPSGSY
TSGGLGEPKFNIDLTAFTGAWGRPQRDGPALRAITLITYGNHLLSSGNTSYVTDTIWPVV
KADLDYVVSYWNQTGFDLWEEVSSSSFFTTAEQHTALRLGATFATAVGASASTYLTQADN
VLCFLQSYWNSNGGYATANTGGGRSGIDANTVLTSIHTFDIEAGCDSVTFQPCSDRALSN
LKVYVDSFRGLYSINPTGATDPILTGRYKEDVYYNGNPWYLTTFAVAEQLYDALNTWDKL
GSLDVTSTSLAFFKQFDSSITAGTYASSTSEYATLTSAIRNWADGFLEVLADFTPADGGL
TEQIDKSSGNPTSAADLTWSYASAITAFKARGGAIPASWGAAGLTVPATCSTGGGGGSGG
DTVAVTLNVQATTVYGENIYVTGSVNQLANWSPDNAIALNADNYPTWSVTVNLPANTQIE
YKYIRKNNGQVTWESDPNRSITTSASGSFTQNDTWR
>ADM15668.1 Allergen Fel d 8; latherin [Felis catus]
MLKVSSLFILLCGLLASSSTQEVLSRVSSHITDALTQGLLGMNFLPTLQTIDFQGPLKDI
FSLVLGHQLTNGEANFMVQMKDLRLFQVFIETSPDFKGIDLRMPLAFSIQIKFPALNPYI

FHVRTDMKVQLYLEKDVDNRYQLTFGHCRIVPETVWIQSGNFITPMKNFIVENIERALGN
VIIHNFGAKMCPFINSWLYNLNPQVTNQLISLLLQHGTYQATVEIPAK
>ADM18345.1 Allergen Tab y 5; unknown function, antigen 5 [Tabanus yao]
MAPIIVPCLLLVVLVLQCSVINSLDYCSLCRGGRGEHVGCGSPGFSSDCGQKARTRKFTK
EHKKVILDKINDVRDHVAKGSWGLPVASRMKVIVWDEELAALAKRHTQGCVPEAYKCRHT
LRFWSPGQLNFEFYADKMPSTMSLISTAIKRGHTQKHNITRDIIEKYQPAGPKGNVKELA
LAISDRVTAVGCGLTTWKLGGKARALLTCNFSSENDYNRPVYKTGNSPGEKCIKKDETFK
NLCSAQEPINPNEHNF
>ADM18346.1 Allergen Tab y 2; hyaluronidase [Tabanus yao]
MKLHQGLVCLSVLILLPTCILGDRKFEVYWNIPTFMCPDQNKTIMDLNKKHGVIQNTEDL
FRGDKISLLYHPGAFPAITRNKTTNTLIYENGGVPQAGNLSLHLKLLEKDINEQITDKNF
SGLAVIDFELWRPIFRQNGGSLSDYQNLSLKLEKDLHPEFNEDQLRKEAERRIEKFGRSF
IKQTLIKAKKLRPKAQWGYYAFPYCFNGRRRYVDTCIPSAKIDNDRILYMFENSDVIYPA
VYLQTDLAQKNQTGLVKGRVDEAVRMAKMVKKPAKPPVLVYHRYVFTDTLEYISKENTTA
VFKAMKDNGADGVIIWGSSFDLNSKEKCAKFLDYLREVLWPVIDEVKRS
>ADM52184.1 Allergen Der f 1 allergen, partial [Dermatophagoides farinae]
RPASIKTFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEANKGAINHLSDLSLDEFKNR
YLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRTVTPIRMQGGCGSCWAFSG
VAATESAYLAYRQTSLDLSEQELVDCASQHGCHGDTIPRGIEYIQQNGVVEERSYPYVAR
EQRCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVIIGIKDLRAFQHYDGRTII
QHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGYGYFQAGNNLMMIEQYPYV
VIM
>ADN39439.1 Allergen class I chitinase isoform 2 [Castanea sativa]
EQCGRQAGGAACANNLCCSQFGWCGNTAEYCGAGCQSQCSSPTTTTSSPTASGGGGGDVG
SLISASLFDQMLKYRNDPRCKSNGFYTYNAFIAAARSFNGFGTTGDVTTRKRELAAFLAQ
TSHETTGGWATAPDGPYAWGYCFIMENNKQTYCTSKSWPCVFGKQYYGRGPIQLTHNYNY
GQAGKAIGADLINNPDLVATNPTISFKTAIWFWMTPQANKPSSHDVIIGNWRPSAADTSA
GRVPSYGVITNIINGGLECGHGSDDRVANRIGFYKRYCDTLGVSYGNNLDCYNQKPFA
>ADN39440.1 Allergen Pru du 6; 11S globulin / legumn-like protein /
amandin / prunin [Prunus dulcis]
MAKAFVFSLCLLLVFNGCLAARQSQLSPQNQCQLNQLQAREPDNRIQAEAGQIETWNFNQ
EDFQCAGVAASRITIQRNGLHLPSYSNAPQLIYIVQGRGVLGAVFSGCPETFEESQQSSQ
QGRQQEQEQERQQQQQGEQGRQQGQQEQQQERQGRQQGRQQQEEGRQQEQQQGQQGRPQQ
QQQFRQFDRHQKTRRIREGDVVAIPAGVAYWSYNDGDQELVAVNLFHVSSDHNQLDQNPR
KFYLAGNPENEFNQQGQSQPRQQGEQGRPGQHQQPFGRPRQQEQQGSGNNVFSGFNTQLL
AQALNVNEETARNLQGQNDNRNQIIRVRGNLDFVQPPRGRQEREHEERQQEQLQQERQQQ
GGQLMANGLEETFCSLRLKENIGNPERADIFSPRAGRISTLNSHNLPILRFLRLSAERGF
FYRNGIYSPHWNVNAHSVVYVIRGNARVQVVNENGDAILDQEVQQGQLFIVPQNHGVIQQ
AGNQGFEYFAFKTEENAFINTLAGRTSFLRALPDEVLANAYQISREQARQLKYNRQETIA
LSSSQQRRAVV
>ADN39441.1 Allergen Pru du 6; 11S globulin / legumn-like protein /
amandin / prunin [Prunus dulcis]
CLLLLFNGCLASRQHIFGQNKEWQLNQLEAREPDNHIQSEAGVTESWNPSDPQFQLAGVA
VVRRTIEPNGLHLPSYVNAPQLIYIVRGRGVLGAVFPGCAETFEDSQPQQFQQQQQQQQF
RPSRQEGGQGQQQFQGEDQQDRHQKIRHIREGDIIALPAGVAYWSYNNGEQPLVAVSLLD
LNNDQNQLDQVPRRFYLAGNPQDEFNPQQQGRQQQQQQQGQQGNGNNIFSGFDTQLLAQA
LNVNPETARNLQGQDDNRNEIVRVQGQLDFVSPFSRSAGGRGDQERQQEEQQSQREREEK
QREQEQQGGGGQDNGVEETFCSARLSQNIGDPSRADFYNPQGGRISVVNRNHLPILRYLR
LSAEKGVLYNNAIYTPHWHTNANALVYAIRGNARVQVVNENGDPILDDEVREGQLFLIPQ
NHAVITQASNEGFEYISFRTDENGFTNTLAGRTSVLRALPDEVLQNAFRISRQEARNLKY
NRQESRLLSATSPPRGRLMSILGY
>C7E3T4.1 Allergen Pen m 2; arginine kinase [Penaeus monodon]
MADAAVIEKLEAGFKKLEAATDCKSLLKKYLSKAVFDQLKEKKTSLGATLLDVIQSGVEN
LDSGVGIYAPDAEAYTLFSPLFDPIIEDYHVGFKQTDKHPNKDFGDVNTFVNVDPEGKYV

ISTRVRCGRSMEGYPFNPCLTEAQYKEMEAKVSSTLSSLEGELKGTYYPLTGMSKEVQQK
LIDDHFLFKEGDRFLQAANACRYWPAGRGIYHNDNKTFLVWVNEEDHLRIISMQMGGDLG
QVFRRLTSAVNEIEKRIPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANREKLEEV
AGKYNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILELIKMEKEM
>P86739.1 Putative RecName: Full=Parvalbumin beta 1 [Macruronus magellanicus]
SFAGILDDADITAALAACKAEGSFKHVEFFAKIGLAGKKVFAIIDQDKSDFVEEDELKLF
LQVFSAGARALTDAETKAGDSDGDGKIGVDEFAQMIKG
>P86745.1 Putative RecName: Full=Parvalbumin beta 1 [Merluccius australis australis]
AFAGILADADITAALAACKAEGTFTHGVFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86749.1 Putative RecName: Full=Parvalbumin beta 1 [Merluccius australis polylepis]
AFAGILADADITAALAACKAEGTFTHGEFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86761.1 Putative RecName: Full=Parvalbumin beta 1 [Merluccius gayi]
AFAGILADADITAALAACKAEGTFKHGEFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86768.1 Putative RecName: Full=Parvalbumin beta 1 [Merluccius paradoxus]
AFAGILADADITAALAACKAEGTFKHGEFFTKIGLKGKSPADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86774.1 Putative RecName: Full=Parvalbumin beta 1 [Merluccius productus]
AFAGILADADITAALAACKAEGTFKHGEFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFTAMIKG
>P86741.1 Putative RecName: Full=Parvalbumin beta 2 [Macruronus magellanicus]
AFAGILADADCAAALKACEAADSFNYKAFFAKVGLASKSAEEIKKAFFVIDQDKSGFIEE
DELKLFLQNFVAGARALTDAETKAFLKAGDSDGDGAIGVDEFAALVKA
>P86750.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius australis polylepis]
AFSGILAEADIAAALKACEAADSFNYKAFFAKVGLSAKSADDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDAETKAFLKAGDSDGDGAIGVDEFAVLVKA
>P86752.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius bilinearis]
AFAGILADADIAAALAACKAEGSFKHGEYFAKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86757.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius capensis]
AFSGILAEADIAAALKACEAAGTFNYKAFFAKVGLTGKSADDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDDETKAFLKAGDSDGDGAIGVEEWAALVKA
>P86765.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius merluccius]
AFAGILADADITAALAACKAEGSFKHGEFFTKIGLKGKSAADIKKVFGIIDQDKSDFVEE
DELKLFLQNFSAGARALTDAETATFLKAGDSDGDGKIGVDEFAAMVKG
>P86769.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius paradoxus]
AFSGILAEADIAAALKACEAAGTFNYKAFFAKVGLTGKSADDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDDETKAFLKAGDSDGDGAIGVDEWAALVKA
>P86771.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius polli]
AFSGILAEADIAAALKACEAAGTFNYKAFFAKVGLTGKSADDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDAETKAFLKAGDSDGDGAIGVDEWAVLVKA

>P86775.1 Putative RecName: Full=Parvalbumin beta 2 [Merluccius productus]
AFSGILAEADIAAALKACAAADTFNYKAFFAKVGLSAKSADDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDAETKAFLKAGDSDGDGAIGVDEFAVLVKA
>P86740.1 Putative RecName: Full=Parvalbumin beta 3 [Macruronus magellanicus]
TFFKSNDDVKKAFFVIDQDKSGFIEEDELKLFLQNFSAGARALTAGETKTFLAAGDSDGD
GMIGVDEFQALVKA
>P86742.1 Putative RecName: Full=Parvalbumin beta 3 [Macruronus novaezelandiae]
SFNYKTFFKLAAKSNDDVKKAFFVIDQDKSGFIEEDELKLFLQNFSAGARALTAGETKTF
LAAGDSDGDGMIGVDEFQALVKA
>P86753.1 Putative RecName: Full=Parvalbumin beta 3 [Merluccius bilinearis]
AFSGILADADIAAALKACEAADSFNYKAFFAKVGLSAKSAEDIKKAFFVIDQDKSGFIEE
DELKLFLQVFSAGARALTDAETKAFLKAGDSDGDGAIGVDEFAVLVKA
>P86770.1 Putative RecName: Full=Parvalbumin beta 3 [Merluccius paradoxus]
AFAGVLADADIKAALAGCAAAESFNYKTFFKACGLAGKFFAIIDQDHSGFIEEDELKLFL
QTFSAGARALSDAETKDVDGDGMIGVDEFVALVKA
>P86772.1 Putative RecName: Full=Parvalbumin beta 3 [Merluccius polli]
AFAGVLADADIKAALAGCAAAESFNYKTFFKFFAIIDQDHSGFIEEEELKLFLQTFSAGA
RALSDAETK
>P86754.1 Putative RecName: Full=Parvalbumin beta 4 [Merluccius bilinearis]
AFAGVLADADIKAALAGCAAADSFNYKTFFKACGLFFAIIDQDHSGFIEEEELKLFLQTF
SAGARALSDAETKTFLAAGDVDGDGMIGVDEFAA
>P86760.1 Putative RecName: Full=Parvalbumin beta 4 [Merluccius gayi]
AFAGVLADADIKAALAGCAAADSFNYKTFFKFFAIIDQDHSGFIEEEELKLFLQTFSAGA
RALSDAETKAFLAAGDSDGDGKIGFVALVKA
>A2V735.1 Putative RecName: Full=Tropomyosin; AltName: Full=Tropomyosin, slow-tonic isoform; Short=Tm-Chio-tonic [Chionoecetes opilio]
MDAIKKKMQAMKLEKDNAMDKADTLEQQNKEANLRAEKTEEEIRANQKKSQLVENELDHA
QEQLSAATHKLVEKEKAFANAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREETYKEQIKTLANKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKNIADEMDQAFSELSGF
>CBW45298.1 Allergen Plo i 2; thioredoxin [Plodia interpunctella]
MSIHIKDVEDLTARLTEAGDKLVVIDFMATWCGPCKIIGPKLDEIAAEMADSIVVVKVDV
DECEDIATEYSINTMPTFVFVKNGKPVEQFSGANVEKLRSTILKLK
>ADQ53858.1 Allergen Ara h 1 allergen [Arachis hypogaea]
MRGRVSPLMLLLGILVLASVSATHAKSSPYQKKTENPCAQRCLQSCQQEPDDLKQKACES
RCTKLEYDPRCVYDPRGHTGTTNQRSPPGERTRGRQPGDYDDDRRQPRREEGGRWGPAGP
RERERREEDWRQPREDWRRPSHQQPRKIRPEGREGEQEWGTPGSHVREETSRNNPFYFPSR
RFSTRYGNQNGRIRVLQRFDQRSRQFQNLQNHRIVQIEAKPNTLVLPKHADADNILVIQQ
GQATVTVANGNNRRALILTRAMHSESHPFHFLHLDDMTPELRVAKSHAVNTPGQFEDFFP
ASSRDQSSYLQGFSRNTLEAAFNAEFNEIRRVLLEENAGGEQEERGQRRWSTRSSENNEG
VIVEVSKEHVEELTKHAKSVSKKGSEEEGDITNPINLREGEPDLSDNFGRLFEVKPDKKN
PQLQDLDMMLTCVEIKEGALMLPHFNSKAMVIVVINKGTGNLELVAVRKEQQQRGRREQE
WEEEEEDEEEEGSNREVRRYTARLKEGDVFIMPAAHPVAINASSELHLLGFGINAENNHR
IFLAGDKDNVVDQIEKQAKDLAFPGSGEQVEKLIKNQRESHFVSARPQSQSPSSPEKEDQ
EEENQGGKGPLLSILKAFN
>ADQ53859.1 Allergen Ara h 3 allergen [Arachis hypogaea]
MAKLLALSLCFCVLVLGASSVTFRQGGEENECQFQRLNAQRPDNRIESEGGYIETWNPNN

QEFQCAGVALSRTVLRRNALRRPFYSNAPLEIYVQQGSGYFGLIFPGCPSTYEEPAQEGR
RYQSQKPSRRFQVGQDDPSQQQQDSHQKVHRFDEGDLIAVPTGVAFWMYNDEDTDVVTVT
LSDTSSIHNQLDQFPRRFYLAGNQEQEFLRYQQQQGSRPHYRQISPRVRGDEQENEGSNI
FSGFAQEFLQHAFQVDRQTVENLRGENEREEQGAIVTVKGGLRILSPDEEDESSRSPPNR
REEFDEDRSRPQQRGKYDENRRGYKNGIEETICSASVKKNLGRSSNPDIYNPQAGSLRSV
NELDLPILGWLGLSAQHGTIYRNAMFVPHYTLNAHTIVVALNGRAHVQVVDSNGNRVYDE
ELQEGHVLVVPQNFAVAAKAQSENYEYLAFKTDSRPSIANQAGENSIIDNLPEEVVANSY
RLPREQARQLKNNNPFKFFVPPFDHQSMREVA
>CBY17558.1 Putative tropomyosin, allergen Pan b 1 [Pandalus borealis]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVFGLQKKLQQLENDLDSV
QEALLKANQHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>P0CH89.1 Allergen Ves m 2; hyaluronidase [Vespula maculifrons]
DRCIWPKEGFSIYWNIPTHFCHNFGVYFKEL
>P0CH87.1 Allergen Vesp c 1; phospholipase A1 [Vespa crabro]
FNPCPYSDDTVKMIVLTRENKKYDFYTLDTIKNHNEFKDTITLKPHVFITHGFTSSATAE
NFVVMAKALLDKGNYLVILTDWRMAACTNEIAGLKLAYYPYAASNTRLVGNYIATVTKML
VQKYNVPMANIRLIGHSLGAHISGFAGKKVQELGLGKYPEIIGLDPAGPSFKSNDCSQRI
CETDANYVQIIHTSNRLGTERTLGTVDFYMNNGYNQPGCGLPIIGETCSHTRAVKYFTEC
IKHECCLIGVPKSKNPQPVSKCTRNECVCVGLNAKTYPKTGSFYVPVESKAPYCNNKGKI
I
>P0CH86.1 Allergen Ves s 1; phospholipase A1 [Vespula squamosa]
GSKCPFSDDTVAMVIVTRENRNRDFYTLQTLRNHDEFKKKAITRPVVFITHGFTSSATVE
SFVDLQTAILEXXXXKVTVSDWRVAACNRTTGLLYYVTAVSNTRLVGRYIATVTKKLVTD
YNVSMADIRLIGHSLGAHVSGFAGKEVQKLKLEKYSEIIGLDPAGPSFESNDCAERLCKT
DAHYVQIIHTSKKFGIEKSIGHVDFYVNQGNNQPGCGIIPLKDVCSHSRAITYMTECIKR
ECCLIGIPQSKSSKSISSCTRQECVCVGLKAKSYPNTGSFYVPVESTAPFCNNKGKII
>P0CH88.1 Allergen Bom t 4; protease [Bombus terrestris]
VVGGKPAKLGAWPWMVALGF
>ADR66939.1 Allergen non-specific lipid transfer protein [Prunus persica]
MAYSAMTKLALVVALCMVVSVPIAQAITCGQVSSSLAPCIPYVRGGGAVPPACCNGIRNV
NNLARTTPDRQAACNCLKQLSASVPGVNPNNAAALPGKCGVSIPYKISASTNCATVK
>ADR66943.1 Allergen non-specific lipid transfer protein [Prunus avium]
MACSAMTKLALVVALCMVVSVPIAQALTCGQVSSNLAPCIPYVRGGGAVPPACCNGIRNI
NNLAKTTADRQTACNCLKQLSASVPGVNANNAAALPGKCGVNVPYKISPSTNCATVK
>ADR66944.1 Allergen non-specific lipid transfer protein [Prunus avium]
MACSSMTKLALVVALCMVVSVPIAQALTCGQVSSNLAPCIAYVRGGGAVPPACCNGIRNI
NNLAKTTADRQTACNCLKQLSASVPGVNANNAAALPGKCGVNVPYKISPSTNCATVK
>ADR66945.1 Allergen non-specific lipid transfer protein [Prunus
armeniaca]
MAYSAMTKLALVVALCMVVSVPIAQAQAITCGQVVSTLAPCINYVKSGGAVPPACCNGIR
TLNGLAKTTADRQAACNRLKQLSGSIPGVNPNNAAALPGKCGVNVPYKISISTNCAAVK
>ADR66946.1 Allergen non-specific lipid transfer protein [Prunus
armeniaca]
MAYSAMTKLALVVALCMVVSVPIAQAITCGQVSNSVAPCIPYVIGGGAVPPACCNGIRNV
ENLAKTTADRQAACNCLKQLSGSIPGVNPNNAAALPGKCGVNVPYKISISTNCAAVK
>ADR66947.1 Allergen Pru ar 3; lipid transfer protein (LTP) type 1
[Prunus armeniaca]
MAYSAMTKLALVVALCMVVSVPIAQAITCGQVSSSLAPCIGYVRGGGAVPPACCNGIRNV
NNLARTTPDRRTACNCLKQLSGSISGVNPNNAAALPGKCGVNIPYKISASTNCATVK
>ADR66948.1 Allergen non-specific lipid transfer protein [Prunus
armeniaca]

MAYSAMTKLALVVALCMVVSVPIAQAITCGQVSSSLAPCIGYVRGGGAVPPACCNGIRNV
NNLARTTPDRRTACNCLKQLSGSISGVNPNNAAALPGKCGVNIPYKISISTNCAAVK
>ADR82196.1 Allergen Hev b 14; hevamine [Hevea brasiliensis]
GGIVIYWGQNGNEGTLTQTCSTRKYSYVNIAFLNKFGNGQTPQINLAGHCNPAAGGCTIV
SNGIRSCQIQGIKVMLSLGGGIGSYTLASQADAKNVADYLWSNFLGGKSSSRPLGDAVLD
GIDFDIEHGSTLYWDDLARYLSAYSKQGKKVYLTAAPQCPFPDRYLGTALNTGLLTMYGF
NSITIHHASIAQVTLTTSLTRGIDGPHL
>ADR82198.1 Allergen Per a 2; aspartic protease-like [Periplaneta
americana]
MTFLIQSAFVALAAISAVLCDPVVVPLQKRAPVEEYINTQYVGPVQLGNQYFLCVFDTSS
YTTVIPSASCVSGGCNCANVHKYYSNKPVSNNVASVRILGSGYANGSEAHDYIAVSTLNA
TNQGFLLADDISNDICSLGADCVIGLGRPKSGRAAFNLPTVMENFVNQDNIANSFSFHHG
RYPDGQHRGVLVLGGTIPAYYRGDFTYVPLVDKDTWNFKVDSISVGNEVVATDQLAFVDS
SKYVITGPAEEIKKINDRLGCTNKVIGSRTLCVFDCDKLDNVPSVTFTIGGVAFNISSTY
HIQQNGDLCYSGFQYSAGKCFHFGDFFMDNYYAKFDGQNKRMGFAKSVEEL
>3LIZ_A Allergen Chain A, Crystal Structure Of Bla G 2 Complexed With Fab
4c3 [Blattella germanica]
EAEASIVPLYKLVHVFINTQYAGITKIGNQNFLTVFDSTSCNVVVASQECVGGACVCPNL
QKYEKLKPKYISDGNVQVKFFDTGSAVGRGIEDSLTISQLTTSQQDIVLADELSQEVCIL
SADVVVGIAAPGCPNALKGKTVLENFVEENLIAPVFSIHHARFQDGEHFGEIIFGGSDWK
YVDGEFTYVPLVGDDSWKFRLDGVKIGDTTVAPAGTQAIIDTSKAIIVGPKAYVNPINEA
IGCVVEKTTTRRICKLDCSKIPSLPDVTFVINGRNFNISSQYYIQQNGNLCYSGFQPCGH
SDHFFIGDFFVDHYYSEFNWENKTMGFGRSVESV
>CBY83816.1 Allergen Vesp ma 2; hyaluronidase [Vespa magnifica]
MLLVTLFLFFLQALVNGDSCGSNCEKSERPKRVFNIYWNVPTFMCHQYGLYFDEVTNFNI
KHNSKDNFQGDKIAIFYDPGEFPALLPLNYGKYKIRNGGVPQEGNITIHLQRFIEYLDKT
YPNRNFSGIGVIDFERWRPIFRQNWGNMKIYKNFSIDLVRKEHPFWNKKMIELEASKRFE
KYARLFMEETLKLAKKTRKQADWGYYGYPYCFNMSPTNFVPDCDVTARDENNEMSWLFNN
QNVLLPSVYIRRELTPDQRIGLVQGRVKEAVRISNKLKHSPKVFSYWWYVYQDETNTFLT
ETDVKKTFQEIVINGGDGIIIWGSSSDVNSLSKCTRLREYLLTVLGPIAVNVTEAVN
>ADT89774.1 Allergen Poly p 1; phospholipase A1 [Polybia paulista]
GLIPECPFNEYDILFFVYTRDKQDGIILKKNNLTSYNLFQQPQISHRVVFLIHGFISTGN
NGNFDAMAKALIAKDNFLVMSVDWRRAACDASVFNVAGYSKAVANTRRVGKYVADFTKIL
VDKYKVPMSNIRLIGHSLGAHTSGFAGKQVQKLKLGKYSEIIGLDPAGPSFRSTNCPDRL
CETDAQYVQVLHTSSKLGTYDQIGSVDFYVNYGGSQPGCLVRTCSHTKAVLYMTECIKRE
CCLIGTPWSSTGSSPKPKPISACKRDICVCVGLNAKSYPAKGSFYVPVEKNSPYCHNEGI
KL
>ADV17342.1 Allergen Pen m 3; myosin light chain [Penaeus monodon]
MSRKSGSRSSSKRSKKSGGGSNVFDMFTQRQVAEFKEGFQLMDRDKDGVIGKTDLRGTFD
EIGRIATDQELDEMLADAPAPINFTMLLNMFAERQTGESDDDDVVAKAFLAFADEGGNID
CDTFRHALMTWGDKFSSQEADDALDQMDIDDAGKIDVQSVIQMLTAGGGDDAAAEEA
>ADV17343.1 Allergen Pen m 4; sarcoplasmic calcium-binding protein
[Penaeus monodon]
MAYSWDNRVKYVVRYMYDIDNNGFLDKNDFECLAVRNTLIEGRGEFSADAYANNQKIMRN
LWNEIAELADFNKDGEVTVDEFKQAVQKHCQGKKYGDFPGAFKVFIANQFKAIDVNGDGK
VGLDEYRLDCITRSAFAEVKEIDDAYNKLTTEDDRKAGGLTLERYQDLYAQFISNPDESC
SACYLFGPLKVVQ
>BAJ61596.1 Putative paramyosin [Haliotis discus discus]
MDYGDVSSKVVRTVSHRSYNVYRGSSPATQNRLEARIRELEDALDTERDCRVRAEKNLAE
ITFQYDQVADRLEEQGGVTVQQIEINKKRESELNKVRKDLELAVISHESAEASLRKRNQE
TINDLTDQLEYMTKQKNRVEKEKHQLIIEIDTLQGMTDSLAKAKSSAESRADGLQGSVDR
LKLQVDDLSRQLTDANSAKARLTQENFDLQHQVQELDSANAALAKAKSQLQASNDDLKRQ
LDDESRQRQNLQVQFSQLQSGYDNLNARYEEESESASTLRTQLSKVNAEFAALKARFEKE
LMAKSEALEELRRRLNTRIAQLEDECETLRARNNNLEKTKAKLTAEIKEITIELENTQII

VQDLTKRNRTLENENGILQRRCDELGAEVSALRAEKASLEAEVHRLRVANAELTERNDNL
QRENKNLSDQLREAQLALKDANRELNELRQIRAQLEMERDSLASQLRDTEEALRDAEGKL
AAAQAALNQLRIDMENRLREKDEEIDNIRRSSARAIEELQRTLIEVETRYKTEISRIKKK
YETDIRELEGALDNANKANAEYLKQIRSLQLRVKELEVLLEEERRLADDLRGQLSISERK
RIALQQEVEDVRSLLEAAERARKNAENELNDANARLSELQIQVTALSNDKRRMEADISAM
QSDLEDAINAQRAAEERADRLFNENVRLADELKQEQENYKNAESLRKQLEIEIREITVRL
EEAEAFATREGKRMVAKLQARIRDLEAELEAEQRRVREAFATSRKLERQYKEIQMQTEDD
RRILAETMSINDQLSMKVKAYKRQIEESEDVANLTMNKYRKAQQLIEEADHRADMAEKNL
VAVRRSRSMSVTRDVKIVRI
>CBY93636.1 Allergen Vesp ma 5; unknown function, antigen 5 [Vespa magnifica]
MKISGFVYLILITTIINLSFSEANNYCKIKCRSGIHTLCKFGISTKPNCGKNVVKGSGLT
KAEKLEILKQHNEFRQKVARGLETRGKPGPQPPAKSMNTLVWNDELAQIAQVWASQCKYG
HDDCRNTAKHSVGQNIAQQSTTAASFGSVSNMVQMWADEVKNYQYGSTKNKLIEVGHYTQ
MVWAKTKEIGCGSIKYIENGWHRHYLVCNYGPAGNIGNEPIYEKK
>ADW27428.1 Allergen Fag t 2; 2S albumin [Fagopyrum tataricum]
MKLFIILATATLLIAATQAKYLRDEGFDLGETQMSSKCTRQVKMMEPELVKCNRYIAMDI
MDDKYEEALSRIQGEGCESEEKFLRGCCVAMKEMEDECVCEWMKMMVENQKGRIGETLMR
KGIRDLKELPNKCGISEMECHSRGNWYYV
>2X45_A Allergen Chain A, Crystal Structure Of Arg R 1 In Complex With Histamine [Argas reflexus]
MDDCSGKTDAWTSIKGPKTGGYWLKQTTKTGENECTYVKGTDFKENTKTATYTYGYKDAS
GKLTKTTGTATAKGSDIVVGSDTSTVIYTDGKTCDVVKHGGHTELWVHSSKTSGGYNNCC
DKKFTETRGSTPANEVYKKCPGMP
>ADX78255.1 Allergen Tab y 1; apyrase [Tabanus yao]
MFKITVFIYVLQLILPSKVHSSPVPDSDNGLREFPLSIVHINDFHARFEQTDELGGQCKP
TAKCVGGYARLVTTVKKLKEEGQNTIFLNAADNYQGTLWYNLGKWNVTAYFMNLLPADAM
TLGNHEFDDKIEGIVPFLEVIKTPIVVANIDDSLEPTFKGKYTKSVVLERGGRKIGIVGV
IAQNTDNISSPGKLRFLDEIQSVKNESKRLREEEKVDIVIVLSHIGLDHDYDLAEQAGDY
IDAIIGGHSHSFLWTGDNPPGKEKVVDAYPVEIVQTSGKKVLIVQASAFARYVGNITLYF
GENNNLIRYAGAPVYLDSDVPEVPQIVEEMKAWEEFVHEKGNEIIAESRVVLSRENCRVS
DCNIGNFFTDAYVHEYVTSHTGPYWTPVSVGLMNVGGIRASVDRGNITFSQLITMAPFEN
TVDTFDLSGKHLLEAFEHAVTVPNRLGFNGQNMLQVSGVKLVYDVTKCEGQRVVSAKIRC
QKCDIPKYEPLDPEETYRIVTASFLANGGDGFTMIRDNKKNYKVGRKDYDVLINYAKYSS
PITIGEEGRIRIIQ
>BAJ78220.1 Allergen Ani s 11; unknown function [Anisakis simplex]
MHSTAILLLVLQLSCYFAASFILPGGANPPRFPVGGPGPIISGDGVNVWQKANSIPKLKD
NAGQRQVNIPPPFIRGPGPVVSGSGIGEVGQIPIGGPGPVVSGSGIGQVFPPQSGQLPIG
GPGPVVSGSGIGGGANPPRFPVGGPGPIISGDGVNVWQKANSIPKLKDNAGQRQVNIPPP
FIRGPGPVVSGSGIGEVGQIPIGGPGPVVSGSGIGQVFPPQSGQLPIGGPGPVVSGSGIG
GGANPPRFPVGGPGPIISGDGVNVLQKANSIPKLKGNANPPQLPVGGPGPVISVDGESVL
QKEENSL
>BAJ78221.1 Putative Ani s 11-like protein precursor [Anisakis simplex]
MHSTAILLLVLQLSCYFAASFILPGDHGLPVGGPGPVISVDGKNVWEDANGMSELHGPGP
VVSGSGIGRVFPPRSGQLPIGGPGPVVSGSGIGGGANPPRFPVGGPGPIISGDGVNVWQK
ANSIPKLKGNANPPQLPVGGPGPVISVDGESVLQKEENSL
>BAJ78222.1 Putative Ani s 11-like protein 2 precursor [Anisakis simplex]
VGGPGPVISVDGKNVWEDANGMSELHGPGPVVSGSGIGRVFPPRSGQLPIGGPGPVVSGS
GIGGGANPPRFPVGGPGPIISGDGVNVWQKANSIPKLKDNAGQRQVNIPPPPFIRGPGPV
VSGSGIGEVGQVPIGGPGPVVSASGRVFPPLRGPLPIGGPGPVVSGSGIGRVFPPRSGQL
PIGGPGPVVSGSGIGQVFPPQSGQLPIGGPGPVVSGSGIGGGANPPRFPVGGPGPIISGD
GVNVWQKANSIPKLKGNANPPQLPVGGPGPVISVDGESVLQKEENSL
>BAJ78223.1 Allergen Ani s 12; unknown function [Anisakis simplex]
MLSHLWLIQLCIVAVLSNSEREEFAFLCPVVKNLPPSVREQCIESQIVIRDCKEKKYGEN

CAELIKQCVTITGAPPVTIGGSGQYRVASSLRDCIKKGGYMGYCSNFTTHENCIKWKDEC
APSEAAEKKDENSLEVFPETFSQCFKSQVVMQQCMNEGEEECSKIEKECVDALGTPPVTT
AANGAYQMAAPLHRCIENGGWMKMCSTWINATICERWKQECSRDKDAEPPTNFSQCIQTQ
TVMLQCKLEFGDKCKALQEECVAATYAPTAYVDANPPIFTSETIRCVQRKMAKGL
>CAX62129.1 Allergen Cav p 2; lipocalin [Cavia porcellus]
MMQILLLALAVSLACADSIDYSKVPGNWRTIAIAADHVEKIEVNGELRAYFRQVDCTEGC
DKISITFYTNTDGVCTEHTVVGARNGENDVYTVDYAGENTFQILCNSDDAFVIGSVNTDQ
NGQTTKEVAIAAKRNFLTPEQEQKFQKAVQNAGIPLENIRYVIETDTCPD
>CAX62130.1 Allergen Cav p 3; lipocalin [Cavia porcellus]
MQILLLALTIGLAYAHQTLDPSEINGQWHTISIAADNVEKIGEGGPLRGYFHNLHCYDGC
KNIGLTFYVKLDGNCQRFDVLGAKQEDSDVYVAQYSGTNHFEVIGKKEDAIAFYNHNTDE
TGKETKMIVVVARRDSLTEEEQQKLQEVAGEKGIPKDNIRYFRERDTCAQ
>BAK09232.1 Putative parvalbumin [Evynnis japonica]
MPFKGLQDADVAKALEGCKDAGTFDHKKFFHACGLSGKSGADVKDAFFVIDQDKSGFIEE
EELKLFLQNFKAGARALTDEETKKFLKAGDSDGDGKIGADEFAEMVKV
>BAK09233.1 Putative parvalbumin [Evynnis japonica]
MAFSGVLSDADMKAALDGCSAADSFDYKKFFKACGLSGKSADEVKKAFAIIDQDKSGFIE
EEELKLFLQNFGKSARALTDKETKAFLAAGDSDGDGKIGVDEFAALVKA
>CBG76811.1 Allergen Sec c 5; unknown function [Secale cereale]
MAVQQYTVALFLAVALVAGPAVSYGTYAPAAPGTQPKATTPEQKLMENINNGFKAAVEAA
AAVAPADKYKTFQTTFIKGSNKAFADVLTAAASGQIPAQSDSMARLSTSLESSYKLAYDS
AEGATPETKYDTYVASLTESLRVISGAFEVHAVKPASEEVKGVPAPQLKVVDQIDAAYRT
AATAANAAPTNDKFNVFESSFNKAIKENTGGAYASYTFVPALESAVKQAYAATVASAPEV
KYAVFQAALSKAINAMVEAEKDAKPAAAAAATATATATVGAAAGAAAGGYKA
>Q40240.2 Allergen Lol p 5; unknown function [Lolium perenne]
MAVQKYTVALFLAVALVAGPAASYAADAGYTPAAAATPATPAATPAAAGGKATTDEQKLL
EDVNAGFKAAVAAAANAPPADKFKIFEAAFSESSKGLLATSAAKAPGLIPKLDTAYDVAY
KAAEATPEAKYDAFVTALTEALRVIAGALEVHAVKPATEEVLAAKIPTGELQIVDKIDAA
FKIAATAANAAPTNDKFTVFESAFNKALNECTGGAYETYKFIPSLEAAVKQAYAATVAAA
PEVKYAVFEAALTKAITAMTQAQKAGKPAAAAATAAATVATAAATAAAVLPPPLLVVQSL
ISLLIYY
>P85524.1 Allergen Act d 11; pathogenesis related protein, PR-10, Bet v 1-like protein [Actinidia deliciosa]
MDLSGKMVKQVEILSDGIVFYEIFRYRLYLISEMSPVNIQGVDLLEGNWGTVGSVIFFKY
TIDGKEKTAKDIVEAIDEETKSVTFKIVEGDLMELYKTFIIIVQVDTKGEHNSVTWTFHY
EKLKEDVEEPNTLMNFCIEITKDIETYHLK
>AEE98392.1 Allergen Man e 5; glutamic acid rich protein / Hev b 5-like protein [Manihot esculenta]
MATAEVVTAQTALPEEKPAEEVKVSEIVTEEAAPAVEPVAEEPKEAEPVAVSEEPKGGDD
APAEVAVETKEVVEVEEAKTVTEEPTVEKTEEEEETPKEETPEPVVVKETPKEEPTAETV
VEEAPKETTEAATEAEAPAPESAPASAPETPAEEEVPKEEEGDEKKSEAEVEAEKTE
>AEH31546.1 Allergen Tri a 36; LMW glutenin [Triticum aestivum]
MKTFLIFALLAIVATSAIAQMENSHIPGLERPSQQQPLPPQQTLSHHQQQQPIQQQPQPF
SQQQPCSQQQQQPLSQQQQPPFSQQQPPFSQQQQQPLSQQQQPPFSQQQPPFSQQQQPPF
SQQQPPFSQQQQPVLPQQPSFSQQQLPPFSQQQSPFSQQQQIVLQQQPPFLQQQQPSLPQ
QPPFSQQQQQLVLPQQQIPFVHPSILQQLNPCKVFLQQQCSPVAMPQSLARSQMLQQSSC
HVMQQQCCQQLPQIPQQSRYEAIRAIIYSIILQEQQQVQGSIQTPQQQPQQLGQCVSQPQ
QQSQQQLGQQPQQQQLAQGTFLQPHQIAQLEVMTSIALRTLPTMCRVNVPLYRTTTSVPF
GVGTGVGSY
>CBM42660.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
MAWRKEEGAMTMLRALLVVALAVCGAHAAGDKKKAEESKKGDSPAAAAASGPGGSFDITK
LGASGDGKTDSTKALEEAWASACGGKGKQTILIPKGDYLTGALNFTGPCTGDVTFQLDGN
LLASTDLSQFKANWIEILRVDNLVITGKGKLDGQGSAVWSKNSCAKKYDCKILPNSLVLD
FCNKAEVSGISIINSKFFHMNVFQCKDVVIKDVTVSAPGDSPNTDGIHMGDSSGVSIIDT

TIGVGDDCISIGPGSTKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSSN
GLRIKAYEDAKSVLTCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTF
KDITGTSSTPEAVSLLCSDSTPCSGITMNNVKVEY
>CBM42661.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
MAWGAMTMLRALLVVALAVCGAHAAGDKKKAEESKKGDSPAAAAASGPGGSFDITKLGAS
GDGKTDSTKALEEAWASACGGKGKQTILIPKGDYLTGALNFTGPCTGDVTFQLDGNLLAS
TDLSQFKANWIEILRVDNLVITGKGKLDGQGSAVWSKNSCAKKYDCKILPNSLVLDFCNK
AEVSGISIINSKFFHMNVFQCKDVVIKDVTVSAPGDSPNTDGIHMGDSSGVSIIDTTIGV
GDDCISIGPGSTKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSSNGLRI
KAYEDAKSVLTCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTFKDIT
GTSSTPEAVSLLCSDSTPCSGITMNNVKVEY
>CBM42662.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
MAWRKEEGAMTMLRALLVLALAVCGAHAGAKKAEESKKGDSPAAAAASGPGGSFDITKLG
ASGDGKTDSTKALEEAWASACGGKGKQTILIPKGDYLTGALNFTGPCTGDVTFQLDGNLL
ASTDLSQFKANWIEILRVDNLVITGKGKLDGQGQAVWSKNSCAKKYDCKILPNSLVLDFC
NKAEVSGISIINSKFFHMNVFQCKDVVIKDVTVSAPGDSPNTDGIHMGDSSGVSIIDTTI
GVGDDCISIGPGSTKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSTNGL
RIKAYEDAKSVLTCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTFKD
ITGTSSTPEAVSLLCSDSTPCSGITMNNVKVEY
>CBM42663.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
MAWRKEEGAMTMLRALLVLALVVCGAHAGAKKVEESKKGDSPAAAAASGPGGSFDITKLG
ASGDGKTDSTKALEEAWASACGGKGKQTILIPKGDYLTGALNFTGPCTGDVTFQLDGNLL
ASTDLSQFKANWIEILRVDNLVITGKGKLDGQGQAVWSKNSCAKKYDCKILPNSLVLDFC
NKAEVSGISIINSKFFHMNVFQCKDVVIKDVTVSAPGDSPNTDGIHMGDSSGVSIIDTTI
GVGDDCISIGPGSTKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSTNGL
RIKAYEDAKSVLTCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTFKD
ITGTSSTPEAVSLLCSDSTPCSGITMNNVKVEY
>CBM42664.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
ITGINITGVTCGPGHGISVGSLGRYKDEKDVTDINVKGCTLKKTSNGVRIKSYEDAASVL
SASNLHYENIAMEDVANPIIIDMKYCPNKICTKNGASKVTIKDVTFKNITGTSSTPEAVS
LLCSEKLPCTGVTLDNVKVEYKGTNNKTMAVCNNAKGSSTGCLKELACL
>CBM42665.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
STGINITGVTCGPGHGISVGSLGRYKDEKDVTDINVKGCTLKKTSNGVRIKSYEDAASVL
SASNLHYENIAMEDVANPIIIDMKYCPNKICTKNGASKVTIKDVTFKNITGTSSTPEAVS
LLCSEKLPCTGVTLDNVKVEYKGTNNKTMAVCNNAKGSSTGCLKELACL
>CBM42666.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
STKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSTNGLRIKAYEDAKSVL
TCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTFKDITGTSSTPEAVS
LLCSDSTPCSGITMNNVKVEYSGSNNKTMAVCKNAKGSATGGLKELACF
>CBM42667.1 Allergen group 13 grass pollen allergen [Paspalum notatum]
STKVNITGVTCGPGHGISIGSLGRYKDEKDVTDINVKDCTLKKSSNGLRIKAYEDAKSVL
TCSNIHYENVKMEDAGYPIIIDMKYCPNKICSASAGSKVTVKDVTFKDITGTSSTPEAVS
LLCSDSTPCSGITMNNVKVEYSGSNNKTMAVCKNAKGSATGGLKELACF
>AEK65120.1 Putative arginine kinase [Amphioctopus fangsiao]
MAEELFKTLQNAKECHSLLKKHLTKERFDKLKGLKTKFGGTLADCIRSGCKNPDSGVGIY
ASDPDAYTVFAEVLDAVIMDYHKIDKVHHPIPDFGDVNNLNIGDLDPSGNMIVSTRVRVG
RSHDSFGFPPVLKKDDRIKMEQVSVEALKSLDGELAGSYFPLANMSADVQKQLTEDHFLF
NDSDRFLKAASGYDDWPIGRGIYFSENKTFLCWVNEEDHLRLISMQKGGNLGEVYKRLVS
AINKMEKKLNFAKKDNMGYLTFCPSNLGTTMRASVHIKIPKLSQRSDFKSICDKYNLQAR
GIHGEHTESVCGVYDISNKRRMGLTEYEAVTEMMRGVNEIIREETNST
>2XV9_A Putative Chain A, The Solution Structure Of Aba-1a Saturated With
Oleic Acid [Ascaris suum]
GSPEFHHFTLESSLDTHLKWLSQEQKDELLKMKKDGKAKKELEAKILHYYDELEGDAKKE
ATEHLKGGCREILKHVVGEEKAAELKNLKDSGASKEELKAKVEEALHAVTDEEKKQYIAD

FGPACKKIYGVHTS
>AEM89226.1 Putative enolase, partial [Fenneropenaeus merguiensis]
FTEAMRMGSEVYHHLKAVIKGRFGLDATAVGDEGGFAPNILNNKDALTLIQESIEKAGYT
GKIEIGMDVAASEFYKGENIYDLDFKTANNDGSQKITGDQLRDMYMEFCNEFPIVSI
>CCD28287.1 Allergen pollen allergen Phl p 5 [Phleum pratense]
MAVHQYTVALFLAVALVAGPAASYAADLGYGPATPAAPAAGYTPAAPAGAEPAGKATTEE
QKLIEKINAGFKAALAAAAGVPPADKYRTFVATFGAASNKAFAEGLSGEPKGAAESSSKA
ALTSKLDAAYKLAYKTAEGATPEAKYDAYVATLSEALRIIAGTLEVHAVKPAAEEVKVIP
AGELQVIEKVDAAFKVAATAANAAPANDKFTVFEAAFNNAIKASTGGAYESYKFIPALEA
AVKQAYAATVATAPEVKYTVFETALKKAITAMSEAQKAAKPAAAATATATSAVGAATGAA
TAAAGGYKV
>3S7E_A Allergen Chain A, Crystal Structure Of Ara H 1 [Arachis hypogaea]
MSRNNPFYFPSRRFSTRYGNQNGRIRVLQRFDQRSRQFQNLQNHRIVQIEAKPNTLVLPK
HADADNILVIQQGQATVTVANGNNRKSFNLDEGHALRIPSGFISYILNRHDNQNLRVAKI
SMPVNTPGQFEDFFPASSRDQSSYLQGFSRNTLEAAFNAEFNEIRRVLLEENAGGEQEER
GQRRWSTRSSENNEGVIVKVSKEHVEELTKHAKSVSKKGSEEEGDITNPINLREGEPDLS
NNFGKLFEVKPDKKNPQLQDLDMMLTCVEIKEGALMLPHFNSKAMVIVVVNKGTGNLELV
AVRKEQQQRGRREEEEDEDEEEEGSNREVRRYTARLKEGDVFIMPAAHPVAINASSELHL
LGFGINAENNHRIFLAGDKDNVIDQIEKQAKDLAFPGSGEQVEKLIKNQKESHFVSAR
>AEQ28167.1 Putative tropomyosin [Anisakis simplex]
MDAIKKKMQAMKIEKDNALDRADAAEGKVRQMTDKLERIEEELRDTQKKMMQTENDLDKA
QEDLSTANSNLEEKEKKVQEAEAEVAALNRRMTLLEEELERAEERLKLATXKLEEATHTA
DESERVRKVMENRSFQDEERANTVESQLKEXQMLAEEADRKYDEVARKLAMVEADLERAE
ERAEAGENKIVELEEELRVVGNNLKSLEVSEEKALQREDSYEEQIRTVSARLKEAETRAE
FAERSVQKLQKEVDRLEDELVHEKERYKSISEELDQTFQELSGY
>NP_001238443.1 Allergen Gly m 8; 2S albumin [Glycine max]
MTKFTILLISLLFCIAHTCSASKWQHQQDSCRKQLQGVNLTPCEKHIMEKIQGRGDDDDD
DDDDNHILRTMRGRINYIRRNEGKDEDEEEEGHMQKCCTEMSELRSPKCQCKALQKIMEN
QSEELEEKQKKKMEKELINLATMCRFGPMIQCDLSSDD
>AET05730.1 Putative lipid transfer protein isoform a, partial [Pyrus communis]
AHAITCSQVSSNLAPCINYVRSGGAVPPACCNGIKTINGLANTTPDRQAACNCLKNLAGS
VSGVNPGNAESLPGKCGVNVPYKISTSTNCATVK
>AET05732.1 Putative lipid transfer protein isoform c, partial [Pyrus communis]
AHAITCSQVSSNLAPCINYVRSGGAVPPACCNGIKTINGLANTTPDRQAACNCLKNLAGS
VSGVNPGNAESLPGKCGVNVPCKISTPTNCATVK
>AET05733.1 Putative lipid transfer protein isoform d, partial [Pyrus communis]
AHAITCSQVTSNLGACIGYVKNGGVVPPACCNGIRTVNGLARTTADRQTTCNCLKSLAGS
IKGVNPNNAATLPGKCGVNVPFKISTSTNCATVK
>AEV23867.1 Allergen Per a 5; gluthatione S-transferase [Periplaneta americana]
MTIDFYYLPGSAPCRSVLLAAKAIGVDLNLKVTNLMAGEHLTPEFLKMNPQHTIPTLNDN
GFCLWESRAILSYLADQYGKDDSLYPKDAKKRALVDQRLYFDIGTLYHRFGEYYYPIYFA
KQAADPEKMKKLEEAFEFLNKFLESQEFVAGNKLTIADLAIVSSVSTADIMGFDVSKYSN
VAKWFEKCKKIVPGYEELNHSGCLKFKEMCDNLAKK
>AEV41413.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAIFSSNSATSSSLPSRTTSILLVLFIASLSITDAQVGVCYGMLGNNLPPASQVISLYKQ
ANIKRMRIYDPNQAALQALRGSNIQLMLGVPNSDLQSLTNPSNANSWIQRNVRAFWPSVR
FRYIAVGNEISPVNGGTASLAKFVLPAMRNIYNAIRSAGLQDQIKVSTAIDMTLIGNSYP
PSAGAFRGDVRSYLDPIIGFLSSIRSPLLANIYPYFSYAGNPRDISLPYALFTSPSIVVW
DGQRGYKNLFDAMLDALYSALERAGGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLIQ
HVKGGTPKRPGRFIETYLFAMFDENQKQPEFEKHFGLFFPNKQQKYNLNFGAKKNWDISA

DYNATVLLLKSDI
>AEV57471.1 Allergen thaumatin-like protein 2 [Prunus persica]
MMKSQAALLGLTTLAILFFSGAHAAKITFTNKCSYTVWPGTLTGDQKPQLSLTGFELATG
ISNSVDAPSPWSGRFFGRTRCSTDASGKFSCATADCGSGQVSCNGNGAVPPATLVEITIA
ENGGQDFYDVSLVDGFNLPMAVAPQGGTGECKASTCPADVNAVCPAELQVKGSDGSVIAC
KSACLALNQPQYCCTPPNDKPETCPPTEYSKIFKDQCPQAYSYAYDDKSSTFTCSARPDY
LITFCP
>B3A0N2.1 Putative RecName: Full=Non-specific lipid-transfer protein;
Short=LTP [Lycium barbarum]
GPLGGCCGGIKKSAAAGISGINYGIAAGLPGKCGVNIPYKISPSTDCSKVQ
>AEX34122.1 Allergen Pen cr 26; ribosomal phosphoprotein P1 [Penicillium
crustosum]
MSTAELACSYAALILADDGIEISADKIQTLISAANVQEVEPIWASIFARALEGKDIKELL
TNVGSAGPASAAPAGAAGAAAPAEEKAEEKEEEKEESDEDMGFGLFD
>AEY79726.1 Putative cyclophilin [Daucus carota]
MANPKVFFDMTIGGTPAGKIVMELYADTTPKTAENFRALCTGEKGTGKSGKPLHYKGSSF
HRVIPGFMCQGGDFTAGNGTGGESIYGAKFADENFERKHTGPGILSMANAGPGTNGSQFF
ICTAKTEWLDGKHVVFGKVVEGMDVVKAIEKVGSGSGKTSKPVAIADCGQC
>AEY79727.1 Putative isoflavone reductase-like protein [Daucus carota]
MATKILIVGGTGYIGKFIVEASAKAGHPTFVLVREATLTSPDKSQLIDSFKSLGVTFVHG
DLYDHGSLVKAIKQVDVVISALGHGQLADQDKLLAAIVEAGNVKRFFPSEFGQDVDRVNA
VEPAKSAFAAKALFRRTVEAAGVPFTYVACNFFAGYFLPTLAQAGAAAPPRDKAVILGDG
IPKVAFNKEEDIATYTIKAVDDPRTLNKILYVRPPHNTLSFNELLSVWEKKIGKTLEKIY
VPEEQVLKNIQESPVPINVLLSISHSAFVKGDQTSFEIEPSYGVEASALYPDVKYTTVDV
YLSQFV
>AEY79728.1 Allergen Dau c 5; isoflavone reductase-like protein [Daucus
carota]
MATKILIVGGTGYIGKFIVEASAKAGHPTFVLVREATLTSPDKSQLIDSFKSLGVTFVHG
DLYDHGSLVKAIKQVDVVISTLGHGQLADQDKLLAAIVEAGNVKRFFPSEFGQDVDRVNA
VEPAKSAFAAKAQFRRTVEAAGVPFTYVACDFFAGYFLPTLAQAGAAAPPRDKAVILGDG
IPKVAFNKEEDIATYTIKAVDDPRTLNKILYVRPPHNTLSFNELLSVWEKKIGKTLEKIY
VPEEQVLKSIQESPVPINVLLSISHSAFVKGDQTSFEVEPSFGVEASALYPDVKYTTVDE
YLSQFV
>CCF72371.1 Allergen Can f 6; lipocalin [Canis familiaris]
MKLLLLCLGLILVHAHEEENDVVKGNFDISKISGDWYSILLASDIKEKIEENGSMRVFVK
DIEVLSNSSLIFTMHTKVNGKCTKISLICNKTEKDGEYDVVHDGYNLFRIIETAYEDYII
FHLNNVNQEQEFQLMELYGRKPDVSPKVKEKFVRYCQGMEIPKENILDLTQVDRCLQARQ
SEAAQVSSAE
>AFA45339.1 Allergen Pro c 2; arginine kinase [Procambarus clarkii]
MADAATIAKLEEGFKKLEAATDCKSLLKKYLSKSIFDSLKAKKTGLGATLLDVIQSGVEN
LDSGVGIYAPDAEAYSLFAPLFDPIIEDYHKGFKQTDKHPNKDFGDVNQFVNVDPDGKFV
ISTRVRCGRSLEGYPFNPCLTEAQYKEMEEKVSSTLSGLEGELKGTYYPLAGMTKEVQQK
LIDDHFLFKEGDRFLQAANACRYWPVGRGIYHNDNKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVSAVNDIEKRVPFSHHDRLGFLTFCPTNLGTTIRASVHIKLPKLAANREKLEEV
AARYSLQVRGTRGEHTEAEGGVYDISNKRRMGLTEFQAVKEMQDGILELIKIEKEMA
>AFA45340.1 Allergen Scy p 2; arginine kinase [Scylla paramamosain]
MADAAVIEKLEEGFKKLEAATDCKSLLKKYLTKSVFDQLKGKKTSLGATLLDVIQSGVEN
LDSGVGVYAPDAEAYTLFAPLFDPIIEDYHKGFKQTDKHPNKDFGDVNQFVNVDPDGKFV
ISTRVRCGRSMEGYPFNPCLTEAQYKEMESKVSSTLSNLEGELKGTYYPLTGMTKDVQQK
LIDDHFLFKEGDRFLQAANACRYWPTGRGIYHNDNKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVSAVNEIEKRVPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANREKLEEV
AGKYSLQVRGTRGEHTEAEGGVYDISNKRRMGLTEFQAVKEMQDGILELIKIEKEMQ
>P86137.2 Allergen Act d 10; lipid transfer protein [Actinidia deliciosa]
AVSCGQVDTALTPCLTYLTKGGTPSTQCCSGVRSLKSMTGTKVPDRQAACNCLKQAAARY

QGIKDAAAALSQKCGVQLSVPISRSTDCSKIS
>P85204.1 Allergen RecName: Full=Non-specific lipid-transfer protein 1; Short=LTP1; AltName: Allergen=Act c 10 [Actinidia chinensis]
AVSCGQVDTALTPCL
>P85206.1 Allergen Act d 10; lipid transfer protein [Actinidia deliciosa]
TVSCGQVDTALTPCLTYLTKGGTPSTQCCSGVRSLKSMTGTKVPDRQAACNCLKQAAARY
QGIKDAAAALSQKCGVQLSVPISRSTDCSKIS
>CBL79147.1 Allergen aldolase A [Salmo salar]
MPHAFPFLTPDQKKELSDIAHKIVAQGKGILAADESTGSVAKRFQSINTENTEENRRLYR
QLLFTADERAGPCIGGVIFFHETLYQKTDAGKTFPQHVKSRGWLVGIKVDKGVVPLAGTN
GETTTQGLDGLYERCAQYKKDGCDFAKWRCVLKITSTTPSRLTIMENCNVLARYASICQM
HGIVPIVEPEILPDGDHDLKRTQYVTEKVLAAMYKALSDHHVYLEGTLLKPNMVTAGHSC
SHKYTHQDIAMATITALRRTVPPAVPGITFLSGGQSEEEASINLNVMNQCPLHRPWAITF
SYGRALQASALKAWGGKPKNGKAAQEEFIKRALANSLACQGKYVSSGDSAAAGDSLFVAN
HAY
>CBL79145.1 Allergen enolase [Thunnus albacares]
MSILKIHAREIFDSRGNPTVEVDLYTKKGLFRAAVPSGASTGIYEALELRDNDKTRYMGK
GVKRAVKYINEFLAPALCNQDVTVIEQEKIDKLMLDMDGTENKYKFGANAILGVSLAVCK
AGAAEKGVPLYRHIADLAGNPEVILPVPAFNVINGGSHAGNKLAMQEFMILPVGASSFKD
AMRIGAEVYHNLKNVIKEKYGKDATNVGDEGGFAPNILENKEALKLLKNAIGKAGYTDKI
VIGMDVAASEFYKGGKYDLDFKSPDDPSRYIPSDKLADLYKGFVKDYPVVSIEDPFDQDD
WEAWSKFTASTSIQVVGDDLTVTNPKRIAKGVAEKSCNCLLLKVNQIGSVTESLQACKMA
QSSGWGVMVSHRSGETEDTLISDLVVGLCTGQIKTGAPCRSERLAKYNQLMRIEEELGAK
AKFAGKNFRHPI
>CBL79146.1 Allergen enolase [Salmo salar]
MSILKIHAREIFDSRGNPTVEVDLYTKKGLFRAAVPSGASTGIYEALELRDNDKTRYLGK
GVKRSVKYINEFLAPALCNQDVSVLEQEKVDQLMLDMDGTENKSKFGANAILGVSLAVCK
AGAAEKGVPLYRHIADLAGNPNVILPVPAFNVINGGSHAGNKLAMQEFMTLPVGASTFKE
AMRIGAEVYHNLKNVIKKNYGQDATNVGDEGGFAPNILENKEALELLKEAIGKAGYTDKI
VIGMDVAASEFYKDGKYDLDFKSPDDPSRYITPDQLGDLYKSFVKDYPVVSIEDPFDQDD
WAAWSKFTAETSIQVVGDDLTVTNPKRIAKGVADKACNCLLLKVNQIGSVTESLQACKMA
QTNGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERLAKYNQLLRIEEELGDK
AVFAGKNFRHPI
>AFJ68065.1 Allergen Der p 1 variant, partial [Dermatophagoides pteronyssinus]
EARPSSIKTFEEYKKAFNKSYATFEDEEAARKNFLESVKYVQSNGGAINHLSDLSLDEFK
NRFLMSAEAFEHLKTQFDLNAETNACSINGNAPAEIDLRQMRTVTPIRMQGGCGSCWAFS
GVAATESAYLAYRNQSLDLAEQELVDCASQHGCHGDTIPRGIEYIQHNGVVQESYYRYVA
REQSCRRPNAQRFGISNYCQIYPPNVNKIREALAQTHSAIAVIIGIKDLDAFRHYDGRTI
IQRDNGYQPNYHAVNIVGYSNAQSVDYWIVRNSWDTNWGDNGYGYFAANIDLMMIEEYPY
VVIL
>AFJ68066.1 Allergen Der f 1 variant, partial [Dermatophagoides farinae]
EARPASIKIFEEFKKAFNKNYATVEEEEVARKNFLESLKYVEANKGAINHLSDLSLDEFK
NRYLMSAEAFEQLKTQFDLNAETSACRINSVNVPSELDLRSLRTVTPIRMQGGCGSCWAF
SGVAATESAYLAYRNTSLDLSEQELVDCASQHGCHGDTIPRGIEYIQQNGVVEERSYPYV
AREQQCRRPNSQHYGISNYCQIYPPDVKQIREALTQTHTAIAVIIGIKDLRAFQHYDGRT
IIQHDNGYQPNYHAVNIVGYGSTQGVDYWIVRNSWDTTWGDSGYGYFQAGNNLMMIEQYP
YVVIM
>AFJ68067.1 Allergen Der p 2 variant 1, partial [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGSEPCIIHRGKPFQLEALFEANQNSKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVLGDNGVLACA
IATHAKIRD

>AFJ68070.1 Allergen Der p 2 variant 4, partial [Dermatophagoides pteronyssinus]
DQVDVKDCANHEIKKVLVPGCHGSETCIIHRGKPFQLEAVFEANQNTKTAKIEIKASIDG
LEVDVPGIDPNACHYMKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKVMGDDGVLACA
IATHAKIRD
>AFJ68072.1 Allergen Der f 2, partial [Dermatophagoides farinae]
DQVDVKDCANNEIKKVMVDGCHGSDPCIIHRGKPFTLEALFGANQNTKTAKIEIKASLDG
LEIDVPGIDTNACHFVKCPLVKGQQYDIKYTWNVPKIAPKSENVVVTVKLIGDNGVLACA
IATHGKIRD
>AFJ97274.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASLGITDAQVGVCYGMQGNNLPSVSEVIALYK
QSNIKRMRIYDPNRAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
RFRYIAVGNEISPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDKIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSSRSPLLANIYPYFTYAYNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHFGLFFPDKRPKYNLNFGAEKNWDIS
TEHNATILFLKSDM
>AFJ97275.1 Allergen beta-1,3-glucanase [Hevea brasiliensis]
MAISSSTSGTSSSLPSRTTVMLLLIFFTASLGITDAQVGVCYGMQGNNLPSVSEVIALYK
QSNIKRMRIYDPNQAVLEALRGSNIELILGVPNSDLQSLTNPSNANSWVQKNVRGFWSSV
RIRYIAVATKLVPVNGGTAWLAQFVLPAMRNIHDAIRSAGLQDQIKVSTAIDLTLVGNSY
PPSAGAFRDDVRSYLDPIIGFLSSIRSPLLANIYPYFTYADNPRDISLPYALFTSPSVVV
WDGQRGYKNLFDATLDALYSALERASGGSLEVVVSESGWPSAGAFAATFDNGRTYLSNLI
QHVKGGTPKRPNRAIETYLFAMFDENKKQPEVEKHSGLFFPDKRPKYNLNFGAEKNWDIS
TEHDATILFLKSDM
>3V0R_A Allergen Chain A, Crystal Structure Of Alternaria Alternata Allergen Alt A 1 [Alternaria alternata]
MDTASCPVTTEGDYVWKISEFYGRKPEGTYYNSLGFNIKATNGGTLDFTCSAQADKLEDH
KWYSCGENSFMDFSFDSDRSGLLLKQKVSDDITYVATATLPNYCRAGGNGPKDFVCQGVA
DAYITLVTLPKSS
>AFM77001.1 pathogenesis related protein 5, partial [Malus domestica]
LTGFELASKASRSVDASSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPP
ATLVEITIAANGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNAACPAQLQVK
AADGSVISCKSACLAFGDSKYCCTPPNNTPETCPPTEYSEIFEKQCPQAYSYAYDDKNST
FTCSGGPDYVITF
>CCK33471.1 Allergen Tri a 39; serine protease inhibitor [Triticum aestivum]
MSPVVKKPEGRNTDTSDHHNQKTEWPELVGKSVEEAKKVILQDKSEAQIVVLPVGTIVTM
EYRIDRVRLFVDSLDKIAQVPRVG
>3TSH_A Allergen Chain A, Crystal Structure Of Phl P 4, A Grass Pollen Allergen With Glucose Dehydrogenase Activity [Phleum pratense]
YFPPPAAKEDFLGCLVKEIPPRLLYAKSSPAYPSVLGQTIRNSRWSSPDNVKPLYIITPT
QVSHIQSAVVCGRRHSVRIRVRSGGHDYEGLSYRSLQPETFAVVDLNKMRAVWVDGKART
AWVDSGAQLGELYYAIYKASPTLAFPAGVCPTIGVGGNFAGGGFGMLLRKYGIAAENVID
VKLVDANGKLHDKKSMGDDHFWAVRGGGGESFGIVVAWQVKLLPVPPTVTIFKISKTVSE
GAVDIINKWQVVAPQLPADLMIRIIAQGPKATFEAMYLGTCKTLTPLMSSKFPELGMNPS
HCNEMSWIQSIPFVHLGHRDALEDDLLNRQNSFKPFAEYKSDYVYQPFPKTVWEQILNTW
LVKPGAGIMIFDPYGATISATPESATPFPHRKGVLFNIQYVNYWFAPGAAAAPLSWSKDI
YNYMEPYVSKNPRQAYANYRDIDLGRNEVVNDVSTYASGKVWGQKYFKGNFERLAITKGK
VDPTDYFRNEQSIPPLIKKY
>P86360.1 Allergen Tha p 2; unknown function [Thaumetopoea pityocampa]
MKLLIFAILIALSSSVPQLSEKAEEAVDLAYQEKNNLFDLGSVAGDILSRSGCHVSFGCH
KGYCWAGCGDPTNPWSWGENWCYTTKSYSQSYSYVQCTQDSECDGCWKCGGPCSA

>P86888.1 Allergen Pru p 7; gibberellin-regulated protein [Prunus persica]
GSSFCDSKCGVRCSKAGYQERCLKYCGICCEKCHCVPSGTYGNKDECPCYRDLKNSKGNP
KCP
>AFV53352.1 Allergen Ore m 4; tropomyosin [Oreochromis mossambicus]
MDAIKKKMQMLKLDKENALDRAEQAESDKKAAEDRSKQLEDDLVALQKKLKGTEDELDKY
SEALKDAQEKLELAEKIATDAEGEVASLNRRIQLVEEELDRAQERLATALTKLEEAEKAA
DESERGMKVIENRAMKDEEKMELQEIQLKEAKHIAEEADRKYEEVARKLVIIEGDLERTE
ERAELSEGKCSELEEELKTVTNNLKSLEAQAEKYSQKEDKYEEEIKALTDKLKEAETRAE
FAERSVAKLEKTIDDLEDELYAQKLKYKAISEELDHALNDMTSI
>BAB21619.2 Putative allergen Gly m Bd 28K [Glycine max]
MGNKTTLLLLLFVLCHGVATTTMAFHDDEGGDKKSPKSLFLMSNSTRVFKTDAGEMRVLK
SHGGRIFYRHMHIGFISMEPKSLFVPQYLDSNLIIFIRRGEAKLGFIYDDELAERRLKTG
DLYMIPSGSAFYLVNIGEGQRLHVICSIDPSTSLGLETFQSFYIGGGANSHSVLSGFEPA
ILETAFNESRTVVEEIFSKELDGPIMFVDDSHAPSLWTKFLQLKKDDKEQQLKKMMQDQE
EDEEEKQTSRSWRKLLETVFGKVNEKIENKDTAGSPASYNLYDDKKADFKNAYGWSKALH
GGEYPPLSEPDIGVLLVKLSAGSMLAPHVNPISDEYTIVLSGYGELHIGYPNGSRAMKTK
IKQGDVFVVPRYFPFCQVASRDGPLEFFGFSTSARKNKPQFLAGAASLLRTLMGPELSAA
FGVSEDTLRRAVDAQHEAVILPSAWAAPPENAGKLKMEEEPNAIRSFANDVVMDVF
>AGA84056.1 Allergen profilin [Arachis hypogaea]
MSWQTYVDDHLLCEIEGNHLSSAAILGQDGSVWAQSSNFPQFKPEEITAIMNDFAEPGSL
APTGLYLGGTKYMVIQGEPGTVIRGKKGPGGVTIKKTNQALIIGIYDEPMTPGQCNMIVE
KLGDYLIDTGL
>AGC39164.1 Putative kiwellin [Actinidia deliciosa]
MAQLALLLLSLFLTLISLAPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHIC
RGTTPSPQPGGCKPSGTLTCRGKSHPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39165.1 Putative kiwellin [Actinidia deliciosa]
MAQLALLLLSLFLTLISLAPPGTSISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
RGTTPSPQPGGCKPSGTLTCRGKSHPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39166.1 Putative kiwellin [Actinidia deliciosa]
MAQLALLLLSLFLTLISLAPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHIC
RGTTPSPQPGGCKPSGTLTCRGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39167.1 Putative kiwellin [Actinidia deliciosa]
MAQLSLLVLSLFLTLISLPPPGASISSCNGPCRDLNDCDGQLICIEGKCNDDPEVGTHIC
RGTTPSPQPGGCKPSGTLTCRGKSHPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39168.1 Allergen Act c 5; kiwellin [Actinidia chinensis]
MAQLSLLLLSLFLTLISLPPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
RGTTPSPQPGGCKPSGTLTCQGKSHPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLNKNVGVVDITWSMA
>AGC39169.1 Putative kiwellin [Actinidia eriantha]
MAQLSLLLLSLFLTLISLAPSGASISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
RGTTPSPQPGGCNPSGTLTCRGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ERYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39170.1 Putative kiwellin [Actinidia eriantha]

MAQLSLLLLSLFLTLISLAPSGASISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHIC
RGTTPSPQPGGCNPSGTLTCRGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ERYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39171.1 Putative kiwellin [Actinidia eriantha]
MAQLSLLFLSLFLTLISLAPSGASISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
RGTTPSPQPGGCNPSGTLTCRGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ERYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39172.1 Putative kiwellin [Actinidia arguta]
MAQLTLLLLSLFLTLISLPPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
GGTTPSPQPGSCNPSGTLTCQGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39173.1 Putative kiwellin [Actinidia arguta]
MAQLTLLLLSLFFTLISLPPPGASISSCNGPCRDLNDCNGQLICIKGKCNDDPEVGTHIC
GGTTPSPQPGSCKPSGTLTCQGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39174.1 Putative kiwellin [Actinidia arguta]
MAQLTLLLLSLFLTLISLPPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPEVGTHIC
GGTTPSPQPGGCNPSGTLTCQGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDGGGPSECD
ESYHSNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>AGC39176.1 Allergen thaumatin-like protein [Actinidia chinensis]
MSTFKSLSLSALLFIAFLFTCARGATFNIINNCPFTVWAAAVPGGGKRLDRGQNWIINPG
AGTKGARVWARTGCNFDGAGRGKCQTGDCNGLLQCQAFGQPPNTLAEYALNQFNNLDFFD
ISLVDGFNVAMEFSPTSGGCTRGIKCTANINEQCPNELRAPGGCNNPCTVFKTDQYCCNS
GNCGPTDYSRFFKTRCPDAYSYPKDDQTSTFTCPGGTNYKVVFCP
>AGC56216.1 Allergen Der f 25; triose-phosphate isomerase
[Dermatophagoides farinae]
MGRKFFVGGNWKMNGNKTAIKEIVDFLKNGPLDSNVEVVVGVPAIYLMLCKNILPDNIRV
AAQNCYKVDKGAFTGEISPAMIKDVGAEWVILGHSERRNVFGESDQLIGEKVEHALQEGL
HVIACIGELLEEREAGKTTEVVFRQTQVISKHVKDWFKVVLAYEPVWAIGTGKTASPQQA
QEVHQKLRQCFSENVSPQIAETIRIIYGGSVTANNAKELASQADVDGFLVGGASLKPEFV
QIVNARQ
>AGC56218.1 Allergen Der f 28; heat shock protein 70 [Dermatophagoides
farinae]
MSKTPAIGIDLGTTYSCVGVFQHGKVEIIANDQGNRTTPSYVGFTDTERLIGDAAKNQVA
MNPSNTVFDAKRLIGRKFDETTVQADMKHWPFKVIEKGNKPAIEVEFKGETKQFIPEEIS
SMVLVKMRETAEAYLGGTVNNAVITVPAYFNDSQRQATKDSGLIAGLNVLRIINEPTAAA
IAYGLDKKGGAGERNVLIFDLGGGTFDVSLLTIEEGIFEVKSTAGDTHLGGEDFDNRLVN
HFVKEFKRKHKKDLTTNARALRRLRTSCERAKRTLSSAAQTSIEIDSLFEGIDFYTSITR
ARFEELCADLFRSTMEPVERVLRDAKTDKSSVNEIVLVGGSTRIPKIQRLVADFFNKDPN
KSINPDEAIAYGAAVQASILSGDTSSKSTNEILLLDVAPLSLGIETAGGVMTALIKRDTT
IPTRSPRLSLPTPTTSLVSRFRSTRVSVLAPRTTTSLVSSSSPVSPCSSWCSSDRGHFDV
DANGIMNVGAVEKGTGKTNKITITNDKGRLSKEEIERMLAEAEKYKAEDEAEAARIHAKN
GPESYAYSLRNTVNEGKLSISDSDKEKLRARLTRLSTGSTTTRPPARRSTTLNRRSSRVL
PTPSFWLPTVVLAVVVPPLVVTPVLVALVVLTRLRSALRSLTKKVFNGVFLFPVLFDVS
>AGC56219.1 Allergen Der f 30; ferritin [Dermatophagoides farinae]
MAANPESTTKTSRVRMNIQINLEFYASYVYQQMAYHFNRDDVALPGFEKFFDVSSKEERE
HAERFMKLQNQRGGRIVLDDIHKPQQQDWSSGLEAMRAALELEKTVNQALLDLHAVATKH
NDAQFADFIETHYLTEQVEAIKKLADYITNLERCGPGLGEYLFDRHTLHSS

>B3EWE5.3 Putative RecName: Full=Thaumatin-like protein 2; AltName: Full=Basic thaumatin-like protein [Manilkara zapota]
ATFDIQNNC
>AGC60020.1 Putative Ani s 2 allergen [Anisakis pegreffii]
MSDTLYRSPSMAIRSSTADMGALTSMSVADLGSLTRLEDKIRLLQDDFESERELRNRIER
ERADLSVQLIALTDRLQDAECATDSQIESNRKREVELSKLRKLLEESQLENEDAMNVLRK
KHQDVCLDYTEQIEQLQKKNSKIDRERQRLQHEVIELTATIDQLQKDKHVAEKMAQKFEQ
QTIELSNKVEDLNKHVNDLAQQRQRLQAENSDLLAEIHDQKVQLDNLQHVKYQLAQQLEE
SRRRLEDAERERSQMQAQLHQVQLELDSVRVALDEESAARVEAEHKLSLANTEITQWKSK
FDAEVALHHEEVEDLRKKMMQKQAEYEEQIEIMLQKVSQLEKAKARLQSEVEVLIVDLEK
AQNTIAILERAKEQLEKQVLEMKSRIDELLVELEAAQREARAALAELQKMKQLYEKAVEQ
KEALARENKKLQDDLHEANEALADANRKLHELDLENARLAGEIRDLQVALKESEAARRDA
EARAQRALAELQQVRIEMERRLQEKEEEMEALRKSMQFEIDRLTAALADAEARMKAEIAR
LRKKYQAEIAELEMTVDNLNRANLEAQKTIKKQSEQIIQLQANLEDTQRQLQQTLDQYAL
AQRKISALSAELEECKTALDNAIRARKQVEADLEEAHVRISDLTSINSNLTAIKNKLETE
LSTAQADLDEVTKELHAADERANRALADAARAVQELHEEQEHSMKIDALRKSLEEQVKQL
QVQIQEAEAAALLGGKRVIAKLETRIRDLEVALDEETRRHKETQSALRKKDRRIKEVQMQ
IDEEHKMFVMAQDTADRMLEKLNIQKRQLGEAEAMTMQNLQRVRRYQRELEDAEGRADQA
ESSLNLIRAKHRGTVAVGKATDVYVVEED
>AGC60026.1 Putative Ani s 12 allergen [Anisakis pegreffii]
MVKNLPPSVREQCIESQIVIRNCKEKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAS
SLRDCIKKGGYMGYCKTFTTEENCIEWKDECAPSEAAEKKDENSLEVFPETFSQCFKSQV
VMQQCMSKGEEECSKIQKECVDAFGTPPVTYAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQDECVAATDAPT
VDANPPIFTSKMNTCVKRKMAKGL
>AGC60027.1 Putative Ani s 12 allergen [Anisakis pegreffii]
MVKNLPPSVREQCIESQIVIRDCEEKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAS
SLRDCIKKGGYMGYCSNFTTHENCIKWKDECAPSEAAEKKDENSLEVFPETFSQCFKSQV
VMQQCMSKGEEECLKIQKECVDAFGTPPVTSAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQDECVAATDAPT
VDANPPIFTSKMIRCVKRKMAKGL
>AGC60028.1 Putative Ani s 12 allergen [Anisakis pegreffii]
MVKNLPPSVREQCIESQIVIRDCEEKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAS
SLRDCIKKGGYMGYCSNFTTPENCIKWKDECAPSEAAEKTDENSLEVFPETFSQCFKSQV
VMQQCMSKGEEECLKIQKECVDAFGTPPVTSAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQDECVAATDAPT
VDANPPIFTSKMNTCVKRKMAKGL
>AGC60029.1 Putative Ani s 12 allergen [Anisakis simplex]
MVKNLPPSVREQCIESQIVIRDCEKKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAS
SLRDCIKKGGYMGYCSNFTTHENCIKWKDECAPSEAAEKKDENSLEVFPETFSQCFKSQV
VMQQCMSKGEEECSKIQKECVDAFGTPPVTYAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQDECVAATDAPT
VDANPPIFTSKMNTCVKRKMAKGL
>AGC60030.1 Putative Ani s 12 allergen [Anisakis simplex]
MVKNLPPSVREQCIESQIVIRDCEEKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAT
SLRDCIKKGGYMGYCKTFTTEENCIKWKDECAPSEAAEKTDENSLEVFPETFSQCFKSQV
VMQQCMNEGEEECSKIQKECVDAFGTPPVTYAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQEECVAATDAPT
VDANPPIFTSKMIRCVKRKMAKGL
>AGC60031.1 Putative Ani s 12 allergen [Anisakis simplex]
MVKNLPPSVREQCIESQIVIRDCEEKKYGENCAELIKQCVTITGAPPVTIGGSGQYRVAS
SLRDCIKKGGYMGYCSNFTTHENCIKWKDECAPSEAAEKTDENSLEVFPETFSQCFKSQV
VMQQCMNKGEEECSKIQKECVDAFGTPPVTYAANGAYQMAAPLHRCIENGGWMKMCSTWI
NATICERWKQECSGDKDAELPPNFSQCIQTQMVMLQCNLKFGDKCKALQDECVAATDAPT

VDANPPIFTSKMITCVKRKMAKGL
>AGC60035.1 Allergen Ani s 1 allergen [Anisakis simplex]
MDKGTPCTQEGGVKPSVAWWHDDKTGICLSFKYTGCGGNANRFTTIKNCEQHCKMPDRGA
CALGKKPAEDSNGEQLVCAGMREDKCPNGYQCKMMAFMGLCCPTKEEELFAREYEGVCKS
GKPVKMDRGSGWMMTILGKSCDDQFCPEDAKCEQGKLFANCCK
>AGC60036.1 Allergen Ani s 1 allergen [Anisakis simplex]
MDKGTPCTQEGGVKPSVAWWHDDKSGICLSFKYTGCGGNANRFTTIKNCEQHCKMPDRGA
CALGKKPAEDSNGEQLVCAGMREDKCPNGYQCKMMAFMGLCCPTKEEELFAREYEGVCKS
GKPVKMDRGSGWMMTILGKSCDDQFCPEDAKCEQGKLFANCCK
>B3EWS0.1 Putative RecName: Full=Thaumatin-like protein 1a; AltName: Full=Acidic thaumatin-like protein; AltName: Full=Beta-1,3-glucanase [Manilkara zapota]
ATFDIVNQCTFT
>CCP19647.1 Allergen Par j 3; profilin [Parietaria judaica]
MSWQTYVDDHLMCEIEGNHLTAAAILGQDGSVWAQSASFPQFKPEEIAAIVKDFEEPGTL
APTGLFLGGAKYMVIQGEAGVVIRGKKGSGGVTVKKTGQALVIGIYDEPMAPGQCNMIVE
RLGDYLIETGL
>AGE44125.1 Allergen Por p 1; tropomyosin [Portunus pelagicus]
MDAIKKKMQAMKLEKDDAMDRADTLEQQNKEANIRAEKAEEEVHNLQKRMQQLENDLDQV
QESLLKANTQLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSTTDELDQAFSELSGY
>E1U332.1 Allergen Ole e 12; isoflavone reductase-like protein [Olea europaea]
MADKTKILIIGGTGYIGKFIVEASAKSEHPTFALARESTISDPVKGKIIQGFKNSGVTIL
TGDLYDHESLVKAIKQVDVVISTVGQLQLADQVKIIAAIKEAGNVKRFFPSDFGTDVDRC
HAVEPAKSSFEIKSQIRRAIEAEGIPYTFVSANYFAGYSLPTLVQPEVTAPPRDKVIILG
DGNAKAVFNEENDIGTYTIKAVDDARTLNKILYIKPPKNIYSFNELVALWEKKIGKTLEK
IYVPEEQVLKQIQESPFPINIVMAINHSAFVKGDLTNFKIEPSFGVEASELYPDVKYTTV
EEYLDQFV
>E3SU11.1 Allergen Ole e 13; thaumatin-like protein [Olea europaea]
MNFSKNLPLLVSLWAITFFAYTHAATFDIVNQCTYTVWAAASPGGGRRLDQGQSWNINVA
PGTTQARIWGRTNCNFDANGRGQCETGDCNGLLECQGYGRPPNTLAEFALNQPNNLDFVD
ISNVDGFNIPLEFSPTTNVCRRLVCNAPIVQQCPSELRTPGGCNNPCTVFNTNEYCCTNG
PGSCGPTPLSRFFKERCPDAYSYPQDDPTSLFTCPAGTNYRVVFCP
>AGG10560.1 Allergen Tyr p 8; glutathione S-transferase [Tyrophagus putrescentiae]
MSSKPVLGYWDIRGLAQPIRLLLAYLDVDYEDKRYQLGANFDRSAWLTEKFNLGLDFPNL
PYYIDGNVKLSQTLAILRYIGRKYKLTGANEPEELRVSLVEQQVVDGNQSLSRVAYDPNA
DKLKPDFLKTLPDSVKQLSHFLGNSPFVAGTSITYVDFWLYEYLVKLSVLVPEVFGQFDN
LKKFVERIESLPRVSVYIKAQQPKLFNGPMAKWNGQYA
>NP_001306883 Allergen Sola l 6; lipid transfer protein (LTP) type 2 [Solanum lycopersicum]
MKMTKVCSFVAVMLVMILVCDQFGANEAATCSASQLSPCLGAIQGGTAPSQDCCARLKNQ
QPCICGFMKDPNLRQYVNSPNARKVAGQCGVSIPSC
>CCU98198.1 Allergen Mala s 13; thioredoxin [Malassezia sympodialis ATCC 42132]
MGVQVISSYDQFKQVTGGDKVVVIDFWATWCGPCKMIGPVFEKISDTPAGDKVGFYKVDV
DEQSQIAQEVGIRAMPTFVFFKNGQKIDTVVGADPSKLQAAITQHSA
>CCU99206.1 Putative allergen [Malassezia sympodialis ATCC 42132]
MSNVIKKVFNTDKAEAEGSKVADAPQEAGHKGEGFLHDAKDRLQGFAGHGHHNAQNAASG
VAGSAGAGGAPSVPSANVDVTNPVNDASVQGGVEAPRSWSTQLPQSQSVADTTGATSAGR
NNLTQTTSTGSGVNVAAGNVDQDVQHLAPVTRHVHHRHEIEELLREREHHIHQHHIQHHV

QPVVDSEHLAEQIHSRVVPQTTVREVHANTDKDAALMRAVAGNPKDTFTQAAIDRSVIDK
GETVREIVHHHIHNIVQPIIEKETHEYHRIRTTIPTTHITHEAPIVHESTAHQPIRKEDF
LKGGGVLTSTTRSIEEAGLLNLGNNQRTVEGETYTGGLPLSQ
>CCU99457.1 Putative allergen [Malassezia sympodialis ATCC 42132]
MSATTGSQAPNTTFTYIPWAPELDSGKVCGVPQTFKAHDRWKGKKVVVVAIPGAFTPVCH
QNHIPGFVEKINELKAKGVDEVVVIAVNDAFVMSGWGVTVGGKDQIVYACDNDLAFSKAL
GGTLDLTSGGMGVRTARYAVVLDDLKITYFGMDEGNMGAPEKSSVDAVLAQL
>CCV00099.1 Putative allergen [Malassezia sympodialis ATCC 42132]
MTEHTLPPLPYEYNALEPFISADIMMVHHGKHHQTYVNNLNASTKAYNDAVQAQDVLKQM
ELLTAVKFNGGGHVNHALFWKTMAPQSQGGGQLNDGPLKQAIDKEFGDFEKFKAAFTAKA
LGIQGSGWCWLGLSKTGSLDLVVAKDQDTLTTHHPIIGWDGWEHAWYLQYKNDKASYLKQ
WWNVVNWSEAESRYSEGLKASL
>CCU97864.1 Putative allergen [Malassezia sympodialis ATCC 42132]
MSSVVGLDIGNSSSKIGVARARGVDIVSNEVSNRSTPSLVSFGQKARLLGEGAATAQTSN
FKNTVGSLKRLIGRTFQDESIQTYEKPFVNAELVDAKGEVGVKVRFQNEEHIFSATQLLA
MYLGKLRDTTQNELGGSGVSDVVLSVPIWFTDAQRRAMLHAAEIANLNPLRVMNEPTATA
LGYGITKTDLPEPDSPRNVIFVDIGHSSYQVSVVAFCKGQLTVLGAWADPNFGGRNFDRV
LMEHFAEEFKGKYKIDVFFNPKATFRLAAGCERLKKVLSANTLAQLNVESLMNDIDAASQ
LKRDEFESLIAPYLERVNGPLDAALSQSGLTKDEIHSVELVGGSSRVPALKERIAAWYGK
PLSYTLNQDEAIVRGCTLACATLSPVFRVREFSVHDISSYPIKVSWEPAPDVPDEENELV
VFNTNNPVPSTKILTFYRKEPFSLDATYADASTLPKGTNPWLGRVTIKNVAPNEKGEHSI
VKVKARLNLHGVLNVESAYTVDEIEKEEEVPVVDPNAAEDAEPKTEKKIVKKLQRKDDLP
IVSGIGLLDPTLLAELKEREGQMYAADKLVADTEDRKNALEEYIYDTRSKLDERYATFVQ
SEEKEKLLAMLAESEDWLYTEEGEDATKSAYVSRLETLQKVGAPIHFRWKEHEERPKAAA
QLREVVNKYMSVFENEPEKYDHLSDDDKTKVIEKAATVGKWLDDYMYKQSELPKNVDPKL
TSEEILKKKDDVIYVCTPILTKPKPRVPVDTSKPEENAQTSNENEKQGDMDVD
>AGI78542.1 Allergen Der f 24; ubiquinol-cytochrome c reductase binding
protein (UQCRB) [Dermatophagoides farinae]
MVHLTKTLRFINNPGFRKFYYGLQGYNKYGLYYDDFYDYTDAAHLEAVRRLPPDLYDQHT
YRLVRASQLEITKQFLPKEQWPSYEEDMDKGRFLTPYLDEVMKEKKEKEEWINFLSKD
>AGL34967.1 Allergen Cof a 2; metallothionein type 2 [Coffea arabica]
MSCCGGNCGCGAGCKCSGGCGGCKMYPELSYTENTAAETLILGVAPPKTAYLEGAGEEAA
AENGGCKCGPDCKCNPCNCK
>AGL34968.1 Allergen Cof a 3; metallothionein type 3 [Coffea arabica]
MSDKCGNCDCADRSQCVKKGSSYAADIVETENTFVETFVMMEGGAQNGKCKCGPSCACVN
CTCDN
>AGM48615.1 group 14 major allergen 1 fragment 3, partial [Sarcoptes
scabiei]
DLDNAFNPRDGTMKLQVKDRIYDIKLKREPFRYGDLHIEGNENALIKKGDLHMSLVDPLT
LNVLTKNDGIVDMTLDLVSPNTKKAALKINSKKYDLDHDGEITVSIFNPRMTWKHHTRKG
DMELNIDADITRKGSLITYSRKEPDDSTKVRYSRQGNQVSMEVDSKLIEGHANGTLTDGK
IHVKGRESDFEIESTYKVEDGKLMIEPTKTQNGKLEGLLSRKVPSHLVLETPRVKMNMKY
DRFAPVKILKLDYDGLNYEKHIDAEYEPSNHYKYFTDGKSKRSGKGYSIKIDGKPKKALK
VDVDMPDFKF
>BAN29066.1 Allergen Tri a 20; gamma gliadin [Triticum aestivum]
NMQVDPSSQVQWPQQQPVPQPHQPFSQQPQQTFPQPQQTFPHQPQQQFPQPQQPQQQFLQ
PQQPFPQQPQQPYPQQPQQPFPQTQQPQQLFPQSQQPQQQFSQPQQQFPQPQQPQQSFPQ
QQPPFIQPSLQQQVNPCKNFLLQQCKPVSLVSSLWSMIWPQSDCQVMRQQCCQQLAQIPQ
QLQCAAIHTIIHSIIMQQEQQEQQQGMHILLPLYQQQQVGQGTLVQGQGIIQPQQPAQLE
AIRSLVLQTLPTMCNVYVPPECSIIKAPFSSVVAGIGGQ
>BAN29067.1 Allergen omega-gliadin, partial [Triticum aestivum]
ARELNPSNKELQSPQQSFSHQQQPFPQQPYPQQPYPSQQPYPSQQPFPTPQQQFPQQSQQ
PFTQPQQPTPLQPQQPFPQQPQQPQQPFPQPQQPFPWQPQQPFPQTQQSFPLQPQQPFPQ
QPQQPFPQPQLPFPQQSEQIIPQQPQQPFPLQPQQPFPQQPQQPFPQPQQPIPVQPQQSF

PQQSQQSQQPFAQPQQLFPELQQPIPQQPQQPFPLQPQQPFPQQPQQPFPQQPQQSFPQQ
PQQPFPQQPQQPFPQQPQQPFPQQPQQPFPLRPQQPFPQQPQQSQQSFPQPQPQQPQQPS
ILQPQQPLPQQPQQPFQQPQQQLSQQPEQTISQQPQQPFPQQPHQPQQPYPQQQPYGSSL
TSIGGQ
>BAN29068.1 Allergen high molecular weight glutenin subunit, partial
[Triticum aestivum]
EGEASEQLQCERELQEHSLKACRQVVDQQLRDVSPECQPVGGGPVARQYEQQVVVPPKGG
SFYPGETTPPQQLQQSILWGIPALLRRYYLSVTSPQQVSYYPGQASSQRPGQGQQEYYLT
SPQQSGQWQQPGQGQSGYYPTSPQQSGQKQPGYYPTSPWQPEQLQQPTQGQQRQQPGQGQ
QLRQGQQGQQSGQGQPRYYPTSSQQPGQLQQLAQGQQGQQPERGQQGQQSGQGQQLGQGQ
QGQQPGQKQQSGQGQQGYYPISPQQLGQGQQSGQGQLGYYPTSPQQSGQGQSGYYPTSAQ
QPGQLQQSTQEQQLGQEQQDQQSGQGRQGQQSGQRQQDQQSGQGQQPGQRQPGYYSTSPQ
QLGQGQPRYYPTSPQQPGQEQQPRQLQQPEQGQQGQQPEQGQQGQQQRQGEQGQQPGQGQ
QGQQPGQGQPGYYPTSPQQSGQGQPGYYPTSPQQSGQLQQPAQGQQPGQEQQGQQPGQGQ
QPGQGQPGYYPTSPQQSGQEQQLEQWQQSGQGQPGHYPTSPLQPGQGQPGYYPTSPQQIG
QGQQPGQLQQPTQGQQGQQPGQGQQGQQPGEGQQGQQPGQGQQPGQGQPGYYPTSLQQSG
QGQQPGQWQQPGQGQPGYYPTSSLQPEQGQQGYYPTSQQQPGQGPQPGQWQQSGQGQQGY
YPTSPQQSGQGQQPGQWLQPGQWLQSGYYLTSPQQLGQGQQPRQWLQPRQGQQGYYPTSP
QQSGQGQQLGQGQQGYYPTSPQQSGQGQQGYDSPYHVSAEHQAASLKVAKAQQLAAQLPA
MCRLEGGDALSASQ
>BAN29069.1 Putative low molecular weight glutenin subunit, partial
[Triticum aestivum]
ENSHIPGLERPWQQQPLPPQQTFPQQPLFSQQQQLFPQQPSFSQQQPPFWQQQPPFSQQQ
PILPQQPPFSQQQQLVLPQQPPFSQQQQPVLPPQQSPFPQQQQHQQLVQQQIPVVQPSIL
QQLNPCKLFLQQQCSPVAMPQRLARSQMLQQSSCHVMQQQCCQQLPQIPQQSRYEAIRAI
IYSIILQEQQQVQGSIQSQQQQPQQLGQCVSQPQQQSQQQLGQQPQQQQLAQGTFLQPHQ
IAQLEVMTSIALRTLPTMCRVNVPLYRTTTSVPFGVGTGVGGY
>AGR27935.1 Putative putative Pru du 6 allergen, partial [Prunus dulcis]
DNHIQSEAGVTESWNPSDPQFQLAGVAVVRRTIEPNGLHLPSYVNAPQFIYIVRGRGVLG
AVFPGCAETFEDSQPQQFQQQQQQQQQFRPSRQEGGQGQQQFQGEDQLDRHQKIRHIREG
DIIALPAGVAYWSYNNGEQPLVAVSLLDLSNDQNQLDQVPRRFYLAGNPQDEFNPQQQ
>AGS80276.1 Allergen Alt a 14; manganese superoxide dismutase [Alternaria
alternata]
MELHHSKHHQTYITNLNGLLKTQAEAVSTSDITSQVSIQQGIKFNAGGHINHSLFWQNLA
PASSNEAKISAAPELVKQIQATWGDEDKFKEAFSAALLGIQGSGWGWLIKTDMGKEQRLS
IVTTKDQDPVVGKGEVPIFGVDMWEHAYYLQYQNGKAAYVKNIWNVINWKTAEERYLGSR
ADAFSVLKASI
>AGT20779.1 Putative hemocyanin [Fenneropenaeus merguiensis]
MRVLVVLGLIAAAAFQVVSADVQKQKDVLYLLHRIYGDIQDADLLATANSFDPAGGSYSD
GGAAVQRLLKGLNDGRLLEQKHWFSLFNTRHRNEALLLFDVLIHSSDWATFVGNAAFFRQ
KINEGEFVYALYVAVIHSPLTEDVVLPPLYEITPHLFTNSEVIEAAYRAKQKQTPGKFES
TFTGTKKNPEQRVAYFGEDIGLNTHHVTWHMEFPFWWDDEYGHHLDRKGENFFWVHHQLT
VRFDAERLSNYLDPVGELHWYKPIVDGFAPHTTYKYGGQFPARPDNVKFEDVDDVARIRD
MVIVESRIRDAIAHGYIIDSHGKQIDISNEKGIDILGDVIESSLYSPNVQYYGALHNTAH
IVLGRQGDPHGKFDLPPGVLEHFETATRDPSFFRLHKYMDNIFKEHKDSLPPYTKADLEF
SGVSISEVNVVGELETYFEDFEYNLINAVDDAEGIPDVDISTYVPRLNHKEFTFKIDIEN
GGSPRLATVRIFAWPHKDNNGIEFTFDEGRWNAIELDKFWVSLAGGKNSIERKSTESSVT
VPDVPSIDTLFAKTAAGGDGLSEFASATGLPNRFLLPKGNDKGLEFDLVVAVTDGDADAA
VPDLHLNTKYNHYGANGVYPDKRPHGYPLDRRVPDERVFEELPNFKHIQVKVFNHGEHIH
S
>AGT28425.1 Allergen Phod s 1; odorant-binding protein [Phodopus
sungorus]
NDYAELEGKWDTIAIAADNDAKIKEEGPLRLYVRELYCNEDCSEMEVTFYVNANNQCSKT
TVIGYKQADGTYRTQFEGDNRFQPVYATPENIVFTSKNVDRAGQETNLIFVVGKSQPLTP

EQHEKLVEFAHENNIPEENIHNVLATDTCPK
>AGW21344.1 Allergen lipid transfer protein [Prunus persica]
MAYSAMTKLALVVALCMVVSVPIAQAITCGQVSSSLAPCIPYVRGGGAVPPACCNGIRNV
NNLARTTPDRQAACNCLKQLSASVPGVNPNNAAVLPGKCGVSIPYKISASTNCATVK
>CAA61943.2 Allergen Tri a 12; profilin / partial [Triticum aestivum]
MSWQTYVDDHLCCEIDGQHLTSAAILGHDGSVWTESPNFPKFKPEEIAGIVKDFEEPGHL
APTGLFLGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMALILGIYDEPMTPGQCNLVVE
RLGDYLIDQGY
>CAA61944.2 Allergen Tri a 12; profilin / partial [Triticum aestivum]
MSWQAYVDDHLCCEIDGQHLTSAAILGHDGSVWAESPNFPKFKPEEIAGIVKDFEEPGHL
APTGLFLGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMALILGIYDEPMTPGQCNLVVE
RLGDYLIDQGY
>CAA61945.2 Allergen Tri a 12; profilin / partial [Triticum aestivum]
MSWKAYVDDHLCCEIDGQNLTSAAILGHDGSVWAQSPNFPQFKPEENAGIVKDFEEPGHL
APTGLFLGGTKYMVIQGEPGVVIRGKKGTGGITIKKTGMALILGIYDEPMTPGQCNLVVE
RLGDYLIDQGY
>P86809.1 Allergen Api g 6; lipid transfer protein [Apium graveolens
Rapaceum Group]
ATCSAVQLSPCLAAITKNTPPSAACCNKLKEQKPCLCGYLKDPNLKNYVNSPGARKTASS
CGVALKC
>4C9C_B Allergen Chain B, Crystal Structure Of The Strawberry
Pathogenesis-related 10 (pr-10) Fra A 1e Protein (form A) [Fragaria x
ananassa]
AMAGVYTYENEFTSDIPAPKLFKAFVLDADNLIPKIAPQAVKCAEILEGDGGPGTIKKIT
FGEGSHYGYVKHKIHSIDKVNHTYSYSLIEGDALSENIEKIDYETKLVSAPHGGTIIKTT
SKYHTKGDVEIKEEHVKAGKEKAAHLFKLIEGYLKDHPSEYN
>AHA36627.1 Allergen Cor a 9 allergen [Corylus avellana]
MAKLILVSFSLCLLVLFNGCLGIDVGLRRQQQRHFGECNLDRLNALEPTNRIEAEAGQIE
SWDHNDQQFQCAGVAVIRRTIEPNGLLLPQYSNAPELIYIERGRGITGVLFPGCPETFED
PQQQSQQGQGQGQSQRSEQDRHQKIRYFQEGDIIALPAGVAHWCYNDGDSPVVAVSLLHT
NNYANQLDENPRHFYLAGNPDDEHQRQGQQQFGQRRRQQQHSRGKEGEQEQQGEGNNVFS
GFDAEFLADAFNVDVDTARRLQSNQDKRRNIVKVEGRLQMVRPERSRQEWERQERQERES
EQERERQRRQGGRGRDVNGFEETICSLRLMENIGSRSRADIYTEQVGRINTVNSNTLPVL
RWLQLSAERGDLQREGLYVPHWNLNAHSVVYAIRGRARVQVVDDNGNTVFDDELRQGQVL
TIPQNFAVAKRAESEGFEWVAFKTNDNAQISPLAGRTSAIRALPDDVLANAFQISREEAR
RLKYNRQETTLARSSRSSSERMRRRSESEGRAEA
>AHA85706.1 Putative tropomyosin [Macrobrachium rosenbergii]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVFSLQKRMQQLENDLDSV
QEALLKANQHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>AHB19225.1 Allergen Pun g 1; lipid transfer protein (LTP) type 1 [Punica
granatum]
MASSGFLRLAGFVLVCMAVASTVAEAGITCGQVSSSLAGCIQYARGNGAGPVPQACCNGI
RSLNSAAKTTPDRQAACRCLKSLASSISGINYGLVAGAPGKCGVSIPYKIAPSTNCDNVK
>AHB19226.1 Allergen Pun g 1; lipid transfer protein (LTP) type 1 [Punica
granatum]
MASKRFLNNLVPALFLCMVVAASVVESAVTCGQVTSSLTPCIPYARGVVAAPSAACCSGV
RSLNNAAKTTPDRQTACNCLKVIARSITGINYGRVGALPGKCGVSIPYKISPSTDCSRVK
>AHB19227.1 Allergen Pun g 1; lipid transfer protein (LTP) type 1 [Punica
granatum]
MTGSGLFKLACAVFAVALVAAPIATEAAVTCGQVASSLAPCIPYARSAGGAVPPACCSGI
KTLDGMARTTPDRQATCKCLKSASTSISGINYGLVASLPAKCGVNIPYKISPSTDCARVK

>4BK6_B Allergen Chain B, Crystal Structure Of A Dimeric Variant Of Bet V 1 [Betula pendula]
GVFNCETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFPE
GFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNKY
HTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>4BK7_A Allergen Chain A, Crystal Structure Of A Variant Of The Major Birch Pollen Allergen Bet V 1 [Betula pendula]
GVFNFETETTSVIPAARLFKAFILDGDNLFPKVAPQAISSVENIEGNGGPGTIKKISFPE
GFPFKYVKDRVDEVDHTNFKYNYSVIEGGPIGDTLEKISNEIKIVATPDGGSILKISNKY
HTKGDHEVKAEQVKASKEMGETLLRAVESYLLAHSDAYN
>AHC08073.1 Allergen Sola l 4; pathogenesis related protein, PR-10, Bet v 1-like protein [Solanum lycopersicum]
MGVNTYTYESTTTISPTRLFKALVLDFDNLVPKLLSQHVKNNETIEGDGGVGSIKQMNFV
EGGPIKYLKHKIHVIDDKNLETKYSLIEGDILGEKLESITYDIKFEANDNGGCVYKTTTE
YHTKGDHVVSEEEHNVGRERIMNISKAVEAYLLANPSVYA
>AHC08074.1 Allergen Sola l 4; pathogenesis-related protein / PR-10 / Bet v 1-like protein [Solanum lycopersicum]
MGVNTFTHESTTTIAPTRLFKGLVLDFDSLVPKLLSHDVKSIEIVEGDGGAGSIKQMNFV
EGGPIKYLKHKIHVIDDKNLVTKYSLIEGDVLGDKLESIAYDVKFEAAGDGGCVCKTTTE
YHTKGDHVVSEEEHNVGKGKAIDLFKAIEAYLLANPSVYA
>AHC94806.1 Allergen Der f 21; unknown function [Dermatophagoides farinae]
MKFIIFCAIVMAVSVSGFIVDVDTEDKWRNAFDHMLMEEFEEKMDQIEHGLLMLSEQYKE
LEKTKSKELKEQILRELTIAENYLRGALKFMQQEAKRTDLNMFERYNFETAVSTIEILVK
DLAELAKKVKAVKSDD
>CCK33472.1 Allergen Can s 3; lipid transfer protein (LTP) Type 1 [Cannabis sativa]
ITCGQVASSLAPCLSYLKVGGAVPDGCCNDIKSLSGAAKTPADRQAACKCLKSAASSIKG
VNFNLASGLPGKCGVSIPYKISPSTDCSSVK
>CCW27997.1 Allergen Hev b 15; serine protease inhibitor [Hevea brasiliensis]
MASQCPVKDAWPELIGTNGDIAAGIIETENANVKAIVLKKGSPMTMEYNLCRVLVFVDDN
RVVTQAPAIG
>AHF71027.1 Allergen Bet v 8; glutathione S-transferase [Betula pendula]
MADASVKEHLPTPLDATSNPPPIFDGTTRLYTCYTCPFAQRVWITRNYKGLQEKIKLVPI
NLQNRPAWYKEKVYPENKVPALEHNGKVIGESLDLIKYVDINFEGPSLLPNDPAKKAFAE
ELVAYSDTFNKTVFTSFKGDPVKEAGPAFDHLEKALHKFDDGPFFLGQFSAVDIVYIPFV
ERFQIFLLDALKYDITAGRPKLAKWIEELNKIDAYKPTKTDPKELVEFYKARFAAQQ
>P86980.1 Allergen Gad m 3; aldolase [Gadus morhua]
PHAYPFLSPEQKKEL
>P86979.1 Allergen Thu a 3; aldolase [Thunnus albacares]
PHAFPFLTPEQKKELSDIAHKIVAPGKGILAADESTG
>B3A0L6.1 Allergen Gad m 2; enolase [Gadus morhua]
SITKIKAREIL
>P86978.1 Allergen Thu a 2; enolase [Thunnus albacares]
SITKIKAREILD
>P0DMB4.1 Allergen RecName: Full=Phospholipase A1 1; AltName: Full=Vespapase; AltName: Allergen=Dol Ves a 1.01; Flags: Precursor [Vespa affinis]
MMNLKYLLFFCLVQALHYCYAYGDPSLSNELDRFNPCPYSDDTVKMIILTRENKKHDFYT
LNTIKNHNEFKKSTIKHQVVFITHGFTSTATAENFLAMAEALLDKGNYLVILIDWRVAAC
TNEMAGVKLAYYSYAASNTRLVGNYIATVTKMLVQQYNVPMANIRLIGHSLGAHTSGFAG
KKVQELRLGKYSEIIGLDPAGPSFKSQECSQRICETDANYVQIIHTSNHLGTLVTLGTVD
FYMNNGYNQPGCGLPIIGETCSHTRAVKYFTECIRHECCLIGVPQSKNPQPVSKCTRNEC

VCVGLNAKTYPKTGSFYVPVESKAPYCNNKGKII
>P0DMB5.1 Allergen RecName: Full=Phospholipase A1 2; AltName: Full=Vespapase; AltName: Allergen=Dol Ves a 1.02; Flags: Precursor [Vespa affinis]
MMNLKYLLFFCLVQALHYCYAYGDPSLSNELDRFNPCPYSDDTVKMIILTRENKKHDFYT
LNTIKNHNEFKKSTIKHQVVFITHGFTSTATAENFLAMAEALLDKGNYLVILIDWRVAAC
TNEMAGVKLAYYSYAASNTRLVGNYIATVTKMLVQQYNVPMANIRLVGHSLGAHTSGFAG
KKVQELRLGKYSEIIGLDPAGPSFKSQECSQRICETDANYVQIIHTSNHLGTLVTLGTVD
FYMNNGYNQPGCGLPIIGETCSHTRAVKYFTECIRHECCLIGVPQSKNPQPVSKCTRNQC
VCVGLNAKTYPKTGSFYVPVESKAPYCNNKGKII
>A4GFC3.1 Putative RecName: Full=Profilin-3; AltName: Full=Pollen allergen Ole e 2; AltName: Allergen=Ole e 2 [Olea europaea]
MSWQAYVYEHLMCEIESHHLSSAAILGHDGTVWAQSTAFPQFKPEEITGIMKDFDEPGHL
APTGMFVAGAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLEQGQ
>A4KA39.1 Putative RecName: Full=Profilin-1; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQAYVDEHLMCDIDGQGQQLAASAIVGHDGSVWAQSSSFPQLKPEEITGIMKDFDEPG
HLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLLEQGL
>A4KA45.1 Putative RecName: Full=Profilin-4; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQTYVDEHLMCDIDGQGQQLAASAIVGHDGSVWAQSSSFPQLKPEEITGIMKDFDEPG
HLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLIDQGL
>A4KA43.1 Putative RecName: Full=Profilin-6; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQAYVDEHLMCEIEGHHLASAAILGHDGTVWAQSADFPQFKPEEITGIMKDFDEPGHL
APTGMFVAAAKYMVIQGEPGVVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCDMVVG
RLGDYLLEQGL
>A4KA44.1 Putative RecName: Full=Profilin-3; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQAYVDEHLMCDIDGQGQQLAASAIVGHDGSVWAQSSSFPQLKPEEITGIMKDFDEPG
HLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLVEQGL
>A4GFC0.1 Putative RecName: Full=Profilin-3; AltName: Full=Pollen allergen Ole e 2; AltName: Allergen=Ole e 2 [Olea europaea]
MSWQTYVDEHLMCEIEGLHLASTAIIGHAGTVWAQSTAFPQFKPEEITGIMKDFDEPGHL
APTGMFVAGAKYMVIQGEPGAVIRGKKGAGGITIKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLLEQGL
>A4KA40.1 Putative RecName: Full=Profilin-2; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQAYVDEHLMCDIDGQGQQLAASAIVGHDGSVWAQSSSFPQLKPEEITGIMKDFDEPG
HLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLAEQGL
>A4KA41.1 Putative RecName: Full=Profilin-5; AltName: Full=Allergen Cor a 2; AltName: Full=Pollen allergen Cor a 2; AltName: Allergen=Cor a 2 [Corylus avellana]
MSWQAYVDEHLMCEIDGHHLSAAAIIGHDGSVWAQSSTFPQFKPEEIAAIIKDFDEPGSL

APTGLHLGGIKYMVIQGESGAVIRGKKGAGGITVKKTSQALIFGIYDEPLTPGQCNMIVE
RLGDYLLKQGL
>A4K9Z8.1 Allergen RecName: Full=Profilin-2; AltName: Full=Allergen Bet v
II; AltName: Full=Pollen allergen Bet v 2; AltName: Allergen=Bet v 2
[Betula pendula]
MSWQTYVDEHLMCDIDGQGQQLAASAIVGHDGSVWAQSSSFPQFKPQEITGIMKDFEEPG
HLAPTGLHLGGIKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPVTPGQCNMV
VERLGDYLIDQGL
>BAO50870.1 Putative 13S globulin [Fagopyrum esculentum]
MLLGVLLCIMVSLAASETRSRGSSTMRARQCRLDQLTSSQPNQKIQSEGGTIEVWDEEED
QFQCAGVAAMRVTVQPDSLSLPSYYSSPRLVYVEQGEGVFGLSLPGCPETYQSRGMEMRG
DEEEEEGFESGRRMTDAHQPTRRVRKGDVVALPQGTVHWCFNDGQEDLVVVAVHNLNTDA
NQLDQSLKTFFLAGGVQGGSKEGKSQKLNFNNILSAFETKLLAEALGTEEETVRKMQESD
ERGPIVKARKNMRQMVTPPRFGREQDEDETNGLEESFCNMRFRHNLGPRTEADIASRQAG
RIHSVDQNKLPILEFIDMSAEKGHLLPNAMLAPAWPLSGHRVFYVLRGEAQMQIVDDNGQ
TVLDDRVSEGSMVVIPQFYISTCRAGRDGLEYVSFETTANPMSSPLNGHASVFKGMPIPV
LSNSYQISPRAAYELKQTRSHEHGLFSPFGGRS
>BAO50872.1 Putative 13S globulin [Fagopyrum esculentum]
MLLGVLLCIMVSLAASETRTRGSSTMRARQCRLDQLTSSQPNQKIRSEGGTIEVWDEEED
QFQCAGVAAMRVTVQPDSLSLPSYYSSPRLVYVEQGEGVFGLSLPGCPETYQSRGMEMRG
DEEEEEGFESGRRMTDAHQPTRRVRKGDVVALPQGTVHWCFNDGQEDLVVVAVHNLNTDA
NQLDQSLKTFFLAGGVQGGSKEGKSQKLNFNNILSAFETKLLAEALGTEEETVRKMQESD
ERGPIVKARKNMRQMVTPPRFGREQDEDETNGLEESFCNMRFRHNLGPRTEADIASRQAG
RIHSVDQNKLPILEFIDMSAEKGHLLPNAMLAPAWPLSGHRVFYVLRGEAQMQIVDDNGQ
TVLDDRVSEGSMVVIPQFYISTCRAGRDGLEYVSFETTANPMSSPLNGHASVFKGMPIPV
LSNSYQISPRAAYELKQTRSHEHGLFSPFGGRS
>AHL24658.1 Allergen Sal k 4.03 allergen [Salsola kali]
MSWQAYVDDHLMCEIEGTNNHLTAAAILGVDGSVWAQSANFPQFKPDEISAVVKEFDEAG
TLAPTGLHLGGTKYMVIQSEAGQVIRGKKGPGGICVKKTGQALIFGIYDEPVTPGQCNMI
VERLGDYLIEQGL
>AHL24660.1 Putative Fra e 2.01 allergen [Fraxinus excelsior]
MSWQAYVDDHLMCDIEGHEGHRLTAAAIVGHDGSVWAQSATFPQFKPEEINGITTDFNEP
GHLAPTGLHLGGTKYMVIQGEAGAVIRGKKGSGGITIKKTGQALVFGIYEEPITPGQCNM
VVERLGDYLIDQGL
>AHL24661.1 Putative Fra e 3.01 allergen [Fraxinus excelsior]
MADDPQEVAQLERIFKRLDANGDGKISSSELGETLKTLGSITPDEIQRMMAEIDTDGDGF
ISYEEFTDFARANRGLVKDVAKIF
>AHM25035.1 Putative icarapin variant 8 precursor, partial [Apis
mellifera carnica]
FPGAHDEDSKEERMRPAPNLQGVWKASRISTTRYRRTKEMY
>AHM25036.1 Putative icarapin variant 9 precursor, partial [Apis
mellifera carnica]
FPGAHDEDSKERTLPLPPRSSMDTW
>AHM25037.1 Putative icarapin variant 10 precursor, partial [Apis
mellifera carnica]
FPGAHDEDSKEERKNVDTW
>AHM25038.1 Putative icarapin variant 11 precursor, partial [Apis
mellifera carnica]
FPGAHDEDSKVL
>AHW81906.1 Putative 18 kDa winter accumulating protein [Morus alba var.
atropurpurea]
MGVFTFDDEFPSTVAPARFFKAAVLDADNLFPKVAPQAAKSAETVEGNGGPGTVKKITLP
DGKYVKQRLDSIDHDNFTYGHSIIEGDVLSADIEKISHVTKFVASSSGGSIIKVTTTFHT
VGNAPVDEAKAKEGKEKAEGLFKLVEGYLEANPSAYN

>AHY02994.1 Allergen Fus p 4; aldolase [Fusarium proliferatum]
MSSSLEQLKATGTTVVSDSGDFVSIGKYKPQDATTNPSLILAASKKAEYAKLIDVAIDYA
KQKGGSIDQQVDDALDRLLVEFGKEILKIIPGKVSTEVDARYSFDTEASVNKALHLIELY
GEQGISKDRILIKIAATWEGIKAAEILQRDHGINTNLTLMFSLVQAIGAAEAGAYLISPF
VGRILDWFKASTKKEYSKEEDPGVQSVKTIFNYYKKYGYNTIVMGASFRNTGEITELAGC
DYLTISPNLLEDLLNSNEPVPKKLDASQAASLDIEKKSYINDEALFRFDFNEDQMAVEKL
REGISKFAADAVTLKSILKEKLA
>AHY24177.1 Allergen Pro j 2; profilin / partial [Prosopis juliflora]
MSWQTYVDDHLMCEIEGTNNHLSAAAILGVDGSVWAQSASFPQFKPDEISAVVKDFDGPG
TLAPTGLHLGGTKYMVIQGEPGQVIRGKKGPGGICVKKTGQALIIGIYDEPVTPGQCNMI
VERLGDYLVEQGM
>2MC9_A Allergen Chain A, Cat R 1 [Catharanthus roseus]
GSFTGSMPNPRVFFDMSVGGQPAGRIVMELFADTTPRTAENFRALCTGEKGTGRSGKPLH
YKDSSFHRVIPGFMCQGGDFTAGNGTGGESIYGAKFADENFIKKHTGPGILSMANAGPNT
NGSQFFICTAKTEWLDGKHVVFGQVVEGMDVVKAIEKVGSSSGRTAKKVVVEDCGQLS
>G5DC91.2 Putative RecName: Full=Thaumatin-like protein 1; AltName:
Full=Acidic thaumatin-like protein; AltName: Full=Beta-1,3-glucanase;
AltName: Full=Thaumatin-like protein 1b [Manilkara zapota]
ATFDVVNQCTFTVWAGASPGGGKQLDQGQTWTITVAPGSTKARIWGRTGCNFDANGQGKC
QTGDCNGLLQCQGYGSPPNTLAEFSLNQPNNLDYVDISLVDGFNIPMDFSPAAAGVCKDI
RCATDITAQCPAELQAPGGCNNPCTVYKTNEYCCTNGQGTCGPTALSKFFKDRCPDAYSY
PQDDPTSLFTCPAGTNYKVVFCPNLDA
>KEY78748.1 putative allergen Asp F7 [Aspergillus fumigatus var. RP-2014]
MAPIFKSLALVSALFAAISSAAPVNLDKREVDVVWTTVTTVVWTTIDVTTTIYPTPQAPT
PPVVESTPTPTPSAAPEQAEPIETSTQPETTKSQPTQPSVATFIPVAAAAAAADSAAPVP
EEPAPQPATTAAPSTSTTTQAAPSAPPAANSGSTEKAASSGYSGPCSKGSPCVGQLTYYD
TATSASAPSSCGLTNDGFSENVVALPVGIMTDADCGKTVTITYNGITKTATVVDKCMGCK
PTDLDASRHLFGELADFSAGRIDGMSWYFN
>KEY81716.1 Allergen Asp F4 [Aspergillus fumigatus var. RP-2014]
MQLKNSMLLLTALAAGSSVARLHGHERRHLHHAGEKREVGDTVYATINGVLVSWINEWSG
EAKTSDAPVSQATPVSNAVAAAAAASTPEPSSSHSDSSSSSGVSADWTNTPAEGEYCTDG
FGGRTEPSGSGIFYKGNVGKPWGSNIIEVSPENAKKYKHVAQFVGSDTDPWTVVFWNKIG
PDGGLTGWYGNSALTLHLEAGETKYVAFDENSQGAWGAAKGDELPKDQFGGYSCTWGEFD
FDSKINHGWSGWDVSAIQAENAHHEVQGMKICNHAGELCSIISHGLSKVIDAYTADLAGV
DGIGGKVVPGPTRLVVNLDYKE
>AIL01316.1 Allergen Sor h 1; beta-expansin [Sorghum halepense]
MGVNMMSWSMQVALVVALAFLVGGAWCGPPKVAPGKNITATYGSDWLEAKATWYGKPTGA
GPDDNGGACGYKDVNKAPFNSMGACGNLPIFKDGLGCGSCFEIKCDKPAECSGEAVVVHI
TDMNYEQIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMKFRRVKCKYGEKVTFHVEKG
SNPNYLALLVKYVDGDGDVVGVDIKEKGGDAYQPLKHSWGAIWRKDSDKPIKFPVTVQIT
TEGGTKTAYEDVIPEGWKADTTYTAK
>AIL01317.1 Allergen Sor h 1; beta-expansin [Sorghum halepense]
MGSLANKIVAMAAVLAALVTGGSCAPKKFPPGPNITTNYNGQWLSARATWYGQPNGAGPD
DNGGACGIKNVNLPPYNGFTACGNVPIFKDGKGCGSCYEVRCKEMPECSGNPITVFITDM
NYEPIAPYHFDFSGKAFGSLAKPGLNDKLRHCGIMNVEFRRVRCKLGGKIMFHVEKGSNP
NYLAVLVKNVADDGNIVLMELEDKASPGFKPMKQSWGAVWRFDTPKPVKGPFSIRLTSES
GKKLVAPNVIPATWKPDTLYNSNIQF
>AIL01320.1 Allergen Sor h 13; polygalacturonase [Sorghum halepense]
MALGSNAMRVFFLLAMVVCAAHAAGKAAPKEKEKGKDDKSGGAPAEAPSGSAGGSDISKL
GAKGDGKTDSTKALNEAWAAACGKEGPQTLMIPKGDYLTGPLNFSGPCKGSVTIQLDGNL
LGTTDLSAYKTNWIEIEHVDNLVISGKGTLDGQGKQVWDNNKCAQKYDCKILPNSLVLDY
VNNGEVSGITLLNAKFFHMNVFQCKGVTIKDVTVTAPGDSPNTDGIHIGDSSKVTITGTT
IGVGDDCISIGPGSTGINVTGVTCGPGHGISVGSLGRYKDEKDVTDINVKDCTLKKTSNG
VRIKSYEDAACVITASKLHYENIAMDDVANPIIIDMKYCPNKICTAKGDSKVTVKDVTFK

NITGTSSTPEAVSLLCSDKIPCSGVTMDNIKVEYKGTNNKTMAVCQNAKGSATGCLKELA
CF
>AIL01321.1 Allergen Sor h 13; polygalacturonase [Sorghum halepense]
MACTGNAMRAFFLLAFVCAAHAGKDAPAKDGDAKAASGPGGSFDISKLGASGDGKKDSTK
AVQEAWTSACGGTGKQTILIPKGDYLVGPLNFTGPCKGDVTIQVDGNLLATTDLSQYKGN
WIEILRVDNLVITGKGKLDGQGPAVWSKNSCAKKYDCKILPNSLVLDYVNNGEVSGITLL
NAKFFHMNVFQCKGVTIKDVTVTAPGDSPNTDGIHIGDSSKVTITGTTIGVGDDCISIGP
GSTGINVTGVTCGPGHGISVGSLGRYKDEKDVTDINVKDCTLKKTSNGVRIKSYEDAACV
ITASKLHYENIAMDDVANPIIIDMKYCPNKICTAKGDSKVTVKDVTFKNITGTSSTPEAV
SLLCSDKIPCSGVTMDNIKVEYKGTNNKTMAVCQNAKGSATGCLKELACF
>AIO08848.1 Allergen Der f 28; heat shock protein 70 [Dermatophagoides
farinae]
MPSKTLKAPAIGIDLGTTYSCVGVFQNGSVEIIANDQGNRTTPSYVAFNDTERLIGDAAK
NQVSMNPTNTIFDAKRLIGRRFDESSVKSDMKHWPFKVVSESGKPKLEVEFKGERKRFWP
EEISAMVLTKMKETAEAYLGQKVTDVVITVPAYFNDSQRQATKDAGVIAGLNVLRIINEP
TAAAIAYGLDKKGGGEKNVLIFDLGGGTFDVSVLTIDNGIFEVKSTAGDTHLGGEDFDNR
LVNHFVQEFKRKFGKDIMSNKRALRRLRTSCERAKRTLSSSTQTSIEIDSLHEGIDFYST
ITRARFEELCSDLFRSTLEPVEKALRDAKLDKSKIDEIVLVGGSTRIPKIQKLLSDFFNG
KELNKSINPDEAVAYGAAVQAAILTGDNSNNVKDLLLLDVAPLSLGIETAGGVMTTLIKR
NTTIPTKQTQTFTTYADNQPAVTIQVYEGERAMTKDNNRLGTFDLTGIPPAPRGVPQIEV
TFDVDANGILNVSAVDKSTGRQNKITITNDKGRLSKADIEKMVQEAEQYREDDERQRERI
AAKNQLEAYAFQLKSTMEEEAVKSKLSEEDRKTVLNKVDETLRWLDSNQLADKEEFEHRQ
KEIENACRPIMMKIYQQQQQQHHPGANGSCGSNAYPGYNGFKSNNDGPVVEEVN
>AIO08850.1 Allergen Der f 20; arginine kinase [Dermatophagoides farinae]
MVDQAVIDKLEAGFQKLQSSAECHSLLKKYLTRNVLDACKGRKTGMGATLVDVVQSGFEN
LDSGVGLYAPDAESYTLFKELFDPVIEDYHKGFKPTDKHPQTDFGDVNTLCNVDPNNEFV
ISTRVRCGRSLQGYPFNPCLTEAQYKEMEEKVKGQLNSFEGELKGTYYPLLGMDKATQQQ
LIDDHFLFKEGDRFLQAANACRFWPVGCGIFHNDNKTFLIWVNEEDHLRIISMQKGGDLK
QVFSRLINGVNHIEKKLPFSRDDRLGFLTFCPTNLGTTIRASVHIKLPKLAADRKKLEEV
AGKYNLQVRGTAGEHTESVGGVYDISNKRRMGLTEYQAVKEMQDGILELIKIEKSM
>AIO08851.1 Allergen Der f 27; serpin [Dermatophagoides farinae]
MKFFLLSFVLMIVAATATYAAHVGSGSRDNNNNKPVPAEGFAKASNEFGFHLLKEVIQHR
SSSGSRGSSENVLFSPYSVAVALSMVHQGTQGSTAEQFKRVLYYDRVQQLNGGEYQTVAN
SVKQIQNQIKQSDQSNQFDWGNMLMVDQQIPVKDQYKKIIEQYYDGQVMSVDFRKESKNV
MERINQFVSNKTHGLIDRMLEQPPSADTGLALINAVYFKGEWLKPFDSMRTEQSVFYGHH
GQEYKNVQYINGQGPYGYVEVPQWNSDLIQLPYKGEDIAFYGVLPRERNYDLDKIRQSIN
STFVDEIVGQITGGQSSTVYFPKIELSTSYQLPEILKSMGLQDVFTESADLSGITDKKPM
KIDDAIHKAKLILNEQGTEAGAGTYIQMAVLSALETSHTFRFDHPFMYFIRHLPTGQILF
LGEIHDF
>AIO08853.1 Allergen Der f 7 allergen [Dermatophagoides farinae]
MMKFLLIAAVAFVAVSADPIHYDKITEEINKAIDDAIAAIEKSETIDPMKVPDHTDKFER
HVGILDFKGELAMRNIEARGLKQMKRQGDANVKGEEGIVKAHLLIGVHDDIVSMEYDLAY
KLGDLHPNTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFANVVNHIGGLSILDPIFG
VLSDVLTAIFQDTVRKEMTKVLAPAFKRELEKN
>AIO08860.1 Allergen Der f 25; triosephosphate isomerase
[Dermatophagoides farinae]
MVRKFFVGGNWKMNGSRATNEDLIKTLSNGPLDPNTDVVVGVPSIYMAEVRQKLPKTIGV
AAQNCYKVPKGAFTGEISPAMIKDVGAEWVILGHSERRNVFGESDQLIGEKVEHALQEGL
HVIACIGELLEEREAGKTTEVVFRQTQVISKHVKDWSKVVLAYEPVWAIGTGKTASPQQA
QEVHQKLRQWFSENVSPQIAETIRIIYGGSVTANNAKELASQADVDGFLVGGASLKPEFV
QIVNARQ
>AIO08864.1 Allergen Der f 11 allergen [Dermatophagoides farinae]
MSARTAKYMYRSSGAGASGDISVEYGTDLGALTRLEDKIRLLSDDLESEREMRQRIEREK
AELQIQVMSLGERLEEAEGSSESVTEMNKKRDSELAKLRKLLEDVHIESEETAHHLRQKH

QAAIQEMQDQLDQLQKAKNKSDKEKQKFQAEVFELLAQLETANKEKLTALKNVEKLEYTV
HELNIKIEEINRTVIELTSHKQRLSQENTELIKEVHEVKLQLDNANHLKTQIAQQLEDTR
HRLEEEERKRASLENHAHTLEVELESLKVQLDEESEARLELERQLTKANGDAASWKSKYE
AELQAHADEVEELRRKMAQKISEYEEQLEALLNKCSSLEKQKSRLQSEVEVLIMDLEKAT
AHAQQLEKRVAQLEKINLDLKNKLEEVTMLMEQAQKELRVKIAELQKLQHEYEKLRDQRD
QLARENKKLTDDLAEAKSQLNDAHRRIHEQEIEIKRLENERDELSAAYKEAETLRKQEEA
KNQRLIAELAQVRHDYEKRLAQKDEEIEALRKQYQIEIEQLNMRLAEAEAKLKTEIARLK
KKYQAQITELELSLDAANKANIDLQKTIKKQALQITAELQAHYDEVHRQLQQAVDQLGVT
QRRCQALQAELEEMRIALEQANRAKRQAEQLHEEAVVRVNELTTINVNLASAKSKLESEF
SALQADYDEVHKELRISDERVQKLTIELKSTKDLLIEEQERLVKLETVKKSLEQEVRTLH
VRIEEVEANALAGGKRVIAKLESRIRDVEIEVEEERRRHAETDKMLRKKDHRVKELLLQN
EEDHKQIQLLQEMTDKLNEKVKVYKRQMQEQEGMSQQNLTRVRRFQRELEAAEDRADQAE
SNLSFIRAKHRSWVTTSQVPGGTRQVFTTQEETTNY
>AIO08866.1 Putative Der f 29 allergen [Dermatophagoides farinae]
MSWQSYVDNQICQHVDCTLAAIANIQDGSVWAKFEKDDKKINPKELKTIADTIRQNPSGF
LETGIHIGGEKYICIQADNQLVRGRRGSSALCIVATNTCLLAAATVDGFPPGQLNNVIEK
LGDYLRSNNY
>AIS82657.1 Allergen Rhi o 1; aspartyl endopeptidase [Rhizopus oryzae]
MKFFALSLVVSAAFSVFTDAAITKIPIKKVHETATEKLSRYSHTGEYLTQKYFNSQRNNQ
PMETFKLNPDGSANHGVPLSNYLNAQYYGEIEIGTPPQPFTVVFDTGSSNLWVPSTHCTS
IACFLHKRYDSASSRTYSENGTEFAIQYGTGSLEGFISQDTLSVGGIQVEDQGFAESTKE
PGLTFAFAKFDGIFGLGYDTISVKHTIPPFYHMVNRDLVDEPLFSFWLNDANKDQDNGGE
LIFGGVDEDHFEGDIHWSDVRRKGYWEITMENIKFGDDYVDIDPVGAAIDTGSSLLVAPT
TVAALINKELGAEKNWAGQYVVDCNKVPSLPEFCFVFNGKDFCLEGKDYVLEVQGQCISG
FMGMDIPEPAGPLWIVGDVFLRKFYSVYDLGNNRVGLAPSK
>2MFK_A Allergen Chain A, Nmr Solution Structure Of Chitin-binding Domain
From Dust Mite Group Xii Allergen Blo T 12 [Blomia tropicalis]
GPLGSDLIVHEGGKTYHVVCHEEGPIPHPGNVHKYIICSKSGSLWYITVMPCSIGTKFDP
ISRNCVLDN
>AJE61290.1 Allergen Pru p 1; pathogenesis-related protein / PR-10 / Bet
v 1-like protein [Prunus persica]
MGVFTYSDESTSVIPPPRLFKALVLEADTLIPKIAPQSVKSAEIVEGDGGVGTIKKISFG
EGSHYSYVKHRIDGLDKDNFVYNYTLVEGDALSDKVEKITYEIKLVASADGGSIIKSTSN
YHTKGDVEIKEEDVKAGKEKATGLFKLIENYLVANPDAYN
>AJE61291.1 Allergen Pru p 1; pathogenesis-related protein / PR-10 / Bet
v 1-like protein [Prunus persica]
MGVFTYETEFTSVIPPEKLFKAFILDADNLIPKIAPTAVKDTEILEGDGGVGTIKKVTFG
EGSQYGYVKHRIDGIDKDNLTYSYTLIEGDALSDVIEKIVYDIKLVASPNGGSIVKTISH
YHTKGDVEIKEEQVKAGKEKAAGLFKLVEGYLLANPDAYN
>CEJ95862.1 Putative albumin, partial [Pinus pinea]
CRDYLQRRREQPSERRCEELERMSPQCRCRAIQQVLDQSQSYDSITDDLFMDSEAAPNQR
RRRRESRGREEEEEAEERAAYLPETCNVRQPPRRCDVQRRSRYFTSGTDF
>AJO53282.1 Putative chymotrypsin-like protein [Blattella germanica]
MQYCAVLFFAAAVACAYGAELAALDPSTRVVGGTNAATGEFPFIVSLRSTSNSHFCGGSI
ISNYYVITAAHCVSGSSASSVVVVAGTNTLNSGGTSYRVSRIVVHSGYNSNTIVNDIALL
RLSSAISYNSYVQPIALPAQGETSGAGVAAVASGWGYTSYPGWSLPNNLQKVSLSVISNT
QCSSYMNNIYSSSICASGGNGKGVCNGDSGGPLTAGGKLIGLVSWGRPCAVGYPDVYTRV
SSYVSWINQNAV
>AKH04310.1 Allergen Per a 11; alpha amylase [Periplaneta americana]
MKLFALLALVVLLAGVQSQKDPKLVPDESTLLRLFEWKFDDIADECERFLAPKGYAGVQV
SPVHKNLLYTATAPGLWERYQPMSYKLVSRSGDETAFRDMVRRCNAVGVRIYVDVVLNHM
SGNWDNAVGTGGSTADTYNYSYPGVPYDHSDFHPYCILNDYQDPEIVRNCELVGLHDLDQ
SQDYVREKLIDFLNHLVDAGVAGFRVDAAKHMWPADLEYIYGKVNNRNSDAGYCGDSSPS
RYQEVIDLGGEAVSKFEYNGFGRVTEFKHSEQIGYAFRGNNRLEWTYTYKPNWGLLPSGD

ALVFVDNHDNQRGGGNAILTYKTPKNYKMAIAFILAHPYGYPRVMSSFDFEAHDQGPPQD
SDKNILSPSINADGTCGNGWVCEHRWRQHANMVGFRNAVRGTEITNWWDNGNHQIGFCRG
DRGFVAFNVEDNDLKQTLQTCLPAGTYCDVISGSKNNRAHLGAELVVAPNGEAFSVRLIS
DDDGVLAIHLEEKL
>AKH04311.1 Allergen Per a 12; chitinase [Periplaneta americana]
MKLTSLVAVGVGVFLAAALQTCKGFIRDFKTHRQLQEKGDDRAVFCYYGSWATYRWGIAT
FEVDNIDTRLCTHIVYAFTGLRDGVIVSLDEYNDYEENWGKGLMKKFTTLAKNNGIKALV
GLGGWNEGSVKYSEMAATQAGRETFADSAVAFLQKQGFDGLDLDWEYPARRGGVPEDKDN
FTLLLKTLSEKLHARGLILTVAVSADPKTAANAYDFPNVAKYADYITLMSFDYHTPSSDT
VTGLNSPLDSLPQDTGYNKKLNVKYSVNQWLKGGVPPNKLVLGVPLYGRTYRLADPDQHG
LGAPILGPGTAGLYTQEAGFLAYYEICSNPDWNVVWNDTSSYLYAYKDYQWLSYDDPNTI
TIKAQWVLEKNLGGVMVWSLESDDFHGNCGKGAYPLLTAVNKALGRL
>AKJ77985.1 Allergen Tri a 45; elongation factor 1 [Triticum aestivum]
MGKRKAAAKPPPRKGMDKLDTVFSCPFCNHGSSVECRIDLKNLIGEANCQICQESFSTTA
NALTEAIDVYSEWIDECERVNTVEGDDGA
>AKJ77986.1 Allergen Tri a 42; unknown [Triticum aestivum]
EFTNTCMECLVCDVHVACGDFASNDVIDPAKFRRLGINDCLVNDGKSIEPSFPVSFQYGN
SFPYPMTVASASCDCN
>AKJ77987.1 Allergen Tri a 43; unknown [Triticum aestivum]
MTLVASSSLDPVWVEVLGDPLLRRLLLRFIFCRATLSLFKASNDKAECLPSCVPPLPESV
GGESMLSQCCVMRVASFLGAADQFSFAEVTTWPDIDEPTSSGGVDKEL
>AKJ77988.1 Allergen Tri a 41; mitochondrial ubiquitin ligase activator
of NFKB 1 [Triticum aestivum]
EMGDGQLCVICLRKRRRAAFVPCGHLVCCCNCAKRVELMDEPLCPVCRQDIQYMLRVYDS
>AKJ77990.1 Allergen Tri a 44; endosperm transfer cell specific PR60
[Triticum aestivum]
MAKLMCLCFIILTIAVVVSADECEGDRQEMIKQCAKYQQWPANPKVNPSDACCAVWQKAN
IPCLCAGVTKEKEKIWCMEKVAYVANFCKKPFPHGYKCGSYTFPPLA
>AKV72169.1 Allergen Koc s 1; Ole e 1- like protein [Bassia scoparia]
MAKCQAVFLLVGALCVLSLDDVAKAPVSQFHIQGLVYCDTCPYPSSYVLPMLEGATVKLE
CRNITAGTQTFKAEAVTDKVGQYSIPVDGDFEDDICEIELLKSPDNQCSEVSHDVYAKQS
AKVSLTSNNGEASDVRSANALGFMRKEPLEECPEVLKELDLYDVKAN
>XP_013623213.1 Allergen Bra o 3; lipid transfer protein (LTP) type 1
[Brassica oleracea var. oleracea]
MASALSFFTCLVLTVCIVASVDAAISCGTVTSNLAPCAVYLMKGGPVPAPCCAGVSKLNS
MAKTTPDRQQACKCLKTAAKNVNPSLASSLPGKCGVSIPYPISMSTNCDTVK
>ALA65345.1 Allergen Der p 24; ubiquinol-cytochrome c reductase binding
protein (UQCRB) [Dermatophagoides pteronyssinus]
MVHLTKTLRFINNPGFRKFYYGLQGYNKYGLYYDDFYDYTDPAHLEAVRRLPPDLYDQHT
YRVIRASQLEITKQFLPKEQWPSYEEDMDKGRFLTPYLDEVMKEKKEKEEWVNFLSKD
>ALF39466.1 Allergen Pla a 3; lipid transfer protein (LTP) type 2
[Platanus x acerifolia]
AAITCGQVVSKLTNCLSYLRSGGTVSTACCNGVTSLNKMANSTSDRQAACNCLKSAYKSI
SGIKLQYSQSLAGKCGVNLPYKISPDIDCSKVK
>XP_005902099.2 Allergen Bos d 11; beta-casein [Bos taurus]
MPLNTIYKQPQNQIIIHSAPPSLLVLYFGKKELRAMKVLILACLVALALARELEELNVPG
EIVESLSSSEESITRINKKIEKFQSEEQQQTEDELQDKIHPFAQTQSLVYPFPGPIPNSL
PQNIPPLTQTPVVVPPFLQPEVMGVSKVKEAMAPKHKEMPFPKYPVEPFTESQSLTLTDV
ENLHLPLPLLQSWMHQPHQPLPPTVMFPPQSVLSLSQSKVLPVPQKAVPYPQRDMPIQAF
LLYQEPVLGPVRGPFPIIV
>Q6EBC1.1 conglutin beta [Lupinus albus]
MGKMRVRFPTLVLVLGIVFLMAVSIGIAYGEKDVLKSHERPEEREQEEWQPRRQRPQSRR
EEREQEQEQGSPSYPRRQSGYERRQYHERSEQREEREQEQQQGSPSYSRRQRNPYHFSSQ
RFQTLYKNRNGKIRVLERFDQRTNRLENLQNYRIVEFQSKPNTLILPKHSDADYVLVVLN

GRATITIVNPDRRQAYNLEYGDALRIPAGSTSYILNPDDNQKLRVVKLAIPINNPGYFYD
FYPSSTKDQQSYFSGFSRNTLEATFNTRYEEIQRIILGNEDEQEYEEQRRGQEQSDQDEG
VIVIVSKKQIQKLTKHAQSSSGKDKPSDSGPFNLRSNEPIYSNKYGNFYEITPDRNPQVQ
DLNISLTYIKINEGALLLPHYNSKAIYVVVVDEGEGNYELVGIRDQQRQQDEQEEKEEEV
IRYSARLSEGDIFVIPAGYPISINASSNLRLLGFGINADENQRNFLAGSKDNVIRQLDRA
VNELTFPGSAEDIERLIKNQQQSYFANGQPQQQQQQQSEKEGRRGRRGSSLPF
>P85984.1 Allergen Beta v 2; profilin [Beta vulgaris]
YMVIQGEPGAVIRLGDYLIDQGL
>4X9U_A Chain A, Crystal Structure Kiwifruit Allergen Act D 5 [Actinidia deliciosa]
ISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHICRGTTXSXQPGGCKPSGTLTCRGKS
HPTYDCSPPVTSSTPAKLTNNDFSEGGDDGGPSECDESYHNNNERIVALSTGWYNGGSRC
GKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQPPCRNNIVDGSNAVWSALGLDKNVG
VVDITWSMA
>AKV72168.1 Allergen Ama r 1; Ole e 1- like protein [Amaranthus retroflexus]
MAKCQAVFLLVGALCVLSLDDVAKAPVSQFHIQGLVYCDTCRIQFMTRISTIMEGATVKL
ECRNITAGTQTFKAEAVTDKVGQYSIPVNGDFEDDICEIELVKSPNSECSEVSHDVYAKQ
SAKVSLTSNNGEASDIRSANALGFMRKEPLEECPEVLKELDLYDVKAN
>BAT62430.1 Allergen Ani s 14; unknown function [Anisakis simplex]
MQVKCIAKYGEQFCSSMLSVCSSMLSIPWKNDSVQRLPPGIVGCAQTTDPVVQCRAKYSE
SFCNRLGAACSKVTGTDIPAFSRGGGEYRLPEAISQCIAQENIVAMCYASKCSQQCDGWR
VTCNINGGMAQLTPEQVTCFEKQSGLVALKTSCRTNPLNAQCRQIREPFETPKCTTAIPY
LKISQTVINGQIHVQQLVSGGMTGVQVSKTVETVIKT
>F5B8V9.1 Conglutin beta 1; Lup an 1 [Lupinus angustifolius]
MAKMRVRLPMLILLLGVVFLLAASIGIAYGEKDFTKNPPKEREEEEHEPRQQPRPRQQEE
QEREHRREEKHDGEPSRGRSQSEESQEEEHERRREHHRREQEQQPRPQRRQEEEEEEEE
WQPRRQRPQSRREEREEREQEQGSSSGSQRGSGDERRQHRERRVHREEREQEQDSRSDSR
RQRNPYHFSSNRFQTYYRNRNGQIRVLERFNQRTNRLENLQNYRIIEFQSKPNTLILPKH
SDADFILVVLNGRATITIVNPDKRQVYNLEQGDALRLPAGTTSYILNPDDNQNLRVAKLA
IPINNPGKLYDFYPSTTKDQQSYFSGFSKNTLEATFNTRYEEIERVLLGDDELQENEKQR
RGQEQSHQDEGVIVRVSKKQIQELRKHAQSSSGEGKPSESGPFNLRSNKPIYSNKFGNFY
EITPDINPQFQDLNISLTFTEINEGALLLPHYNSKAIFIVVVDEGEGNYELVGIRDQQRQ
QDEQEEEYEQGEEEVRRYSDKLSKGDVFIIPAGHPLSINASSNLRLLGFGINANENQRNF
LAGSEDNVIKQLDREVKELTFPGSIEDVERLIKNQQQSYFANAQPQQQQQREKEGRRGRR
GPISSILNALY
>F5B8W0.1 Conglutin beta 2; Lup an 1 [Lupinus angustifolius]
MANMRVKFPTLVLLLGIVFLMAVSIGIAYGEKNAIKNHERPQEREQEERDPRQQPRPRHQ
EEQEREHGREEERNREPSRGRSESEESREEEREQRREPSRGREQEQQPQHGRREEEEEWQ
PRRQRPQSRREEREQEQGSSSSSGRQSGYERREQREEREQQQEQDSRSESRRQRNPYYFS
YERFQTLYKNRNGQIRVLERFDQRTNRLENLQNYRIVEFQSKPNTLILPKHSDADYILVV
LNGRATITIVNPDKRQAYNLEHGDALRLPAGTTSYILNPDDNQNLRVVKLAIPINNPGNF
YDFYPSSTKDQQSYFNGFSRNTLEATFNTRYEEIQRIILGNEDGQEDEEQSRGQEQSHQD
QGVIVRVSKEQIQELRKHAQSSSGKGKPSESGPFNLRSDEPIYSNKFGNFYEITPDRNPQ
AQDLDISLTFIEINEGGLLLPHYNSKAIFVVVVDEGEGNYELVGIRDQERQQDEQEQEEV
RRYNAKLSEGDIFVIPAGHPISINASSNLRLLGFGINADENQRNFLAGSEDNVIRQLDKE
VKQLTFPGSVEDVERLIKNQQQSYFANAQPQQQQQREKEGRRGRRGLSFPFRSLFTKLLS
TIM
>F5B8W1.1 Conglutin beta 3; Lup an 1 [Lupinus angustifolius]
MAKMRVRFPTLVLLLGIVFLMAVSIGIAYGEKNVLKNHERPQEREQEERDPRQQPRPHHQ
EEQEREHRRESEESQEEEREQRREPRREREQEQQPQHGRREEEEEWQPRRQRPQSRREER
EQEQGSSSSSRRQSGYERREQREEREQEQEQGSRSDSRRQRNPYYFSSERFQTLYRNRNG
QIRVLERFDQRTNRLENLQNYRIVEFQSKPNTLILPKHSDADYILVVLNGSATITIVNPD
KRQSYNLENGDALRLPAGTTSYILNPDDNQNLRVVKLAIPINNPGNFYDFYPSSSKDQQS

YFSGFSKNTLEATFNTRYEEIQSILLGNEDEQEDDEQWHGQEQSHQDEGVIVRVSKEQVQ
ELRKYAQSSSRKGKPYESGPFNLRSNKPIYSNKFGNFYEITPDRNPQAQDLDISLTFIEI
NEGALLLPHYNSKAIFVVVVDEGEGNYELVGIRDQQRQQDEQEVRRYSARLSEGDIFVIP
AGHPISINASSNLRLLGFGINADENQRNFLAGSEDNVIRQLDREVKGLIFPGSAEDVERL
IKNQQQSYFANAQPQQQQQRERERGRHGRRGHISSILSTLY
>F5B8W2.1 Conglutin beta 4; Lup an 1 [Lupinus angustifolius]
MIKMRVRFPTLVLLLGIVFLMAVSIGIAYGEKNVIKNHERPQEREQEERDPRQQPRPHHQ
EEQEREHRREEERDREPSRGRSESEESREEEREQRREPRREREQEQQPQHGRREEEEEWQ
PRRQRPQSRREEREQEQGSSSSSRRQSGYERREEREQEQEQGSRSDSRRQRNPYYFSSER
FQTLYRNRNGQIRVLERFDQRTDRLENLQNYRIVEFQSKPNTLILPKHSDADYILVVLNG
SATITIVNPDKRQSYNLENGDALRLPAGTTSYILNPDDNQNLRVVKLAIPINNPGNFYDF
YPSSSKDQQSYFSGFSRNTLEATFNTRYEEIQRILLGNEDEQEDDEQRHGQEQSHQDEGV
IVRVSKEQVQELRKYAQSSSRKGKPSKSGPFNLRSNKPIYSNKFGNFYEITPNRNPQAQD
LDISLTFIEINEGALLLPHYNSKAIFVVLVDEGEGNYELVGIRDQQRQQDEQEVRRYSAR
LSEGDIFVIPAGHPISINASSNLRLLGFGINADENQRNFLAGSEDNVIRQLDTEVKGLTF
PGSTEDVERLIKNQQQSYFANAQPQQQQQRERERGRRGRRGHISSILSTLY
>F5B8W3.1 Conglutin beta 5; Lup an 1 [Lupinus angustifolius]
MAKMRVRFPMLVLLLGVVFLLAVSIGIAYGEKDVIKNPERPEERQEEERDPRQPPRSRQQ
EEQEREHRREKERDREPSRGRSESKQSQEEERERRKEHDREREQEQQPQYGRRHEEEEKG
EEEEEGQARRQRPQRRREEREQEQGSSSESRRQSGDERRHRHEKREQREEREQEQGSSSG
RQSDYGRRQRHEGREQREEREQEQGSSSESHRLRNPYYFSSERFQTRYKNKNGQIRVLER
FDQRTNRLENLQNYRIVEFQSRPNTLILPKHSDADYILVVLNGRATITIVNPDKRQAYNL
EYGDALRLPAGTTSYILNPDDNQDLRVVKLAIPINNPGKFYDFYPSRTKDQQSYFSGFSK
NTLEATFNTHYEEIQRILLGYEDEQEDEEQRREQEQSHQDEGVIVRVSKEQIQELRKHAQ
SSSRKGKPSESGPFNLRSNEPIYSNKFGNFYEITPDRNPQVQDLDISLIFTEISEGALLL
PHYNSKAIFVIVVDEGEGNYELVGIRNQQRQQDEQEVEEVRSYNARLSEGDILVIPAGHP
LSINASSNLRLLGFGINADENQRNFLAGSEDNVIRQLDREVKELIFPGSAEDVERLIRNQ
QQSYFANAQPQQQQQQREKEGRRGRRGPISSILSALY
>F5B8W5.1 Conglutin beta 7; Lup an 1 [Lupinus angustifolius]
MARMRVRFPTLVLLLGILFLMAVSIGIAYGEKDVIKNHERPGEREHEERDPRQQPRPRKQ
EEQEREHRREEEHDRDPSRGRRESEERQEEERERRREPCREREQEQQPQHGRREEEEEEE
EWQPRRLRPQSRKEEREQEQGSSSSSRKQSGYERRQYHERREQRDEKEKEQDSRSDSRRQ
RNPYHFSSERFQTRYRNRNGQIRVLERFDQRTNRLENLQNYRIVEFQSNPNTLILPKHSD
ADYILVVLNGRATITIVNPDKRQAYNLEYGDALRVPAGTTSYILNPDDNQNLRVVKLAIP
INNPSNFYDFYPSSTKDQQSYFSGFSKNTLEATFNTRYEEIQRILLGNEDEQEDEEQRRG
QEQSYQDEGVIVRVSKEQIQELRKHAQSSSRKGKPSESGPFNLRSNESIYSNKFGNFYEI
TPERNPQVQDLDISLTFTEINEGALLLPHYNSKAIFIVVVDEGEGNYELVGIRDQQRQQD
EQEEEEEEVRRYSARLSEGDIFVIPAGYPISVNASSNLRLLGFGINANENQRNFLAGSED
NVISQLDREVKELTFPGSAQDVERLIKNQQQSYFANAQPQQKQQREKEGRRGRRSLISSI
LSTLY
>B3EWP3.1 Allergen Ara h 12; defensin [Arachis hypogaea]
KTVAGFCIFFLVLFLAQEGVVKTEAKLCNHLADTYRGPCFTNASCDDHCKNKEHFVSGTC
MKMACWCAHNC
>B3EWP4.1 Allergen Ara h 13; defensin [Arachis hypogaea]
VQKRTIIMEKKMAGFCIFFLILFLAQEYGVEGKECLNLSDKFKGPCLGSKNCDHHCRDIE
HLLSGVCRDDFRCWCNRKC
>C0HJZ1.1 Allergen Ara h 13; defensin [Arachis hypogaea]
MEKKMAGFCIFFLVLFLAQEYGVEGKVCLNLSDKFKGPCLGTKNCDHHCRDIEHLLSGVC
RDDFRCWCNRNC
>1510259A H2 proteinase [Protobothrops flavoviridis]
ERFPQRYIELAIVVDHGMYKKYNQNSDKIKVRVHQMVNHINEMYRPLNIAISLNRLQIWS
KKDLITVKSASNVTLESFGNWRETVLLKQQNNDCAHLLTATNLNDNTIGLAYKKGMCNPK
LSVGLVQDYSPNVFMVAVTMTHELGHNLGMEHDDKDKCKCEACIMSDVISDKPSKLFSDC
SKNDYQTFLTKYNPQCILNAP

>3S18_B Chain B, Crystal Structure Of A Plant Albumin From Cicer Arietinum Showing Hemagglutination [Cicer arietinum]
TKTGYINAAFRSSRNNEAYLFINDKYVLLDYAPGTSNDKVLYGPSFVRDGYKSLAKTIFG
TYGIDCSFDTEYNEAFIFYENFCARIDYAPHSDKDKIISGPKKIADMFPFFKGTVFENGI
DAAFRSTKGKEVYLFKGDKYARIDYLTNRLVQNKSISDTGFPCLRGTIFEAGMDSAFASH
KTNEAYLFKGEYYARINFTPGSTNDIMGGVKKTLDYWPSLRGIIPLE
>4ZCE_A Chain A, Crystal Structure Of The Dust Mite Allergen Der P 23 From Dermatophagoides Pteronyssinus [Dermatophagoides pteronyssinus]
SFTKFECPSRFGYFADPKDPHKFYICSNWEAVHKDCPGNTRWNEDEETCT
>5E1R_A Allergen Car i 2; 7S globulin/ vicilin-like protein [Carya illinoinensis]
MSREEEQQRHNPYYFHSQGLRSRHESGEGEVKYLERFTERTELLRGIENYRVVILEANPN
TFVLPYHKDAESVIVVTRGRATLTFVSQERRESFNLEYGDVIRVPAGATEYVINQDSNER
LEMVKLLQPVNNPGQFREYYAAGAQSTESYLRVFSNDILVAALNTPRDRLERFFDQQEQR
EGVIIRASQEKLRALSQHAMSAGQRPWGRRSSGGPISLKSQRSSYSNQFGQFFEACPEEH
RQLQEMDVLVNYAEIKRGAMMVPHYNSKATVVVYVVEGTGRFEMACPHDVSSQSYEYKGR
REQEEEESSTGQFQKVTARLARGDIFVIPAGHPIAITASQNENLRLVGFGINGKNNQRNF
LAGQNNIINQLEREAKELSFNMPREEIEEIFERQVESYFVPMERQSRRGQGRDHPLASIL
DFAGFF
>5EM0_A Chain A, Crystal Structure Of Mugwort Allergen Art V 4 [Artemisia vulgaris]
GSGSWQTYVDDHLMXDIEGTGQHLTSAAIFGTDGTVWAKSASFPEFKPNEIDAIIKEFNE
AGQLAPTGLFLGGAKYMVIQGEAGAVIRGKKGAGGICIKKTGQAMVFGIYDEPVAPGQCN
MVVERLGDYLLDQGM
>5EM1_A Chain A, Crystal Structure Of Ragweed Allergen Amb A 8 [Ambrosia artemisiifolia]
GSGSWQTYVDEHLMXDIEGTGQHLASAAIFGTDGNVWAXSSSFPEFXPDEINAIIKEFSE
PGALAPTGLFLAGAXYMVIQGEPGAVIRGXXGAGGICIXXTGQAMVFGIYEEPVNPGQCN
MVVERLGDYLVDQGM
>5EV0_A Chain A, Crystal Structure Of Ragweed Profilin Amb A 8 In Complex With Poly- Pro14 [Ambrosia artemisiifolia]
SGSWQTYVDEHLMXDIEGTGQHLASAAIFGTDGNVWAKSSSFPEFKPDEINAIIKEFSEP
GALAPTGLFLAGAKYMVIQGEPGAVIRGKKGAGGICIKKTGQAMVFGIYEEPVNPGQCNM
VVERLGDYLVDQGM
>A0A161AT60.1 Allergen Pis s 3; lipid transfer protein [Pisum sativum]
MARSMKLACVALVICMVVIAPMAEAALSCGTVSADMAPCVTYLQAPNNASPPPPCCAGVK
KLLAAATTTPDRQAACNCLKSAAGSIPKLNTNNAAALPGKCGVSIPYKISTSTNCNTVRF
>AAU43733.1 Profilin [Citrullus lanatus]
MSWQAYVDDHLMCEIEGNHLTSAAIIGQDGSVWAKSENFPQLKPEEITGILNDFNEPGTL
APTGLYIGGSKYMVIQGEPGAVIRGKKGPGGVTVKKTALALVIGIYDEPMTPGQCNMIVE
RLGDYLIEQGL
>ACX47057.1 Allergen Fra a 1; PR10 protein [Fragaria ananassa]
MGVFTYETEFTSVIPPPRLFKAFILDADNLIPKIAPQAVKCAEIIEGDGGVGTIKKITFG
EGSQFGSVTHKIDGIDKENFVYSYSLIEGDALSDKIEKISYETKLVSSSDGGSIIKSTSN
YHTKGDVEIKEEHVKAGKEKASHLFKLVEGYLLANPNEYC
>ACX47058.1 Fra a 1 (isoform) [Fragaria x ananassa]
MGVFTYESEFTSVIPPPKLFKAFVLDADNLIPKIAPQAVKSAEIIEGDGGVGTIKKIHLG
EGSEYSYVKHKIDGIDKDNFVYSYSIIEGDAIGDKIEKISYEIKLVASGGGSIIKSTSHY
HTKGEVEIKEEHVKAGKERAAGLFKIIENHLLAHPEEYN
>ADV71357.1 metalloproteinase PMMP-3 [Protobothrops mucrosquamatus]
MIEVLLVTICLAVFPYQGSSIILESGNVNDYEVVYPRKVSALPKGAVQPKYEDTMQYELK
ENGEPVVLHLEKNKGLFSEDYSETHYSPDGREITTYPSVEDHCYYHGRIHNDADSTASIS
ACDGLKGYFKLQGQTYLIEPLKLPDSEAHAVFKYENIEKEDEAPKMCGVTQNWESDESIK
KASQLYLTPEQQRFPQRYVKLAIVVDYRMYIKYNRDSNKITVRVHEMVNHVNEMYKPLNV

AITLSLLRIWSTRDLITVQSDSKVTLGSFGDWRKTVLLKQQSHDCAHLLTDITFTKNVIG
VAYKKGMCDPKLSVGLVQDYSSNVFVVAAIMTHELGHNLGMEHDEDENGKKCKCDTCIMS
PAISDPPAQLFSDCSKNDYHTFLTNSKPQCILNAPLRTDTVSTPVSGNEPL
>AEB54655.1 Allergen Pro c 8; triosephosphate isomerase [Procambarus clarkii]
MANQRKFFVGGNWKMNGDRAGIDSIISFMKGPLSADTEVVVGCPQCYLMYTREHLPSNIG
VAAQNCYKVAKGAFTGEISPSMIKDCGCEWVILGHSERRNVFNEPDTLISEKVGHALEAG
LKVIPCIGEKLEERESNRTEEVVFAQMKALVPNISDWSRVVIAYEPVWAIGTGKTATPEQ
AQEVHAKLRQWLRDNVNAEVADSTRIIYGGSVTPGNCKELAKTGDIDGFLVGGASLKPDF
VQIINARD
>AFJ80778.1 Allergen Scy p 4; sarcoplasmic calcium-binding protein [Scylla paramamosain]
MAYSWDNRVKYVVRYMYDIDNNGYLDKNDFECLALRNTLIEGRGEFNSDAYANNQKIMSN
LWNEIAELADFNKDGQVTVDEFKQAVQNLCCGKSFDGFPPCFKTVIGRLFKTIDINGDGL
AGVDEYRLDCISRSAFSSVKEIDDAYAKLCTDDDKKAGGISLNRYQELYAQFISNPDEKC
NAVYLFGPLKEVQ
>AHZ10957.1 Fra a 1.06 allergen [Fragaria x ananassa subsp. ananassa]
MGVFTYETEFTSVIPPPRLFKAFILDADNLIPKIAPQAVKCAEIVEGDGGVGTIKKITFG
EGSQFGSVTHKIDGIDKENFVYSYSLVEGDALSDKIEKISYETKLVASSDGGSVIKSTSN
YHTKGDVEIKEEHVKAGKEKASHLFKLVEDYLLANPNEYC
>AHZ10958.1 Fra a 1.07 allergen [Fragaria x ananassa subsp. ananassa]
MGVFTYETEFTSVIPPPRLYKAFVLDTDNLIPKIAPQAVKSTELVQGDGGVGTIKKIHLG
EGSEYSYVKHQIDGLDKDNFVYNYSIIEGDAIGDKVEKISYEIKLVASPSGGSIIKSTSH
YHCKGEVEIKEEHVKAGKERAAGLFKIIENYLLGNPDAYN
>AHZ10959.1 Fra a 1.08 allergen [Fragaria x ananassa subsp. ananassa]
MGVFTYETEFTSVIPPPRLYKAFVLDADNLIPKIAPQAVKSAEIVQGDGGVGTIKKIHLG
EGSEYSYVKHQIDGLDKDNFVYNYSIIEGDAIGDKVEKISYEIKLVASPSGGSIIKSTSH
YHCKGEVEIKEEHVKAGKEKAAGLFKIIENHLLANPEAYN
>AHZ97469.1 Allergen Alt a 15; serine protease [Alternaria alternata]
PQRQMDSAKEVPNSYMVVFKKHVKDASKHHDWVQSVHSKNNEERMELRKRSSQFPVTTEV
FDGLKHVYEMAGMKGYSGHFDDETIEAIRNHPDVDYIERDSEVHTLGHDEPEIEKNSPWG
LARISHRDSLSFGTWNKYLYAADGGEGVDVYVIDTGTNTKHVDFEGRAKWGKTIPNGDAD
EDGNGHGTHCSGTVAGKKYGVAKKAHVYAVKVLRSNGSGTMSDVVKGVEYAAKAHSDTVQ
AAKDGKKKGFKGSAANMSLGGGKSTTLDLAVNAAVDAGIHFAVAAGNDNADSCNYSPAAA
ENAVTVGASTLLDERAYFSNYGKCNDIFAPGLNILSTWIGSEHATNTISGTSMASPHIAG
LLAYMLSLQPAKDSAYAVADITPKKLKANLISVATVGALSDVPRNTKNILAWNGGGSSNY
TEIVEKGGYTVKKAAEKNEEESEFRITIPSLSEIEDDFEKAKESAGRNAHRVGGKLQHLE
AEIEDFIAEEMESMFEKVKERVASQKL
>AJA79001.1 Allergen Fus p 9; serine protease [Fusarium proliferatum]
DKCDGETERQAPWGLARISHRNTLNFGTFNKYLYSSDGGEGVDAYIVDTGTNVDHVDFEG
RAHWGKTIPSGDADEDGNGHGTHCSGTVAGKKYGVAKKANVYAVKVLRSNGSGSMSDVVK
GVEFAATSHLEQKKKAKDGKRKGFKGSVANMSLGGGKTQALDAAVNAAVRTGIHFAVAAG
NDNADACNYSPAAASEPVTVGASALDDSRAYFSNYGKCTDIFAPGLNIQSTWIGSKYAVN
TISGTSMASPHIAGLLAYYLSLQPAEDSEYALASITPKKLKENLISVATEDALSDIPSDT
PNLLAWNGGGCSDYKKIVEAGSYKVKAAPSSRVEEIKHAVEQEVNLVSGKLTTGAKELGS
KAEKFSKKIHELVDEELEEFLKELNL
>AK068307.NT Translation from Accession AK068307: Oryza sativa Japonica Group cDNA clone:J013136I11, full insert sequence [Oryza sativa Japonica Group]
MKLVSIYLLVLCVVGANELLVVAASGNDGGGGRFVYSGFAGANLTLDGTATVTPAGLIEL
TNGTLQLKGHAFHPTPLRFGFGSGGGGGGDGVVVRSFSASFVFGILSAYPDMSAHGIVFL
VSPTTDFSAALASQYLGLVNVTSNGDARNRIFAVELDTLQQDEFRDINDNHVGVDINGLV
SLQSTSAGYYAADINGGGFRNLTLISHEAMRVWVDYDAGDARIDVTLAPLAVAKPVRPLI
SAAYNLSSVITDTAYVGFSSATGSFNSRHYVLGWSFAVDGGPAPAIDVAKLPKLPREGPK

ARSKFLEIFLPIASAAVVLAMGILVILLVRRRKRYTELREDWEVEFGPHRFPYKDLHHAT
QGFESKCLLGVGGFGRVYKGVLPNSNVEIAVKRVSHDSSQGVKEFVAEVVSLGRLQHCNL
VRLLGYCRRKGELMLVYEYMSNGSLDKYLHGQDNKPTLSWAQRFQIIKDIASGLLYLHEE
CDKVVIHRDIKASNVLLDNEMNARLGDFGLARLYDHGEDPQSTHVVGTIGYLAPELGRTS
KATPLTDVFAFGTFILEVTCGRRPIYHDSHGTQVMLVDWVLDHWHKQSLVDTVDLKLHGE
FDVGEACLVLKLGLLCSHPFINARPDMRRVMQYLKREVALPELMPTSMSFHMLALMQNDG
FDSYVQSYPSSNSKGNISTATSSLLEEG
>AK119653.NT Translation from Accession AK119653: Oryza sativa Japonica Group cDNA clone:002-130-H01, full insert sequence [Oryza sativa Japonica Group]
MDRVRGCAFLLGVLLAGSLFAFSVAKEETKKLGTVIGIDLGTTYSCVGVYKNGHVEIIAN
DQGNRITPSWVAFTDSERLIGEAAKNQAAVNPERTIFDVKRLIGRKFEDKEVQRDMKLVP
YKIVNKDGKPYIQVKIKDGENKVFSPEEVSAMILGKMKETAEAYLGKKINDAVVTVPAYF
NDAQRQATKDAGVIAGLNVARIINEPTAAAIAYGLDKKGGEKNILVFDLGGGTFDVSILT
IDNGVFEVLATNGDTHLGGEDFDQRIMEYFIKLIKKKYSKDISKDNRALGKLRREAERAK
RALSNQHQVRVEIESLFDGTDFSEPLTRARFEELNNDLFRKTMGPVKKAMDDAGLEKSQI
HEIVLVGGSTRIPKAQQLLRDYFEGKEPNKGVNPDEAVAYGAAVQGSILSGEGGDETKDI
LLLDVAPLTLGIETVGGVMTKLIPRNTVIPTKKSQVFTTYQDQQTTVSIQVFEGERSMTK
DCRLLGKFDLSGIPAAPRGTPQIEVTFEVDANGILNVKAEDKGTGKSEKITITNEKGRLS
PEEIDRMVREAEEFAEEDKKVKERIDARNQLETYVYNMKNTVGDKDKLADKLESEEKEKV
EEALKEALEWLDENQTAEKEEYEEKLKEVEAVCNPIISAVYQRTGGAPGGGADGEGGVDD
EHDEL
>AK242260.NT Translation from Accession AK242260: Oryza sativa Japonica Group cDNA, clone: J075184G19, full insert sequence [Oryza sativa Japonica Group]
MKIIFVFALLAIAACSASAQFDVLGQSYRQYQLQSPVLLQQQVLSPYNEFVRQQYGIAAS
PFLQSAAFQLRNNQVWQQLALVAQQSHYQDINIVQAIAQQLQLQQFGDLYFDRNLAQAQA
LLAFNVPSRYGIYPRYYGAPSTITTLGGVL
>AKF12278.1 Allergen Par h 1; defensin-like protein linked to polyproline-rich region [Parthenium hysterophorus]
MAKSSTSYLVFLLLVLVVAISEIASVNGKVCEKPSKTWFGNCKDTEKCDKRCMEWEGAKH
GACHQRESKYMCFCYFDCDPKKNPGPPPGAPGTPGTPPAPPGGGEGDAPPGGGAPPPAGG
EGGGGGGEGGGGAPPPAGGEGGGGGGDGGGGAPPAA
>AKV72166.1 Allergen Aca f 1; Ole e 1-like protein [Acacia farnesiana]
DDVPKPPVSQFHVQGLVYCDTCRYPFITEASPIMEGATVKLECRNITAGTQTFKAEAVTD
KVGQYSIPVDGDHEDDICEIELVKSPDNQCSEIPHDVYAKQSAKVSLTSNNGEASDVRSA
NALGFMRKEPLPECPEVLKEKLDMYDVKAN
>AKV72167.1 Allergen Pro j 1; Ole e 1-like protein [Prosopis Juliflora]
DDVAKPPVSQFHIQGLVYCDTCRIQFMTRVSTIMEGATVKLECRNITAGTQTFKAEAVTD
KVGQYSIPVNGDFEDDICEIELVKSPNSDCSEIPHDVYAKQSAKVSLTSNNGEASDIRSA
NALGFMRKEPLKECPEVSKEPLDMYDVKAN
>ALM30773.1 triose phosphate isomerase [Amphioctopus fangsiao]
MGRKFFVGGNWKLNGNKKSIDGIIEFMNAGPLNADTEVVVGPPSCYLEYVRSKLKGNIGV
AAQNCYKVPSGAFTGDISPAMIKDIGLRYVILGHSERRNVFGETDELIGEKIEHAVSEGL
IVIACIGEKLEEREAGKTEEVVFSQTKTIIKHTKDWSKVVIAYEPIWAIGTGKTATPEQA
QSVHASLRKFISENASKEIADNVRILYGGSVSAANCKELGQKPDIDGFLVGGASLKPDFV
KIVNARA
>ANQ43386.1 Man i 1 allergen [Mangifera indica]
MAGGKKIKIGINGFGRIGRLVARVALQRNDVELVAVNDPFITTDYMTYMFKYDTVHGQWK
HHEVKIKDQKTLLFDEKPVTVFGIRNPEEIPWAETGAEFVVESTGVFTDKEKAAAHLKGG
AEKVVISAPSKDAPMFVVGVNEKEYKPELNIVSNASCTTNCLAPLAKVINDRFGIVEGLM
TTVHSITATQKTVDGPSMKDWRGGRAASFNIIPSSTGAAKAVGKVLPSLNGKLTGMSFRV
PTVDVSVVDLTVRLEKEATYEEIKAAIKEESEGKLKGILGYTEEDVVSTDFVGDSRSSIF
DAKAGIALNKKFVKLVSWYDNEWGYSSRVIDLIVHMASTA

>ANZ22900.1 Allergen Amb a 12; enolase [Ambrosia artemisiifolia]
MATIKAVKARQIFDSRGNPTVEVDITLSDGTLARAAVPSGASTGIYEALELRDGGSDYLG
KGVSKAVANVNTIIGPALVGKDPTDQTGIDNFMVQQLDGTQNEWGWCKQKLGANAILAVS
LAVCKAGASVLKTPLYKHIANLAGNKNLVLPVPAFNVINGGSHAGNKLAMQEFMILPIGA
SSFKEAMKMGVEVYHNLKSVIKKKYGQDATNVGDEGGFAPNIQENKEGLELLKTAIAKAG
YTDKVVIGMDVAASEFYGEKDKTYDLNFKEENNDGKEKISGEQLKDLYKSFVSEYPIVSI
EDPFDQDDWEHYAKMTAECGEQVQIVGDDLLVTNPTRVKKAIDEKTCNALLLKVNQIGSV
TESIEAVRMSKHAGWGVMASHRSGETEDTFIADLSVGLATGQIKTGAPCRSERLAKYNQL
LRIEEELGSEAVYAGANFRKPVEPY
>ANZ22901.1 Allergen Amb a 12; enolase [Ambrosia artemisiifolia]
MLFVDEIKVDITLSDGTLARAAVPSGASTGIYEALELRDGGSDYLGKGVSKAVANVNTII
GPALVGKDPTDQTGIDNFMVQQLDGTQNEWGWCKQKLGANAILAVPLAVCKAGASVLKTP
LYKHIANLAGNKNLVLPVPAFNVINGGSHAGNKLAMQEFMILPIGASSFKEAMKMGVEVY
HNLKSVIKKKYGQDATNVGDEGGFAPNIQENKEGLELLKTAIAKAGYTDKVVIGMDVAAS
EFYGEKDKTYDLNFKEENNDGKEKISGEQLKDLYKSFVSEYPIVSIEDPFDQDDWEHYAK
MTAECGEQVQIVGDDLLVTNPTRVKKAIDEKTCNALLLKVNQIGSVTESIEAVRMSKHAG
WGVMASHRSGETEDTFIADLSVGLATGQIKTGAPCRSERLAKYNQLLRIEEELGSEAVYA
GANFRKPVEPY
>XP_005598291.1 uteroglobin [Equus caballus]
MRLFLPVLLVTLALCCCETNAATCPAVATDIASFFLLPDSLFKLQLIKYQAPPEAKDATM
QVKQCINEISAGDRYIITETLGKIVLQCGA
>XP_003362701.1 uteroglobin [Equus caballus]
MKLVTVLMLVAFPLYCYAGSGCQLLEDVVEKTITAELSPAEYVEAVQEFIPDEATEKAAI
QLKQCYLKQSNETLNDFRTMMNSMYNSAYCALF
>APD76154.1 Allergen Jug r 5; pathogenesis related protein/PR 10/ Bet v 1-like protein [Juglans regia]
MGVFTYETESTSVIPPARLFKAFVLDADNLIPKVVPQAVKSSEIIEGNGGPGTIKKINFG
EGSQYKYVKHRTDAIDEANFTYAYSVIEGDALADKIEKISYETKIVASHEGGSILKSISH
YHSKGDHEIKEEDVKDGKEKASGLFKAVEGYLLAHPDAYN
>APR62629.1 Allergen Jug n 4; 11S globulin/legumin- like protein [Juglans nigra]
MAKPILLSISLCLVALVNGCLAQSGGRQQPRFGECKLKRLVALEPSNRIEAEAGVIESWD
PNNQQFQCAGVAVVRRTIEPNGLLLPQYSNAPQLLYIVKGRGITGVLFPGCPETFEESQQ
GQSRIRPSLRSASFQRDRHQKIRHFREGDVIAFPAGVAHWCYNDGDTPVVAVALMDTTNN
ANQLDQNPRNFYLAGNPDDEFRPQGQQEYEQHRRQQQHQQRHGEPGQQQRGSGNNVFSGF
DADFLADAFNVDTETARRLQSENDHRRSIVRVEGRQLQVIRPRWSREEQEREERKERERE
RESESERRQSRRGGRDDNGLEETICTLRLRENIGDPSRADIYTEEAGRISTANSHTLPVL
RWLQLSAERGALYSDALYVPHWNLNAHSVVYALRGRAEVQVVDNFGQTVFDDELREGQLL
TIPQNFAVVKRARNEGFEWVSFKTNENAMVSPLAGRTSAIRALPEEVLANALQIPREDAR
RLKFNRQESTLVRSRPSSSRSSRSERRAEV
>ARG42047.1 major urinary protein-like lipocalin 2 precursor [Mesocricetus auratus]
MKLLLLLLVLGLELTLVCVHAEEKTSLTGKNFNPEKIVGKWHSILLASDKREMIEEYGSM
RMFMEYIRLFKNSSLAVKFHTIANEECTELYLVCDKTEKGGVYDAKYDGYNRFTILDTDY
NDYIITHLRNIKNGETFQLMKLCGRKPKLSSNIKKKFGDLCQKHGIVKENIIDLTEADHC
LKTQVEIVA
>ARS33724.1 Allergen Sal k 6; polygalactorunase [Salsola kali]
MKTFNLPLLVALFYLFVSVARSQGPIDITKFGAKPNADATSALLAAWKEACAAAAPAKIV
VPAGEFLLNAVKLQGPCKAPLTIEIAGNFKAPADVAQMKGEDTWVKIENVQGLTITCLPT
GGTFDGQGQAAWKQNKCAQSGMCNSLPYNFRFNTLTNAQISGIKSLNSKLYHMGVMGCKN
ITLTGLTIDAPKDSLNTDGMHIGRSNGVHATNSKIGTGDDCISMGDGAVDVHVEGITCGP
GHGISIGSMGKFANEAPNTGIFVKNCSFTDTDNGVRIKSWMNSFEASASDLHFEDITVTN
VLNPVIIDQEYCPYNHCKEKTPSKVKLSKISFKNVHGAAKSAEVVKLLCSSAVPCDGVEL
ADIDLTFPGGAAVSQCKNVKPIVTGKQNPVACGAPATPAAP

>B8AL97.1 Cupincin; 52 kDa globulin-like protein; Ory s NRA [Oryza sativa Indica Group]
MAKKKTSSSMARSQLAALLISLCFLSLASNAVGWSRRGEREEEDERRRHGGEGGRPYHFG
EESFRHWTRTRHGRFSVLERFPDEQVVGAAVGGYRVAVLEAAPRAFLQPSHYDADEVFYV
KEGEGVIVLLREGRKESFCVREGDAMVIPAGAIVYSANTHSSKWFRVVMLLNPVSTPGHF
EEYFPVGGDRPESFFSAFSDDVLQAAFNTRREELEKVFERQREGGEITTAPEEQIRELSK
SCSRGGGGGSGSEWEIKPSSLTGKSPYFSNNHGKLFELTGDECRHLKKLDLQIGLANITR
GSMIAPNYNTRATKLAVVLQGSGYFEMACPHVSGGGSSERRERREHGRRREEEQGEEEH
GERGEKARRYHKVRAQVREGSVIVIPASHPATIVASEGESLAVVCFFVGANHDEKVFLAG
RNSPLRQLDDPAKKLVFGGSAAREADRVLAAQPEQILLRGPHGRGSVSDM
>BAG86826.1 unnamed protein product [Oryza sativa Japonica Group]
MKMKALLPVAAMLLLVSGQLAAPVTADGYVGQLAVFWGRHKEEGSLREACDTGRYNIVVI
TFYNVFGYQRGRYGLDFSGHPVAAVGADIKHCQSKGVQVLLSIGGQGGEYSLPSSQSASD
VADNLWNAYLGGRRAGVPRPFGDAVVDGIDFFIDQGGADHYEQLARQLHGRGVLLTATVR
CAYPDSRMEAALATGVFARIHVRIFGDDQCTMFPKDAWEKWAAAYPRCTVFLTVVASPEQ
DEGYMFQKDLYYGVQQFIDKEPNYGGIAIWDRYYDKKANYSGEG
>BAG88472.1 unnamed protein product [Oryza sativa Japonica Group]
MASSSFSFLLVAALLGLASWKAIASDPSPLQDFCVADLNSPVRVNGFVCKNPMNASADDF
FKAAMLDKPRDTNNKVGSNVTLVNVLQLPGLNTLGISIARLDFAPLGLNPPHTHPRATEI
FTVLEGTLYVGFVTSNPDNRLLSKVLNKGDVFVFPEGLIHFQFNPNPHKPAVAIAALSSQ
NPGVITIANAVFGSNPPISDDILMKAFQVDKKIIDLLQAQF
>BAG93480.1 unnamed protein product [Oryza sativa Japonica Group]
MPPDVEVIRHEHIDHPSSTRDRSVVVSSNSLSNTVSAYTDMKNTSSLCLLLLVVLCSLTC
NSGQAQVLFQGFNWESWKQQGGWYNMLKGQVDDIAKAGVTHVWLPPPSHSVAPQGYMPGR
LYDLDASKYGTAAELKSLIAAFHGKGVQCVADVVINHRCAEKKDARGVYCVFEGGTPDDR
LDWGPGMICSDDTQYSDGTGHRDTGEGFGAAPDIDHLNPRVQRELTDWLNWLKSDVGFDG
WRLDFAKGYSTDIAKMYVESCKPGFVVAEIWNSLSYNGDGKPAANQDQGRQELVNWVNAV
GGPAMTFDFTTKGLLQAGVQGELWRLRDGNGKAAGMIGWLPEKAVTFVDNHDTGSTQKLW
PFPSDKVMQGYAYILTHPGVPCIFYDHMFDWNLKQEITALAAIRERNGINAGSKLRIVVA
DADAYVAVVDEKVMVKIGTRYDVGNAVPSDFHQTVHGKDYSVWEKGSLRVPAGRHL
>BAG95020.1 unnamed protein product [Oryza sativa Japonica Group]
MEQYEKVEKIGEGTYGVVYKGKHRHTNETIALKKIRLEQEDEGVPSTAIREISLLKEMQH
RNIVRLQDVVHKEKCIYLVFEYLDLDLKKHMDSSPDFKNHRIVKSFLYQILRGIAYCHSH
RVLHRDLKPQNLLIDRRTNSLKLADFGLARAFGIPVRTFTHEVVTLWYRAPEILLGARHY
STPVDMWSVGCIFAEMVNQKPLFPGDSEIDELFKIFSIMGTPNEETWPGVASLPDYISTF
PKWPSVDLATVVPTLDSSGLDLLSKMLRLDPSKRINARAALEHEYFKDLEVA
>BAH01262.1 unnamed protein product [Oryza sativa Japonica Group]
MKIIFFFALLAIAACSASAQFDAVTQVYRQYQLQPHLMLQQQMLSPCGEFVRQQCSTVAT
PFFQSPVFQLRNCQVMQQQCCQQLRMIAQQSHCQAISSVQAIVQQLRLQQFASVYFDQSQ
AQAQAMLALNMPSICGIYPSYNTAPCSIPTVGGIWY
>BAV90601.1 Allergen Der f 34; enamine/imine deaminase [Dermatophagoides farinae]
MSPKRIISTPLAPQPIGPYSQAVQVGNTVYLSGQIGMNVRTNEMVTGPIRDEAQQAFTNM
KAVVEASGAKMSDVVKVNIFIRNFNDFPAINDVMKEFFQSPFPARSTVGVAELPKNARVE
IESIVVIE
>BAW03242.1 Allergen Lip b 1; unknown [Liposcelis bostrychophila]
MAAIKFILIAFLAFSVSQTTEANVVAQPKAFDIIAIVKQVIDIVRIVVKAVNDAVPDIDK
ILQQLVALLPSDVAATVTTVLDAIKQAITDENARIDHIIQVLEKAMDDLLAIDPCYQPQA
DAIKAVLDKALSGIDGVLHGSIDAHKADIDNVIAGFSQDLEDLRNLYDTQLPAAVVCLTP
GNAESCGCLDGVKETVVNGVVSLAANFVLHLTAASDVLKVVVPEVINGSTPIVNDGLAAA
GPLIDNVCTCVAAM
>BAW03243.1 Allergen Lip b 1; unknown [Liposcelis bostrychophila]
MAAFKFILLAFLAFSVSQTTEANVVAQPRAFDIIDIVKKVIQIVEIVVEAVNGAVEPIDK
ILQELIALLPADVAKTVTAVVDALRQAIADENVRIDHIIEVLNKALDDLLAIDPCYQPQA

DAIKAVLDTALSGIDKVLHGSIDAHKADIDNVIAGFSQDLEDLRNLYDTQLPAAVVCLTP
GNADSCTCLDGVKETVVNGVVSLAANFVLHLTAASDVLKVVVPEVIDGATPVVNDGLAAA
GPLIDNVCACVQGM
>BAX34757.1 Allergen Der f 35; NPC2-like protein [Dermatophagoides farinae]
MIKFLCIFALTFAVASAGKMKFVDCGHKEVISLDVSGCEGDYCVLHKGKTIDLDMKCKSN
QDSEHLKLIISADVNGIEIEVPGFDQDGCHYVQCPIHKGQDYDIKYSYNVPAVLPNIKGT
LTAKVIGDNGLVGCLKLNGEIAD
>C0HJX6.1 Allergen Pla l 2; profilin [Plantago lanceolata]
AILGQDGSVWAQGLHLGGAKYVIAGEPGAVIRLGDYLLDQGL
>C0HKB1.1 Allergen Cup s 2; polygalacturonase [Cupressus sempervirens]
DVAIVFNVEHTLSAVFLVPANKKVDGIIAAYPDPVKIWMHFARTVCNDKGRPTAIKIDFS
KSELTLMNSPEFHLVFGECDGVKIQGIKIKRFEIEKDLTCGPGHGMSIGSLGKGNSRSEV
SFVHLDGAKFIDTQNGLRSAVKIEDVTFKNANGYYTNPLNPPCK
>C0HKC0.1 Allergen Pun g 7; gibberellin-regulated protein [Punica granatum]
GSSFCDSKCAVRCSKAGVQD
>CAA58223.1 mucofirase 3 [Protobothrops mucrosquamatus]
MVLIRVLANLLILQLSYAQKSSELVIGGDECNINEHPFLVLVYYDDYQCGGTLLNEEWVL
TAAHCNGKDMEIYLGVHSKKVPNKDVQRRVPKEKFFCDSSKTYTKWNKDIMLIRLDRPVR
KSAHIAPLSLPSSPPSVGSVCRVMGWGTITSPQETYPDVPHCANINLLDYEVCRAAYAGL
PATSRTLCAGILEGGKDSCVGDSGGPLICNGQFQGIVSWGGDPCAQPREPGVYTNVFDHL
DWIKGIIAGNTDVTCPL
>CEE03318.1 unknown function [Thaumetopoea solitaria]
VPQLSEKAEKAVDLTYQEKNNLFELGSVVGDIISKNGCHVSFGCHKGYCWAGCGNPTNPW
SWGENWCYTTKTYSQSYSYVQCTQDSECDGCWKCGGPCSA
>XP_008286259.1 parvalbumin [Stegastes partitus]
KAFAIIDQDKSGFIEEDELKLFLQNFSAGARA
>L7UZ85.1 Alpha-actinin; F-actin cross-linking protein; Der f 24 [Dermatophagoides farinae]
MTQDGYMQQEEEEWEREGLLDPAWEKQQRKTFTAWCNSHLRKAGTQIDNIEEDFRNGLKL
MLLLEVISGETLGKPDRGKMRFHKIANVNKALDFIESKGVKLVSIGAEEIVDGNSKMTLG
LIWTIILRFAIQDISVEEMTAKEGLLLWCQRKTAPYKNVNVQNFHLSWKDGLAFCALIHR
HRPDLIDYGKLRKDNPMDNFNLAFDVAEKHLNIPRMLDAEDVVYTAKPDERAIMTYVSWY
YHAFHGAQQAETAANRICKVLKVNQDNERLMEEYERLASDLLEWIRRTTPWLENRTTDNT
LPGTQKKLEEFRSYRRQHKPPRVEQKANLETNFNTLQTKLRLSKRPAYMPSEGKMVSDIT
GAWKGLESAEKGFEEWLLSEMMRLERLDHLAQKFKHKADIHEEWTQGKEEMLVSHDFRQC
KLNEIKALKKKHEAFESDLAAHQDRVEQIAAIAQELNALGYHDIASINARCQRICDQWDR
LGTLTTRRRQALDEAEQILEKVDLFHLEFAKRAAPFNNWLDETREDLVDMFIVHSIEEIQ
QLIDAHESFKNTLGEADKEYKTIVGLAQEVQPMATQYQIPGGLENPYTTLTPEVITTKWR
DVKQLVPQRDHTLQTELIRQQCNENLRRQFAEKANVVGPWIERQMDAVTAIGMGMQGTLE
DQLQRLHEYDQAVVQYRPHVDDLEKIHQEVQEAMIFENRYTQYTMETLRVGWEQLLTSIH
RNINEVENQILTRDSKGITQEQLNEFRTSFNHFDKKRTGRLAPEEFKSCLVSLGYNIRND
DRPEFRRILAIVDPNKTGYVHFDAFLDFMTREYTDTDTAEQMIDSFRILAGDKPYITADE
LRRELPPDQAEYCIRRMTPYNGQCAVPGALDYRSFSTALYGESDL
>NP_001003242.2 epididymal secretory protein E1 precursor [Canis lupus familiaris]
MRLLVAAFLLLALGASALAEPVHFKDCGSAVGVIKELNVNPCPAQPCKLHKGQSYSVNVT
FTSNIPSQSSKAVVHGIVLGVAVPFPIPEADGCKSGINCPIQKDKTYSYLNKLPVKNEYP
SIKLVVQWMLLGDNNQHLFCWEIPVQIEG
>NP_001005208.1 serum albumin precursor [Sus scrofa]
MKWVTFISLLFLFSSAYSRGVFRRDTYKSEIAHRFKDLGEQYFKGLVLIAFSQHLQQCPY
EEHVKLVREVTEFAKTCVADESAENCDKSIHTLFGDKLCAIPSLREHYGDLADCCEKEEP
ERNECFLQHKNDNPDIPKLKPDPVALCADFQEDEQKFWGKYLYEIARRHPYFYAPELLYY

AIIYKDVFSECCQAADKAACLLPKIEHLREKVLTSAAKQRLKCASIQKFGERAFKAWSLA
RLSQRFPKADFTEISKIVTDLAKVHKECCHGDLLECADDRADLAKYICENQDTISTKLKE
CCDKPLLEKSHCIAEAKRDELPADLNPLEHDFVEDKEVCKNYKEAKHVFLGTFLYEYSRR
HPDYSVSLLLRIAKIYEATLEDCCAKEDPPACYATVFDKFQPLVDEPKNLIKQNCELFEK
LGEYGFQNALIVRYTKKVPQVSTPTLVEVARKLGLVGSRCCKRPEEERLSCAEDYLSLVL
NRLCVLHEKTPVSEKVTKCCTESLVNRRPCFSALTPDETYKPKEFVEGTFTFHADLCTLP
EDEKQIKKQTALVELLKHKPHATEEQLRTVLGNFAAFVQKCCAAPDHEACFAVEGPKFVI
EIRGILA
>NP_001036878.1 27 kDa glycoprotein precursor [Bombyx mori]
MMWKTVLITIFAAGVLADDFSQITAVVTSQCTKNNAEDKVPEVEAALRTFGNCLKGLVDL
NVLKTEIEEAKPNGALDEVFKKYCDKSAQLKGCISSVLQGVRPCVGNEYANHINDAQNST
NQLIDFVCYKDGDRIALFIAEGGPECFQQKTENLKTCFLNLKQSFPTVESANNLSLVEKC
AKVDEMTSCIVKSLEECSTPTPANMAESLIKFMRKDSPCHTALPKTD
>NP_001037083.1 thiol peroxiredoxin [Bombyx mori]
MPLQMTKPAPQFKATAVVNGEFKDISLSDYKGKYVVLFFYPLDFTFVCPTEIIAFSEKAD
EFRKIGCEVLGASTDSHFTHLAWINTPRKQGGLGPMNIPLISDKSHRISRDYGVLDEETG
IPFRGLFIIDDKQNLRQITINDLPVGRSVEETLRLVQAFQFTDKHGEVCPANWRPGAKTI
KPDTKAAQEYFGDAN
>NP_001316123.1 non-specific lipid-transfer protein precursor [Solanum
lycopersicum]
MKAIAILVLVVLAVFQLAMVARGAITCGQVDANLAPCVPFLTQGGEPGAACCSGVRTLNG
NTQSSDDRRTACNCVKAAANRYPNLKDDAAQSLPSKCGISLTVPISRTVNCDTIS
>P13080.1 Probable maltase [Aedes aegypti]
MKIFVPLLSFLLAGLTTGLDWWEHGNFYQVYPRSFKDSDGDGIGDLDGVTEKLKYLKDIG
MDGVWLSPIFSSPMADFGYDISNFREIQTEYGDLDAFQRLSDKCKQLGLHLILDFVPNHT
SDQHEYFKKSVQKDETYKDFYVWHPGVHGPNNTKVPPSNWISVFRGSSWEWNEERQEFYL
HQFLKEQPDLNYRNPAVVEEMKNVLRYWLDRGVSGFRIDAVPYLFESDIIDGRYRNEPES
RTTDDPENPAYLVHTQTMDQPETYDMIYQWRAVLDEYSKTDNRTRIMMTEGYTSLPKIIE
FFGNATANGAQIPFNFEVISNVKKNSTGADFATYVKRWLDAKPANRRSNWVLGNHDNNRL
GSRLGENKIDLYNIALQTLPDIAVTYYGEEIGMLDQWIPWNETVDPAACRSDEASYSAYS
RDPARTPMQWDSGKNAGFSKAAKTWLPVADNYKTLNVKIQDRARKSHLKIFKKLTKYRKR
QILTEGDIDIKVSGENLLVYKRKVDKVGYVVVALNFGTEPVALGLSSLFDRADQRMQVVV
SSNRVSTPDNVWVDVDNYVLIGESGIVLQYLWGKNPIVS
>P29022.1 Endochitinase A; Seed chitinase A [Zea mays]
MANAPRILALGLLALLCAAAGPAAAQNCGCQPNFCCSKFGYCGTTDAYCGDGCQSGPCRS
GGGGGGGGGGGGGGSGGANVANVVTDAFFNGIKNQAGSGCEGKNFYTRSAFLSAVNAYPG
FAHGGTEVEGKREIAAFFAHVTHETGHFCYISEINKSNAYCDASNRQWPCAAGQKYYGRG
PLQISWNYNYGPAGRDIGFNGLADPNRVAQDAVIAFKTALWFWMNNVHGVMPQGFGATIR
AINGALECNGNNPAQMNARVGYYKQYCQQLRVDPGPNLIC
>Q75GX9.1 63 kDa globulin-like protein; Ory s GLP63 [Oryza sativa
Japonica Group]
MATRARATILLLLAAVLFAAAAAASGEDRRRETSLRRCLQRCEQDRPPYERARCVQECKD
QQQQQQERRREHGGHDDDRRDRDRRGEGSSEEEDEGRERGSRRRPYVFGRRSFRQVVRSD
QGSVRLLPPFHQASSLLRGIKNYRVAVLEANPRSFVMPTHTDAHCICYVAQGEGVVAIIE
NGEKWSYAIRQGDVFVAPAGTINYLANTDGRRKLIVTKILHTISVPGQIQFFFAPGGRNP
ESFLSSFSKGVQRAAFKISEEKLEKLLGKQDKGVIIRASEEQVRELRRHASEGGHGPHWP
LPPFGESSRGPFNILEQRPRFANRHGRLYEADARSFHDLAEHDIRVAVVNITAGSMNAPF
YNTRSVKVAYVLDGEGEAEIVCPHLSRGGRGGESEERRRERGKGKWREEEEEEEQQKGQ
EEEEEEQVGQGYETIRARLSRGTVFVVPSGHPIVVTSSRDSTLQIVCFDVHANNNERMYL
AGMNSVLKKLDPQAKELAFAASAREVDELLNAQQESAFLAGPEKSGRRGEESEDEDRRRR
RSHRGRGDEAVETLLRMAAAAV
>Q7X7E6.1 17kDa alpha-amylase/trypsin inhibitor 1; Allergen=Ory s 17kD
[Oryza sativa Japonica Group]
MASASDKLVLSAIVLAVLAAVVAAASGYGDVGEYCRVGKAVSRNPVPSCRNYIARWCAAA

GGRMDSRKQPPREFLEPCCRELAAVPMQCRCDALSVLVRGVVTEEGDRVSGMISQHAAPG
CDAATIAGMASALTDYGRCNLQHTAGSFACLMFGGGMD
>Q7X8H9.1 17kDa alpha-amylase/trypsin inhibitor 2; Ory s 17kD [Oryza sativa Japonica Group]
MALASDKFVLSAIVLAVLTVAAAAAGYGGYGDVGEYCRVGKAVSRNPVPSCRNYIARWCA
VAGGRLDSGKQPPRQLLEPCCRELAAVPMQCRCDALSVLVRGVVTEEGDRVAGMISQHAA
PGCDAATIAGMASALTDYGRCNLQHTGFFGCPMFGGGMD
>Q852L2.2 Cupincin; 52 kDa globulin-like protein; Ory s NRA [Oryza sativa Japonica Group]
MAKKKTSSSMARSQLAALLISLCFLSLASNAVGWSRRGEREEEDERRRHGGEGGRPYHLG
EESFRHWTRTRHGRFSVLERFPDEQVVGAAVGGYRVAVLEAAPRAFLQPSHYDADEVFYV
KEGEGVIVLLREGRRESFCVREGDAMVIPAGAIVYSANTHSSKWFRVVMLLNPVSTPGHF
EEYFPVGGDRPESFFSAFSDDVLQAAFNTRREELEKVFERQREGGEITTAPEEQIRELSK
SCSRGGGGGSGSEWEIKPSSLTGKSPYFSNNHGKLFELTGDECRHLKKLDLQIGLANITR
GSMIAPNYNTRATKLAVVLQGSGYFEMACPHVSGGGSSERRERERREHGRRREEEQGEEEH
GERGEKARRYHKVRAQVREESVIVIPASHPATIVASEGESLAVVCFFVGANHDEKVFLAG
RNSPLRQLDDPAKKLVFGGSAAREADRVLAAQPEQILLRGPHGRGSVSDM
>Q9DG84.1 Snake venom serine protease serpentokallikrein-2 [Protobothrops mucrosquamatus]
MVLIRVLANLLILQLSYAQKSSELVIGGDECNINEHPFLVLVYYDDYQCGGTLINEEWVL
TAAHCNGENMEIYLGMHSKKVPNKDRRRRVPKEKFFCDSSKNYTKWNKDIMLIRLNRPVR
KSAHIAPLSLPSSPPSVGSVCRIMGWGTISPTKVTLPDVPRCANINLLDYEVCRAVYPEL
PATSRTLCAGILEGGKDSCGGDSGGPLICNGQFQGIVSWGGDPCAQPHEPGLYTNVFDHL
DWIKGIIAGNTDVTCPL
>Q9YGJ8.2 Venom plasminogen activator Haly-PA [Gloydius brevicaudus]
MALIRVLANLLILQLSYAQKSSELVVGGDECNINEHRSLVVLFNSSGLICSGTLINQEWV
LTAAHCDSKNFQMLFGVHSKKILNEDEQTRDPKEKFICPNKKKDDEKDKDIMLIRLDSPV
SNSEHIAPLSLPSSSPTVDSVCRIMGWGTIKPADETYPDVPHCANINILDHTVCRAAYPV
LLAGSSTLCAGTQQGGKDTCVGDSGGPLICNGQIQGIVSWGAHPCGQGSKPGVYTKVFDH
LDWIKSIIAGNTAVTCPP
>SHD75397.1 RNA dependent RNA polymerase [Sarcoptes scabiei]
MSARSAKFMYRSGNAGASGDLSVEYGTDLGALTRLEDKIRLLSDDLESEREMRQRIEREK
AELQIQVMSLSERLEEAEGSSESVVEMNKKRDSELAKLRKLLEDVHLESEETAHHLRQKH
QAAIQEMQDQLDQVQKAKNKSDKEKQKFQAEVFELLAQLETANKEKLTAMKTVEKLEYTV
HELNIKIEEINRTVIELTSQKTRLSQENTELIKEVHEHKMQLDNANHLKQQLAQQLEDTK
HRLEEEERKRASLENHAHTLEVELESLKVQLDEESEARLELERQLTKANGDAASWKSKYE
AELQAHADEVEELRRKMAQKISEYEEQLEALLNKCSSLEKQKSRLQSEVEVLIMDLEKAT
THAQQLEKRVAQLEKLNLDLKNKLEEVTMLMEQAQKEARAKAAELQKLQHEYEKLRDQRD
ALARENKKLTDDLAECKVFRHHDAHRRSTNRRSKSNDWRTREKSYLLPTKKRKPYANKRR
LRINDLPSWLKYDTITRNVWHRKRKKSKHLENNIKSRSNSLICDLKLKLNKPRSHDRRNI
KLKSLNWNCHWMLPIKPILIYRKQSKNKPYKLRSFKHTMMRRQSNHCTGSSIGSHPKTMP
SVTSRAGRAKNRFGTSESCQTTSRTIAGSCRKSTYHHQCSCFSKQIGIGIRCSTKRLRSP
QRTQNFTSTETYHAQIYQGLISGGTGTISENGDRKEIFGARSSYPTCPYRRGRSQCFGWR
TCHCTGEQNSCDRSGRGTKTTRDGKNAKKRSSTQGIVGAKRGGPQTNPIASRNGRQNERK
GQSLTTNARTGGNEPTKSDSCSTLPTIGSCRSSGSSIKSIVHPCQTPF
>XP_015646887.1 PREDICTED: casein kinase II subunit alpha [Oryza sativa Japonica Group]
MSKARVYTDVNVLRPKEYWDYEALTVQWGEQDDYEVVRKVGRGKYSEVFEGINVNNNEKC
IIKILKPVKKKKIKREIKILQNLCGGPNIVKLLDIVRDQHSKTPSLIFEYVNNTDFKVLY
PTLTDYDIRYYIYELLKALDYCHSQGIMHRDVKPHNVMIDHELRKLRLIDWGLAEFYHPG
KEYNVRVASRYFKGPELLVDLQDYDYSLDMWSLGCMFAGMIFRKEPFFYGHDNHDQLVKI
AKVLGTDSLNSYLNKYRIELDPQLEALVGRHSRKPWSKFINADNQHLVSPEAIDFLDKLL
RYDHQDRLTAREAMAHPYFLQVRAAENSRPRAQ
>AHA56102.1 Amb a 11 cysteine protease [Ambrosia artemisiifolia]

MEINKLVCFSFSLVLILGLVESFHYHERELESEEGFMGMYDRWREQHNIEMRSPERFNVF
KYNVRRIHESNKMDKPYKLKVNEFADMTNLEFVNTYANSKISHFQALRGSAPGSIDTDPN
KDFIYANVTKIPDKVDWREKNAVTDVKGQGGCGSCWAFAAVVALEGINAIRTGKLVKFSE
QQLVDCDMTNAGCDGGLMEPAFTYVIKHGGIAPEASYPYVGKRETCDKAKIKDVLKIDGR
QNVPGLDEEALRKAVAHQPVATGIQLSGHGLQFYSEGVYTGDCGTEPNHGVGIVGYGENE
KGIKFWTVKNSWGPTWGEKGYIHLQRGARKEGLCGVAMHSSFPIMNDPNPPKDDPNGPKD
DPDAPKDPKFKTTQRLQGIRTKLLEL
>5X7Y_A Lipocalin, putative Can f 6, Chain A [Canis lupus familiaris]
GSHEEENDVVKGNFDISKISGDWYSILLASDIKEKIEENGSMRVFVKDIEVLSNSSLIFT
MHTKVNGKCTKISLICNKTEKDGEYDVVHDGYNLFRIIETAYEDYIIFHLNNVNQEQEFQ
LMELYGRKPDVSPKVKEKFVRYCQGMEIPKENILDLTQVDRCLQARQSEAAQVSSAE
>AAV83993.1 Arginine kinase Putative Pen c 2 [Penaeus chinensis]
MADAAVIEKLEAGFKKLEAATDCKSLLKKYLTKAVFDQLKDKKTSLGATLLDVIQSGVEN
LDSGVGIYAPDAEAYTLFAPLFDPIIEDYHVGFKQTDKHPNKDFGDVTSFVNVDPEGKYV
ISTRVRCGRSMEGYPFNPCLTEDQYKEMESKVSSTLSSLEGELKGTYYPLTGMGKEVQQK
LIDDHFLFKEGDRFLQAANACRYWPSGRGIYHNDNKTFLVWVNEEDHLRIISMQMGGDLG
QVFRRLTSAVNEIEKRIPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANRDKLEEV
AGKYNLQVRGTRGEHTEAEGGIYDISNKRRMGLTEFQAVKEMQDGILELIKMEKEM
>COMPARE001 Allergen Bla g 9; arginine kinase [Blattella germanica]
VDAAVLEKLEAGFAKLAASDSKSLLKKYLTKEVFDNLKTKKTPTFGSTLLDVIQSGLENH
DSGVGIYAPDAEAYTVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYII
STRVRCGRSMQGYPFNPCLTEAQYKEMEDKVSSTLSGLEGELKGQFYPLTGMTKEVQQKL
IDDHFLFKEGDRFLQHANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLGQ
VYRRLVTAVNDIEKRVPFSHDDRLGFLTFCPTNLGTTVRASVHIKVPKLAADKKKLEEVA
GKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKEMNDGIAELIKIESSL
>ABV55108.1 Catalase 2 [Musa acuminata AAA Group]
MDPYKFRPSSSFDTNFTTTNAGAPVWNDDQALTVGSRGPILLEDYHLVEKIAHFARERIP
ERVVHARGASAKGFFECTHDVTHLTCADFLRAPGVQTPIILRFSTVIHERGSPETIRDPR
GFAVKFYTREGNWDLLGNNFPVFFIRDGIKFPDVIHAFKPNPKSHVQEYWRVFDFLSHHP
ESLHTFFFLFDDVGVPSDYRHMEGFGVNTYTFVSKEGKVNYVKFHWKPTCGVKCLLEDEA
IVVGGKNHSHATQDLYDSIAAGNYPEWKLFVQVMDPDTEDRYDFDPLDDTKTWPEDLLPL
QPVGRLVLNRNIDNFFSENEQLAFGPGLVVPGIYYSDDKMLQCRVFAYGDTQRYRLGPNY
LTLPVNAPKCAHHNNHYDGLMNVMHRDEEVDYFPSRHASLRHAERFPIPNRVVTGKREKN
VIPKQNDFKQPGERYRSWAPDRQERFVRRWAEQLAHPKVSYELRSIWISFLSKCDTSLGQ
KVANRLNMRANI
>ACV85695.1 Allergen Cari p 1; polygalacturonase [Carica papaya]
MAVLYYDNYNRTHLLILSFSILFFSFSSRLVNSGFHGERRRERVHGYHYDELNNFSEDQE
GGLTLLSGAGYDPEAHPSFLSSINGDRDEEFTEAEPSVLSFKGIEDLRSAKPRSVIFNVD
DFGAEGDGIHDDTQQVFEEAWEKACSYKGPALFLVPERRTYLIGPIRFLGPCKSNLVIQV
QISGTILASDNRSDYRKDPRHWIVIDSVDNLLVEGGGTIHGNGQIWWRNSCKAPCKEAPT
VTFYKCKNLMVRNVKVQDAQQMQVSFEKCSEVTASDLTVTAPEKSPNTDGIHVTNTQNIL
ITNTFIGGDDCISIESGSHNVQIEELTCGPGHGINVDSLGDNNSKAFVSFVTVNGAKLSG
TTNGVRIKTYQGGSGSASNIKFQNVDMENVKNPIIIDQNYCDQKKPCKKQQKSAVQVKDV
LYQNIQGNSASDVAIDFDCSENYPCLGVKLQNVRLQRADRVDEEAKAICNHVELTETGVV
FPRCPDYHLKHDEL
>AHY24648.2 Putative Can f 4 variant allergen precursor, partial [Canis
familiaris]
MKILLLCLALVLASDAQLPLPNVLTQVSGPWKTLYVSSNNLDKIGENGPFRIYLRGINVD
IPRLKMLFNFYVKVDGECVENSVGASIGRDNLIKGEYNGGNYFRIIDMTPNALIGYDVNV
DSKGKITKVALLMGRGAHVNEEDIAKFKKLSREKGIPEENIIYLGDTDNCPNHE
>COMPARE013 Allergen Der f 31; cofilin [Dermatophagoides farinae]
MASGVIVATEAKTLYEEVKKDKKYRYIIYHIKDERVIEVETTGPRDATYSDFVARLQDYK
NECRYCVFDFPANIPVEGGGEKSNMSVDRLVLMTWCPESAKIKQKMLYSSSYDALKKALV
GVYRYVQACDYEEASEEAIAEAFRKGG

>AIV43661.1 Allergen Koc s 2; profilin [Bassia scoparia]
MSWQTYVDDHLMCDIEGTTNHLTGAAILGVDGSVWAQSANFPQFKPDEIAAIVKEFDEPG
TLAPTGLHLGGTKYMVIQGEAGQVIRGKKGPGGICVKKTGQALIFGIYDEPVTPGQCNMI
VERLGDYLVEQGM
>AIV43662.1 Allergen Aca f 2; profilin [Vachellia farnesiana]
MCWQTYVDDHLMCEIEGTNNHLSGAAILGVDGSVWAQSASFPQFKPDEIAAVVKDFDGPG
TLAPTGLHLGGTKYMVIQGEPGRFIRGKKGPGGICVKKTGQALVFGIYDEPVTPGQCNMI
VERLGDYLVEQGM
>COMPARE009 Putative Der p 23 [Dermatophagoides pteronyssinus]
MKFNIIIVFISLAILVHSSYAANDNDDDPTTTVHPTTTEQPDDKFECPSRFGYFADPKDP
HKRYICSNWEAVHKDCPGNTRWNEDEETCT
>ANW82807.1 Allergen Poly p 5; unknown function, antigen 5 [Polybia
paulista]
NKYCNIKCSKVAHTVCQYGESTKPSSKCNKVSITSVGVTEEEKKLIVDEHNRFRQKVAQG
LETRGNPGPQPAASDMNNLVWNDELAYIAQVWASQCQFFVHDKCRNTAQYQVGQNIAYSA
STAAYPGIVSLIVLWENEVKDFNYSQGITKENFSKVGHYTQVVWAKTKEVGCGSIKYIEK
GMKSHYLVCNYGPAGNYMGQPIYTKK
>AAP35068.1 Putative Der f 5 [Dermatophagoides farinae]
MKFIIAIAVCTLAVVCVSGEPKKHDYQNEFDFLLMQRIHDQMRKGEEALLHLHQINTFEE
NPTKEMKEQILASEMDTIIALIDGVRGVLNRLMKRTDLDIFERYNVEIALKSNEILERDL
KKEEQRVKKIEV
>AAX34057.1 Putative Tyr p 5 [Tyrophagus putrescentiae]
MKFAILALAFLGAVMAQGGPKVPAKGDFRNEFDHLLVSTLMEGMYKGEQHLLRLSEEIAH
LESTKTKVEQDRIVREIEVTVAFIEGGVRVVEQELKRTDLNILERFNFEEVQALSKLLVK
DLKEAEVKVKAVKTR
>AAX34059.1 Putative Tyr p 21 [Tyrophagus putrescentiae]
MKFVIALAALLAVACAAPTPKPARPTPAKGDFRNEFDHLIVAAAVQRFHDLEEFLLKLSE
QVADLEKTKNREEKAKILREITIADGLVVGGRTYFEKELKRTDLDLVEKFNFEAVLATIG
ILDRDLKALATRVNAIKV
>AAV39514.1 0.19 family dimeric alpha-amylase inhibitor [Triticum
aestivum]
SGPWMCYPGQAFQVPALPACRPLLRLQCNGSQVPEAVLRDCCQQLAHISEWCRCGALYSM
LDSMYKEHGAQEGQAGTGAFPRCRREVVKLTAASITAVCRLPIVVDASGDGAYVCKDVAA
YPDA
>Q4W1F6 Allergen Zea m 25; thioredoxin [Zea mays]
MASEQGVVIACHSKAEFDAHMTKAQEAGKLVVIDFTAAWCGPCRAIAPLFVEHAKKFTQV
VFLKVDVDEVKEVTAAYEVEAMPTFHFVKNGKTVATIVGAKKDELLALIEKHAAPAPASA
SA
>Q4W1F8 Expansin EXPB11 protein [Triticum aestivum]
MASSSIAVAAALILCILVAHAHGCYAKHHAAPSATNSSWLDAKATWYGPPHGAGPDDNGG
ACGFKNVNLPPFSSMTSCGNQPLFKDGKGCGSCYQIRCLKSDHPACSGVPKTVIITDMNY
YPVSRYHFDLSGTAFGAMAKDGRNDELRHAGMINMQFKRVPCQYPGLTVTFHVEEGSNPF
YMAILVEYENGDGDVNQLDIMESRPNGGKMAPTGQWVPMKESWGSIWRMDAHHPMKAPFS
LRITNESGKTLVAEQVIPIDWKPNKTYSSLVQFH
>Q4W1G2 Chromatin asssociated protein [Triticum aestivum]
ANGDTAFKASGKNKTATGGVAKPKRAPTPFFAFLAEFRPQYMEKHPEAKGVAAVTKAAGE
KWRSMSDEEKAKYGGKKADAPASKAVNKKESTSSKKAKTGSDVEDDGEEDEE
>ARQ16437.1 Allergen Art an 7; galactose oxidase [Artemisia annua]
MASSIKTVILFLLPLLLAYSVLAAPDITDGGDKPGPEIDDGGGDKPVPGNNDGASDYAKP
AFEPEFMGAWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPINPDAN
NQPDCYAHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPKGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPKRFDLPFM
QQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVIPEIVICGGNQPNAYELVDARHVTEKQFLPALQDCNRI

QPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELTPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALETERTQIDPANTDAVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITSVQNGVITAVAPPSGQIAPPGYYIMFVSHLGIPGAGIWVHID
>ARQ16438.1 Galactose oxidase [Artemisia argyi]
MASSIKTVILFLLPLLLAYSVLAAPDITDGGDKPGPQVDDGGGDKPVPGNNDGASDYAKP
AFEPEFMGAWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPNNPDAN
NQPDCYVHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPNGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPRRFDLPFM
QQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVIPEIVICGGNKPNAYELVDARHVTEKQFLPALQDCNRI
QPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELSPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALEPERTQIDPANTDVVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITSVENGVITAIAPPSGEIAPPGYYIMFVSHLGIPGAGIWVHID
>ARQ16439.1 Galactose oxidase [Artemisia capillaris]
MASSIKTAILFLLPLLLAYSVLAAPDITDGGDKPGPLIDDGGGDKPVPGNNDGASDYAKP
AIEPEFMGEWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPINPDAN
NQPDCYAHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPNGDFTTKIGALADTRWYSSNQVLPDGSAVVLGGRDSYSYEIVPPQMEFKPKRFDLPFL
QQTTEPPLGPGRPVENNLYPFQFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVVPEIVICGGNQPNAYELVDARHVTEKKFLPALQDCNRI
QPMAADAAWIPEQNMPSPRTMGDLLHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELSPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALEPERTLIDPANTDVVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITGVENGVITAVAPPSGEIAPPGYYIMFVSHLGIPGAGIWVHID
>ARQ16440.1 Galactose oxidase [Artemisia gmelinii]
MASSIKTVILFLLPLLLAYSVLAAPDITDGGDKPGPEIDDGGGDKPVPGNNDGASDYAKP
AIEPEFMGAWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGPSGYKLPEGTPCPINPDAN
NQPDCYAHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPKGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPKRFDLPFM
QQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVIPEIVICGGNQPNAYELVDARHVTEKQFLPALQDCNRI
QPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELTPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALETERTQIDPANTDVVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITSVENGVITAVAPPSGQIAPPGYYIMFVSHLGIPGAGIWVHID
>ARQ16441.1 Galactose oxidase [Artemisia lavandulifolia]
MASSIKTVILFLLPLLLAYSVLAAPDITDGGDKPGPQVDDGGGDKPVPGNNDGASDYAKP
AFEPEFMGAWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPNNPDAN
NQPDCYVHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPNGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPRRFDLPFM
QQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVIPEIVICGGNKPNAYELVDARHVTEKQFLPALQDCNRI
QPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELSPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALEPERTQIDPANTDVVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITSVENGVITAIAPPSGEIAPPGYYILFVSHLGIPGAGIWVHID
>ARQ16442.1 Galactose oxidase [Artemisia sieversiana]
MASSIKTVILFLLPLLLAYSILAAPDITDGAGDKPGPQVDDGGGDKPVPGNNDGASDYAK
PAIESEFMGQWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPINPDA
NNQPDCYVHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIPN
DDPNGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPKRFDLPF
MQQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGS

RNYPPSGSAALFPLKLTADNAPVVPEIVICGGNQPNAYELVDARHVTEKQFLPALQDCNR
IKPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEPNLTPVLYT
PYKPMGQRFKELRPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFS
PPYLDPALELERSQIDPANTDVVLKYGKPFKITAGLMEKQPLVLGEVKVTLLYPPFTTHG
FSQNQRMIVPAITSVENGVITAIAPPSGEIAPPGYYIMFVSHLGIPGAGIWVHID
>ARQ16443.1 Galactose oxidase [Artemisia vulgaris]
MASSIKTVVLFLLPLLLAYSVLAAPDITDGGDKPGPQVDDGGGDKPVPGNNDGASDYAKP
AFEPEFMGAWVIDNPNAGVAAMQLQLMPNDQIVWFDTTSLGASGYKLPEGTPCPNNPDAN
NQPDCYVHGIAYDWKTSKYRPLTLQGDAWCSSGNLWPNGNLMATGGTFSGDKAIRVIAND
DPNGDFTTKIGALADTRWYSSNQVLPDGSSVVLGGRDSYSYEIVPPQMEFKPRRFDLPFM
QQTTEPPLGPGRPVENNLYPFLFLLPDGNIFLFANNRAITFEPATGKTVKEFPVLPGGSR
NYPPSGSAALFPLKLTADNAPVIPEIVICGGNKPNAYELVDARHVTEKQFLPALQDCNRI
QPMAADAAWIPEQNMPSPRTMGDLIHLANGDMLMLNGAKKGTSGWEDATEANLTPVLYTP
YKPMGQRFKELSPTTIARMYHSCSALLPDTRVLVAGSNMHQFYTFDTEFPTELRVEKFSP
PYLDPALEPERTQIDPANTDVVLKYGKPFKITAALMEKQPLVLGEVKVTLLYPPFTTHGF
SQNQRMIVPAITSVENGVITAIAPPSGEIAPPGYYIMFLSHLGIPGAGIWVHID
>ATI08931.1 Allergen Der f 36; unknown function [Dermatophagoides farinae]
MKFYNILTVATIVILVAFFDNVHADSQAQEQCRQLHHVDIDPSGTKFLNNNCRLNCNIHG
QIYGHNINEGRTCMIGQTNYVCQNGECVGHNRQHVGHIDIELISASLYEKANAYATVCIM
NNSLPISLPIQDRRNCISCSTHVKENTNYPVWNEVCVGSSNYLFVSDSRVTTEVWDHHGS
NNNVFLGGVTLTIDQLVNHGDNHRQINLAMAGGHNPGQLSTRITWTQRT
>ATI08932.1 Allergen Der p 36; unknown function [Dermatophagoides pteronyssinus]
MKFYNVLTITIGVILLSVFDNVQADTVAQEQCRQLHHVDVDPSGTQFLNNNCLLDCNIHG
KIYSHNMNEGRTCMVGRTNYVCRNGQCVGNNQHVGHVDIELISASLYEKANAYASVCIKN
NSMPISLPIQDRRDCITCSTQVRSNTNNPIWNEVCTGSGNYLLVSDSRVAIEVWNHLGTS
NNIFLGGVSLTIDQLVNHGDNHRAINLAMAGNKPGQLTTRITWTQRN
>AUH28179.1 Allergen Que m 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Quercus mongolica]
MGVVAYESEDASVIPPARLFKAFVLDSDNLIPKVVPQALKSTEIIEGNGGPGTIKKITFG
EGSHLKHAKHRIDVIDPENFTFSFSVIEGDALFDKLENVSTETKIVASPDGGSIVKSTCK
YQTKGDFQLTDELIRGGKEKASGVFKAVEAYLVAHPDGYY
>AUW37958.1 Allergen Per a 5; glutathione S-transferase [Periplaneta americana]
MTIDFYYLPGSAPCRSVLLAAKAIGVDLNLKVTNLMAGEHLTPEFLKMNPQHTIPTLNDN
GFCLWESRAILSYLADQYGKDDSLYPKDAKKRALVDQRLYFDIRTLYHRFGEYYYPIYFA
KQAADPEKMKKLEEAFEFLNKFLESQEFVAGNKLTIADLAIVSSVSTADIMGFDVSKYSN
VAKWFEKCKKIVPGYEELNHSGCLKFKEMCDNLAKK
>BBD75204.1 Apolipophorin Putative Der f 14 [Dermatophagoides farinae]
MRLFALLFTACLLGLGQAQHCTVACPNSIPQLINPKAQSTYVYTLDAKTVLTPRDSQKVT
IKADAEVAIVSACEAVLRLQNVAIDGVPNGAELASELASKSFAFGYFNGRILGVCPANDD
QDWSLNIKKAIVSALQVQFDENKDKVEESDFSGRCPTEYRKIRNEDNMVVMEKRKDLNLC
DDRRIDLRQTPDQALGQLKEMIRHYMHPMGSDLSCRMTLKDQVVSEVDCEERHVLVHRSH
KPVHLSYVKMMLKESKDGVAADLGQTDSEPKRPYLSFDHKHKNPTETDVVEVLKKLCSEI
SEPQASIETSFTFQKLVDKLRYLSAEETASVDESVKTSVCPAHAYRIRELFLDASAFAAS
DGSIRTLVKAHENQELSITRSTALFTVVAMKAAPNKETVQVLLPVIASEKTIRPMLLGFS
VLVRRYCEKSADCASNSGVKDARDAYLARLATAKDANERITIVRALENLNVNTEGVDNMI
NAMDEIIKSDAEPALRAAAVNALSNDASHMDRYKSLVMDESMPNEARIAAFQKMMKNGGM
SHIKDLFTVKGECMKNYVLTYVDNLKKSKNDLRRQTVSGDVELPEQPKREIGITRNIARE
YGPYTFEYDVIYPETHENVTRSINGRLIRAKNDQLKEIVEIQITQNGFERELTNAMALME
KKSFQSIMQFVRDTLKMLAQIRKNADDNHHMKITVQINGKDVYYTDVFQDLKKMKELIIK
RAEKIINEKKVDRSIGGVLLDSKLVLPTITGLPLMYKFGDNFLIRYDGEFSGEKGDRHIK
LNGGFVAGVYGQMKLLVKDQKMGYEYDGKLAYTPILDMDIQKKEHSLLLRFNTKDVERRT

IMRFKQSLREKRATGEEKDYENEITPESRSDQCFSFFLLDYCRKASHIKGLIFPNVEYYV
VKPEKEVTALELLLKGETEDKTRRYVAELTAVGSPSNKQAKAQIEVTKGEEYKITLKSPE
HEFNTEFTIHADKNNLKMHMDFPNVFQADLTGTFQHDKENNVRKNQLNLQYKFAGDEKPH
TVDYENEFSFNLKRSSKDKNSGVDYRAKYMSSHFPILNHKVNIQFKYRPFKVNELNLEGE
FGRELQHKFQLMRNSQIEVEEVRPFKMHGNSDIKLMANDLDIDYDLKSEFKYESNKGTPI
ELQYKISGKDRSKRAADLGAEDVEGVIDYKNNGSPIDSKMHAHLKMKGNNYGYDSELKQT
QPQQYEGKITLSKNDKKIFINHKSEMTKPTNTFHLKTDADVSYSDSDMKKHYQMEFKKEN
DIYTMRSTVERNGQMFYENHLTIHKGGKLNLNYRRNDRKILLDLDNALSPREGTMKLNIK
DREYNFVMKREPLRFRDITVEGNENAYIKNGKLHLSLMDPSTLSLVTKADGKIDMTVDLI
SPVTKRASLKIDSKKYNLFHEGELSASIVNPRLSWHQYTKRDSREYKSDVELSLRSSDIA
LKITMPDYNSKIHYSRQGDQINMDIDGTLIEGHAQGTIREGKIHIKGRQTDFEIESNYRY
EDGKLIIEPVKSENGKLEGVLSRKVPSHLTLETPRVKMNMKYDRYAPVKVFKLDYDGIHF
EKHTDIEYEPGVRYKIIGNGKLKDDGRHYSIDVQGIPRKAFNLDADLMDFKLKVSKPEDS
NKAQFSYTFNEYTETEEYEFDPHRAYYVNWLSSIRKYIQNFIVEDN
>BBE74942.1 Putative Cry j 4 [Cryptomeria japonica]
MTATAMTTAALRLLIALLLVAAPAECLPLRARGRWIVDEATGLRVKLACVNWPGHLEPGL
PEGLNRLPVTTIAHTISSLGFNCVRLTYSIQMVTEKSYTEATVGQTFAQLNLTEPASGIE
GNNPGFLQLGHVAAYDSIVAALAEAGVMVILDNHVSKPKWCCAVDDGNGFFGDSYFDPRL
WQRGLGLMATHFNNTPNVVAMSLRNELRGNRSTSARWSKYMQRGAATVHEANPNVLVVLS
GLHFDTILSFLPVLPVTLPFKEKIVYEGHWYSFGVPWHDGLPNDICLNETSRFKDNIGFL
TSSINGTAAPLFVSEFGIDQRYVNDNDNRYLNCILAFLAEEDVDWALWTMGGSYNYRSDK
EPVQDFEETYGFFNRDWSRIRNPDFISRLKEIQQPIQDPYLSPGPYYQIIYHPASGLCVE
SSIGNTIHLGSCQSVRSRWNYDASVEGPIGLMGSSSCISTQGNGLPAIMTEKCSAPNNTL
WSTVSSGQLQLGTRVFDEDGKEKWMCLDGSRSPLITTTECICITDSHCYPNQNPEKQWFK
VITTNKQLLHQL
>COMPARE010 Cha o 3 Glycosyl hydrolase 5 family [Chamaecyparis obtusa]
MTSAGVAPTALRLLTALLLLLVAAPSHSLPLLTRGRWIVDEATGLRVKLACVNWVGHLEP
GLPEGLNRLPVATVAHTISSLGFNCVRLTYSIHMLTRTSYTNATVAQTFARLNLTEAASG
IEHNNPELLDLGHVAAYHHVVAALSEAGVMVILDNHYSKPKWCCAVDDGNGFFGDRYFNP
NTWVEGLGLMATYFNNTPNVVAMSLRNELRGNRSTPISWSRHMQWGAATVHKANPKVLVI
LSGLQFDTDLSFLPVLPVTLPFKEKIVYEGHWYSFGVPWRTGLPNDVCKNETGRFLSNVG
FVTSSANATAAPLFMSEFGIDQRYVNDNDNRYLNCILAYLARRDLDWALWTMGGSYYYRS
DKQPVKDFEETYGFFNHDWSRIRNPFFISRLKEIQQPIQDPYLAPGPYYQIIYHPASGLC
VESGIGNTVHLGSCQSVRSRWNYDASVKGPIGLMGSSSCISTQGNGLPAIMTENCSAPNN
TLWSTVSSAQLQLGTRVLGKDGKEKWMCLDGSKSPLISTNECICITDSHCYPKLNPEKQW
FKVITTNKQLLHQLQL
>SHD75396.1 Tropomyosin Putative Sar s 10 [Sarcoptes scabiei]
MYEAIKKMQAMKLEKDNAIDRAEIAEQKARDANLRAEKSEEEVRGLQKKIQQIENELDQV
QEQLSAANTKLEEKEKALQTAEGDVAALNRRIQLIEEDLERSEERLKIATAKLEEASQSA
DESERMRKMLEHRSITDEERMDGLENQLKEARMMAEDADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKAQQREEAYEQQIRISTAKLKDAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKSISDELDQTFAELLAI
>COMPARE002 unknown function, partial [Sinapis alba]
SPDSDLEAFSHNPAHGSFAPLAFQPSAMTNCANQRFLSY
>COMPARE003 unknown function, partial [Sinapis alba]
ITLKVVVFHLRRSSHLFYTSQVISQSRTRVKLNRVFFPR
>COMPARE004 unknown function, partial [Sinapis alba]
IKARLRNRSPRRCRKTVA
>COMPARE005 unknown function, partial [Sinapis alba]
GKETNKDSLSNGERTGKSPA
>Q647G8 Allergen Ara h 7; 2S albumin [Arachis hypogaea]
MVKLSILVALLGALLVVASATRWDPDRGSRGLRWDAPSRGDDQCQRQLQRANLRPCEEHI
RQRVEQEQEQEQDEYPYSQRGSRGRRPGESDEDQEQRCCNELNRFQNNQRCMCQALQQIL
QNQSFRFQQDRSQLHQNGEGAQELAPELRVQVTKPLRP

>COMPARE014 Allergen Mes a 1; lipocalin [Mesocricetus auratus]
HYQNLEVSPSEVDGKWYSLYIAADNKEKVSEGGPLRAYIKNVECIDECQTLKITFYTKVE
GVCQEHTIVGRKGEDGKYITDFSGQNYFHIVEKSDDTMTFHNVNVDDSGKTNVILVVGRG
ESSSIEQKQRFEKTAEEYDIPKENIEDLVPTDNCDQ
>COMPARE006 Allergen Que m 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Quercus mongolica]
MGVVAYESEDASVIPPARLFKAFVLDSDNLIPKVVPQALKSTEIIEGNGGPGTIKKITFG
EGSHLKHAKHRIDVIDPENFTFSFSVVFGDALFDKLENVSTETKIVASPDGGSIVKSTCK
YQTKGDFQLTDELIRGGKEKASGVFKAVEAYLVAHPDGYY
>ANW10058.1 Allergen Ras k 1; parvalbumin [Rastrelliger kanagurta]
MAFASVLKDAEITAALDGCKADGSFDHKKFFKACGLAGKSGDDVKKAFAIIDQDKSGFIE
EEELKLFLQNFKAGARTLSDAETKAFLKAGDTDGDGKIGVDEFAAMIKG
>ABZ81046.1 Allergen Que a 1; pathogenesis related protein, PR-10, Bet v 1-like protein, partial [Quercus alba]
MGVFTYESEDASVIPPARLFKAFVLDSDNLIPKVVPQALKSTEIIEGNGGPGTIKKITFG
EGSHLKHAKHRIDVIDPENFTYSFSVIEGDALFDKLENVSTETKIVASPDGGSIVKSTSK
YQTKGDFQLTDELIRGGKEKASEVFKAVEAYLVAHPDLYK
>COMPARE011 Putative Mal f 7 [Malassezia furfur]
MNNEKYCSVADYDVKWFKERCQSHPTDVKTTKWIAGTDLKIEMDPKEPYELYCFNYYTTF
GNLPDAGAKELDDDATKKACSALKSGKYQSDPKKKSCRMDKKDIDQFKEQCSQYQPSDRP
PYGDWSAGTSLNVVLNLKKNA
>COMPARE012 tropomyosin [Anisakis pegreffii]
MDAIKKKMRKAMEIEKDNALDRADAAEEKVRQMTDKLERIEEELRDTQKKMMQTENDLDK
AQEDLSTANSNLEEKEKKVQEAEAEVAALNRRMTLLEEELERAEERLKLATDKLEEATHT
ADESERVRKVMENRSFQDEERANTVESQLKEAQMLAEEADRKYDEVARKLAMVEADLERA
EERAEAGENKIVELEEELRVDGNNLKSLEVSEEKALQREDSYEEQIRTVSARLKEAETRA
EFAERSVQKLQKEVDRLEDELVHEKERYKSISELDLLQELSGY
>XP_001732036 Protein of unknown function [Malassezia globosa CBS 7966]
MVSLNIFSAAFVASLASAVFAAPSALERRAAPDNTVWVTSVADHCLILPRHKMSVGDSES
PGNMRSFCTKPYSSKQGQLASDFWTKAHFKKTDKYVQITGCINPNVQSTLLSNDEGGQYD
SNGGEGGRGNPAGSVCLGYSSYVELVEPAGNRACIRCCYDPSDCDVSQDEAGCETVIPGK
YDC
>XP_015174445.1 Allergen Pol d 3; dipeptidyl peptidase [Polistes dominula]
MISLRSFVFLNGFIFVLLTGRTVSYVLDKDNLDRVVFRTQDDSNFPKRPFQLEETYTADY
LPRNFNGTWTSDTTLIYISETVGEILQFDVVKQQSTVIIDVSIFDDYLVESYLLSPTGRF
LLIGYDLQKGFRYSTFMRYVIYDTELGQYDKIGNGMHIALVRWAPLTDDLIYILDNNIYY
KRFSKNGFNDVQRVTDDGIAGIIYNGVADWVYEEEVLHGSSAIWFSPDGKRLAYATFDDR
KVHEILYLHYGEPGSLGDQYPTEVKIKYPKAGTPNPVVSLTLVDLHDPTLNKINLEAPVD
IVGIDNVLTNVQWKDFNTIIATWSNRVQNETEIVWYNVYGETVETLHIEEPEGWVDIKNL
FFYNGSTYMRKLQQSGTKAGRFHHVTRYEKVGSTLIQKDLTPGAIEVQDIRAIDHFNGRI
YYLASGPGEPSQRNLYSVPADGSKEPTCISCNVITPEGNQCKYADVSFSPFRSYYALVCQ
GPDPTFIDIFDSNHRKIFSWEHNLMLRLRLTKRELPIVKDLYVHANGYDSKVRLLLPHNF
DESKSYPMLVNVYAGPNTAKINDAASYSYQSYMTTNRSVIYAYIDGRGSSNKGSNMLFEI
YRNLGTVEVEDQITVTRKLQEMYSWIDSKRTAIWGWSYGGFCTAMVLAKDVDSVFKCGIS
VAPVSSWIYYDSIYTERFMGLPTPEDNLKGYDGTDVSRRVEGIRGKKFMLIHGTGDDNVH
YQQSLALAKSLEESDILFEQITYTDEAHALYGVLPHLYHSMDRFWSECFSWSNTH
>XP_016648029.1 Allergen Pru m 7; gibberellin-regulated protein [Prunus mume]
MKLGFATFLLVCLLLSSSVFEVTMAGSSFCDSKCGVRCSKAGYQERCLKYCGICCEKCHC
VPSGTYGNKDECPCYRDLKNSKGNPKCP
>COMPARE172 Allergen Fag e 4; antimicrobial peptide, partial [Fagopyrum esculentum]
AQCGAQGGGATC

>AEG47274.1 Allergen Tri tu 14; lipid transfer protein [Triticum turgidum]
MARSAVAQVVLVAVVAAMLLAVTEAAVSCGQVSSALSPCISYARGNGASPSAACCSGVRS
LASSARSTADKQAACKCIKSAAAGLNAGKAAGIPTKCGVSVPYAISSSVDCSKIR
>COMPARE059 Allergen Ole e7; lipid transfer protein, partial [Olea europaea]
APSQGTVTAKLTSCVSYKDXQ
>COMPARE138 Allergen Tri t 1; beta-glucosidase, partial [Trichophyton tonsurans]
NNMAFSLGVKGPDGSVKQLVDFEQDFVAL
>BAA23361.2 Allergen Gly m 5; beta-conglycinin (vicilin, 7S globulin) (precursor) [Glycine max]
LKVREDENNPFYFRSSNSFQTLFENQNGRIRLLQRFNKRSPQLENLRDYRIVQFQSKPNT
ILLPHHADADFLLFVLSGRAILTLVNNDDRDSYNLHPGDAQRIPAGTTYYLVNPHDHQNL
KIIKLAIPVNKPGRYDDFFLSSTQAQQSYLQGFSHNILETSFHSEFEEINRVLFGEEEEQ
RQQEGVIVELSKEQIRQLSRRAKSSSRKTISSEDEPFNLRSRNPIYSNNFGKFFEITPEK
NPQLRDLDIFLSSVDINEGALLLPHFNSKAIVILVINEGDANIELVGIKEQQQKQKQEEE
PLEVQRYRAELSEDDVFVIPAAYPFVVNATSNLNFLAFGINAENNQRNFLAGEKDNVVRQ
IERQVQELAFPGSAQDVERLLKKQRESYFVDAQPQQKEEGSKGRKGPFPSILGALY
>COMPARE103 Allergen Cor a 1; PR-10 protein [Corylus avellana]
GVFNYEAETTSVIPAAXLFKSYVLDGDKLLPKVAPQALTSVENVGGNXXP
>CBA35339.1 Allergen Onc m 1; beta parvalbumin [Oncorhynchus mykiss]
MACAHLCKEADIKTALEACKAADSFNFKTFFHTIGFASKSADDVKKAFKVIDQDASGFIE
VEELKLFLQNFCPKARVLTDAETKAFLKAGDADGDGMIGIDEFAVWVKQ
>CBA35340.1 Allergen Onc m 1; beta parvalbumin [Oncorhynchus mykiss]
MAFAGLNDADVAAALAACTAADSFNHKAFFAKVGLAGKSNDDVKKAFYVIDQDKSGFIEE
DELKLFLQNFSASARALTDAETKAFLADGDKDGDGMIGVDEFAAMIKG
>BAB55663.1 collagen alpha 2 chain [Oncorhynchus mykiss]
MLSFVDNRILLLLAVTSLLASCQSGGLKGPRGAKGPRGDRGPQGPNGRDGKAGLPGIAGP
PGPPGLGGNFAAQFDGGKGSDPGPGPMGLMGSRGPNGPPGAPGPQGFTGHAGEPGEPGQT
GSIGARGPTGSAGKPGEDGNNGRPGKPGDRGGPGTQGARGFPGTPGLPGMKGHRGYNGLD
GRKGESGTAGAKGETGAHGANGSPGPAGSRGLNGERGRAGPAGPAGARGADGSTGPAGPA
GPLGAAGPPGFPGAPGPKGEIGGAGSNGPSGPQGGRGEPGINGAVGPVGPVGNPGNNGIN
GAKGAAGLPGVAGAPGFPGPRGGPGPQGPQGSTGARGLGGDPGPSGQKGDSGAKGEPGHS
GVQGAAGPAGEEGKRGSTGEVGATGPAGLRGARGGAGTRGLPGLEGRGGPIGMPGARGAT
GPGGIRGAPGDAGRAGESGLTGARGLPGNSGQGGPPGKEGPPGAAGLDGRTGPPGPTGPR
GQPGNIGFPGPKGPGGEAGKGGDKGPTGATGLRGGPGADGNNGAPGPAGVVGNTGEKGEQ
GPAGAPGFQGLPGPAGPAGEAGKAGNQGMPGDQGLPGPAGVKGERGNSGPAGSAGSQGAI
GARGPAGTPGPDGGKGEPGSVGIVGAAGHQGPGGMPGERGAGGTPGPKGEKGEGGHRGLE
GNMGRDGARGGPGPSGPPGPSGANGEKGESGSFGPAGPAGLRGPSGERGEGGPAGLPGFA
GPPGSDGQSGPRGEKGPAGGKGDVGPAGPAGPSGQSGPSGASGPAGPPGGRGDAGPSGLT
GFPGAAGRVGGPGPAGIAGPPGSAGPAGKDGPRGLRGDPGPGGPQGEQGVVGPAGISGDK
GPSGESGPPGAPGTAGPQGVLGPSGFVGLPGSRGDKGLPGGPGAVGEPGRLGPAGASGPR
GPAGNIGMPGMTGTQGEAGREGNSGNDGPPGRPGAAGFKGDRGEPGSPGALGSSGQPGPN
GPAGSAGRPGNRGESGPTGNGGPVGAVGARGAPGPAGPRGEKGGAGEKGDRGMKGLRGHG
GLQGMPGPNGPSGETGSAGITGPAGPRGPAGPHGPPGKDGRAGGHGAIGPVGHRGSPGHL
GPAGPPGSPGLPGPAGPAGGGYDQSGGYDEYRADQPSFRAKDYEVDATIKSLNSQIENLL
TPEGSKKNPARTCRDIRLSHPDWSSGFYWIDPNQGCIADAIKAYCDFSTGHTCIHPHPES
IARKNWYRSSENKKHVWFGETINGGTEFAYNDETLSPQSMATQLAFMRLLANQATQNITY
HCKNSVAYMDGENGNLKKAVLLQGSNDVELRAEGNSRFTFNVLEDGCTRHTGQWSKTVIE
YRTNKPSRLPILDIAPLDIGEADQEFGLDIGPVCFK
>BAG93005.1 extensin/Ole e 1-like protein [Oryza sativa Japonica Group]
MARPRFATTAPLLALAVLAAVVSVAVATAPAGKDPGGFVVTGRVYCDPCRAGFETNVSKS
IPGATVSVECRHYGAGRESLKAEATTDEKGWYKVEIDQDHQEEICEVVLDKSSDPACSET

EKTRDRSRVPLTSNNGLKQNGIRYANPIAFFRKEPLADCGSILQKYDLKDAPETP
>BAG94438.1 Allergen Ory s 12; profilin [Oryza sativa Japonica Group]
MSWQTYVDEHLMCEIEGHHLTSAAIVGHDGTVWAQSAAFPQFKPEEMTNIMKDFDEPGFL
APTGLFLGPTKYMVIQGEPGAVIRGKKGSGGITVKKTGQALVVGIYDEPMTPGQCNMVVE
RLGDYLVEQGL
>BAG93129.1 polygalacturonase [Oryza sativa Japonica Group]
MGFVRALFLLAMVCVAAHAKDYPKEEGAKAEGPAAASGGGGGSTHDVVKLGGKGDGKTDS
TKAVNEAWTAACAGTGKQTIVVPKGDFLTGPLNFTGPCKGDIVIQLDGNLLGSTDLALFK
SNWIEIMRLESLEISGKGKLDGQGAAVWSKNSCAKKYDCKILPNTLVLDFVNNGLISGIS
LVNPKFFHMNVFKSKNITIKDVTITAPGDSPNTDGIHMGDSSKISIIDTVIGTGDDCISI
GPGTEGVNISGVTCGPGHGISVGSLGRYKDEKDVTDVTVKNCVLKKSTNGVRIKSYEDAA
SVLTASKFTYENIKMEDVANPIIIDMKYCPNKICTANGNSKVTIKDITFKNITGTSSTPE
AVSLLCSDKLPCTGVTLNDIKVEYSGTNNKTMAVCKNAKGTATGCLKELSCF
>COMPARE073 Allergen Asc l 13; glutathione S-transferase, partial
[Ascaris lumbricoides]
RLIFHQAGVKFEDNRLKREDWPALKPKTPFGQPLLEVDGEVLAQSAAIYR
>COMPARE074 Allergen Asc l 13; glutathione S-transferase, partial
[Ascaris lumbricoides]
FGLAGKTPMEEAQVDSIFDQFKDFMAELRPCFRVLAGFEEGDKEKVLKEVAVPARDKHLP
LLEK
>COMPARE075 Allergen Asc l 13; glutathione S-transferase, partial
[Ascaris lumbricoides]
WIAERPKTPY
>AFP95338.1 Allergen Pro c 5; myosin light chain [Procambarus clarkii]
MAADLSARDVERVKFAFSIYDFEGNGTMDAFYIGDCLRALNLNPTLAIIEKVGGKEKRKE
KIIKLEEFIPIFAQVKKDKDAGSYEDFMEVLKLYDKSENGTMMYAELEHILLSLGERLEK
SELEPVLKECCNEEDEDGFIPYEPFLKKMTQLL
>AIO08861.1 Allergen Der f 33; alpha-tubulin [Dermatophagoides farinae]
MRECISLHVGQAGVQIGNACWELYCLEHEIQPDGQLSPVKSTTTLSSSETISNDSFSTFF
NETGNGRFVPRSIYVDLEPTVVDEVRTGEYRRLFHPEQLITGKEDAANNYARGHYTEGKT
LIEPVMRRIAKLAEQCSGLQGFLIFHSFGGGTGSGFSSLLMERLSVEYGKKSKLEFAIYP
APAISTAVVEPYNSILTTHNTLEHSDCSFMVDNEAIYDICRRNLNIERPSYMNLNRLIGQ
IVSSITASLRFDGALNVDLTEFQTNLVPYPRIHFPLVSYAPIVSSEKAYHEQFTVPEITG
TCFEPSNQMVKCNTRNGKYMACCLLYRGDVVPKDVNAAIAAIKAKSTIQFVQWCPTGFKI
GINYRPPTVVPSGDLAKVQRAVCLLSNTTAISEAWSRLNHKFDLMYSKRAFVHWYVGEGM
EEGEFSEAREDLAALEKDYEEVAAEYNADDDDYDDRDGEEF
>QAT18644.1 Allergen Der p 33; alpha-tubulin [Dermatophagoides
pteronyssinus]
MRECISVHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGTGDDSFNTFFSETGSGK
HVPRAVYVDLEPTVVDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIVDLVLD
RIRKLSDQCTGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAVYPAPQVSTA
VVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITA
SLRFDGALNVDLTEFQTNLVPYPRIHFPLVTYAPVISAEKAYHEQLTVSEITNTCFEPAN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIASIKTKRSIQFVDWCPTGFKVGINYQPP
TVVQVVIWLKYNVLFVCCPTLLPSLKLGLDWIINLI
>QAT18643.1 Allergen Der p 32; inorganic pyrophosphatase
[Dermatophagoides pteronyssinus]
MSIRSINLLTRQTIPGSLISIIGINNNFHNRYIYFSFKHPHQSFKYHHLSSASLSINFSI
SKNVHYKQQPYNIGNKVHFVQNHQLRKFFATKTNNKMSTNYSVDNRGALNSLDYRIYFKN
DSNGKIISPWHDIPLFADKSAKQYNMVVEIPRWTNEKMEIATAEPMTPIKQDVKKGALRY
VKNVFPHKGYIWNYGAFPQTWENPNHIDQGTKAKGDNDPIDVIEIGSRIAKRGDVIPVKI
LGTIALIDEGETDWKIITIDTRDELAGQMNNVDDVEKLLPGLLRATVEWFRIYKIPDGKP
ANKFAFNGEAKDREFAEKVVEETHQYWREMMENKAGEHQLDLKNITLGNSYTINDEQAKQ
FLETRPASNTVEPNPIADQVAIDKWHHVKLI

>QAT18639.1 Allergen Der p 28; heat shock protein 70 [Dermatophagoides pteronyssinus]
MPSKTSKAPAIGIDLGTTYSCVGVFQNGSVEIIANDQGNRTTPSYVAFTDTERLIGDAAK
NQVAMNPANTIFDAKRLIGRRFDEPSVKSDMKHWPFKVVSESGKPKIEVEFKGEQKRFWP
EEVSAMVLTKMKETAEAYLGQKVTDAVITVPAYFNDSQRQATKDAGVIAGLNVLRIINEP
TAAAIAYGLDKKGGGEKNVLIFDLGGGTFDVSVLTIDNGIFEVKSTAGDTHLGGEDFDNR
LVNHFVQEFKRKFGKDIMSNKRALRRLRTACERAKRTLSSSTQTTIEIDSLHEGTDFYST
ITRARFEELCSDLFRSTLEPVEKALRDAKLDKSKIDEIVLVGGSTRIPKIQKLLSDFFNG
KELNKSINPDEAVAYGAAVQAAILTGDTSNNVKDLLLLDVAPLSLGIETAGGVMTTLIKR
NTTIPTKQTQTFTTYADNQPAVTIQVYEGERAMTKDNNRLGTFDLTGIPPAPRGVPQIEV
TFDVDANGILNVSAVDKSTGRQNKITITNDKGRLSKADIEKMVNEAEQYREEDERQRERI
SAKNQLEAYAFQLKSTMEEEAIKSKLSEEDRKTVLNKVEETLRWLDSNQLADKEEYEHRQ
KELESACRPIMTKIYQQQQQHPGAPGANGSCGSNAYPGYGGFNSNNDGPVVEEVN
>QAT18638.1 Allergen Der p 26; myosin light chain [Dermatophagoides pteronyssinus]
MADLRPPEVEKARLHFDIYDFEGQGKVDYHLLGDLLRSLDLRPTQEMVAKNGWEKKKGQK
YMTFEEFLPIYSQVKKDKDCGAYEDLVEGLKVYDKAENGTMMEAELAHVLLSLGENWMIR
K
>QAT18637.1 Allergen Der p 25; triosephosphate isomerase [Dermatophagoides pteronyssinus]
MGRKFFVGGNWKMNGSRATNDDLIKILTNTPLDPNTEVVVGVPSIYLADVRHKLSKSIGV
AAQNCYKVAKGAFTGEISPAMIKDVGAEWVILGHSERRNVFGENDQLIGEKVEHALNEGL
NVIACIGELFEEREAGKTTEVVFRQTQVISKHVKDWSKVVLAYEPVWAIGTGKTASPQQA
QEVHQQLRQWFSTNISPQIAETIRIIYGGSVTASNAKELASQADVDGFLVGGASLKPEFV
QIVNARQ
>AGM32377.1 Allergen Copt f 7; tropomyosin [Coptotermes formosanus]
MDAIKKKMQAMKLEKDNTMDRALLCEQQARDANLRAEKAEEEARSLQKKIQQIENDLDQT
MEQLMQVNAKLDEKDKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAA
DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKGSRQA
>NP_001138311.1 complement component, C1q-like [Apis mellifera]
MVVWLVLIATSSSVYLAEAAIPDPPNSKISTVNPSKLSTAVDCTGIIAFSATHASVDHAK
AVFAETLVDKGVGYVPQTGIFITNCPGLYQFSFAGYGSTDLRLTLKKKQNNSDSWRPVVG
TGAGGGANLILLEVDVGDQLAVFVDSGKISDGVTFSGYRIAKI
>XP_392204.2 platelet-derived growth factor/vascular endothelial growth factor, PVF1-like [Apis mellifera]
MPYSKCRTFLRFFAICSFSTCGLVMAQLEDTRYPDQRIVFPDRGRETANPALEGGPSGGG
IGELAKSIQLAKKISSINSRDDFLKLVKDVPKDISFFSSSSRMGETERSNAERPNQALCM
PELQTVPLLENEPSVIYYPTCTRIKRCGGCCTHSLLSCQPTATEIRNFEILVTILESSGK
LKYQGKRIVPIEEHTQCTCDCKIKETDCNKKQSYVPEECTCACNNVDEQKKCNESNIKMW
HPDLCSCFCRETQECSTGFYFDQNSCRCLQVPLSRTWFTSTKGSDYRFGQTQRPDNVPPV
IIALDSDDPRRKPKPDPE
>COMPARE147 parvalbumin, partial [Mustelus griseus]
EVFEILDKDQSGFIEEEELK
>COMPARE148 parvalbumin, partial [Mustelus griseus]
ALLAAGDSDHDGKIGADEFAK
>COMPARE149 parvalbumin, partial [Mustelus griseus]
LFLKNFSATAR
>COMPARE028 7S globulin, vicilin [Lathyrus sativus]
YRLLEYKSKPHTLFLPQYTDADFILVVLSGKAILTVLNSNDRNSFSLERGDTIKIPAGTI
AYLANRDDNEDLRVLDLAIPVNKPGQLQPFLLSGTQNQPSLLSGFSKKVLEAAFNTNYEE
IEKVLLEQQEQQHRRSLKDRRQEINEENVIVKVSREQIEELSKNAKSSSKKSVSSESEPF
NLRSRNPIYSNKFGKFFEITPEKNQQLQDLDIFVNSVEIKEGSLLLPNYNSRAIVIVTVN

EGKGDFELLGIRNENQREESDEEEEQEEETSKQVQRYRAKLSPGDVFVIPAGHPVAINAS
SNLNLIGFGINAENNQRNFLAGEEDNVISQIQRPVKELVFPGSSREVDKLLKNQRQSYFA
NAQPLQRE
>ABG35122.1 Allergen Der f 22; unknown function [Dermatophagoides
farinae]
MNRFLIVCMALFCLAAAVQADETNVQYKDCGHNEIKSFFVTGGNPNQKSCVIHKHSKNQL
RISFVANENTGNKINTRFICNLGGIELGWPGIDGTDACQGHGLSCPLTKGQTYNYHLDFN
LGDDVPTANVTATVRLENGHGGDLLCGRMHISLQN
>COMPARE170 Allergen Cit s 7; gibberellin regulated protein, partial
[Citrus sinensis]
GSDFCDSKCAVRCSKAGR
>AVD29823.1 Allergen Art ar 2; pathogenesis- related protein PR-1
[Artemisia argyi]
MGHLRNISLVLAISFAILHLSHAHETYGEPGNTPDDYVHAHNCIRRVLGMKPLCWDDELA
KVAQAWAETRTPDCSLIHSDRCGENMAQGAINGSMAVQLWLDERLDYDYNENKCIKMCGH
YTQIVWANSERVGCGRALCSNGWAYIIVCNYDPPGNVVGQKPY
>ABC86902.1 Allergen Bla g 9.0101; arginine kinase [Blattella germanica]
MVDAAVLEKLEAGFAKLAASDSKSLLRKYLTKEVFDNLKTKKTPTFGSTLLDVIQSGLEN
HDSGVGIYAPDAEAYTVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYI
ISTRVRCGRSMQGYPFNPCLTEAQYKEMEDKVSSTLSGLEGELKGQFYPLTGMTKEVQQK
LIDDHFLFKEGDRFLQHANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVTAVNDIEKRVPFSHDDRLGFLTFCPTNLGTTVRASVRIKVPKLAADKKKLEEV
AGKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYDAVKGMNDGIAELIKIESSL
>AHL24656.1 Allergen Ole e 14; polygalacturonase [Olea europaea]
IPHNGVRRGLVGETIFDVMKYGAKADGRFDNAQAFIKAWKAACESTGPAKVVIPKGDFVA
GEVVFQGPCTAPKPITIEIQGNVLASTDVSAYTSGSWIMLEEIDGLVINGGGTINGRGKS
SWQFAGANNEGPLLPVSLTFKKVKNSEMHDVNFVDSMGFHSKVADSENIKISKLKISAPG
DSPNTDGMHISCSTNVNVTDSIIGTGDDCVSIGHGTTDILVSGITCGPGHGISVGSLGKR
PDETDVKGISVINCTLTGTTNGARIKTYHASPSIQASDILYKDIIVTDVKNPILIDQHYD
SKKKPEQSKVKISGVHFVNIKGTTVSEIPVALNCSEAVPCEDVELADIDLAPSGAAGSLK
SVCANAKFVLKGKPIPPGC
>COMPARE128 Allergen Pun g 14; chitinase, partial [Punica granatum]
GDIAIYWGQNG
>COMPARE022 7S globulin, vicilin, beta-conglutin, partial [Prunus dulcis]
MAIKITIKASYKLPFFFFFLSTLFLASSSVTPLINALSDYHNQKCQQSICRGVGGRHSLL
RSKDHPQDAREEYFYCSQSCGTSEDPEQCETECRERFDEQLKKEAEEQQKGQEEEEEEGP
TFNPNPYYFPKFGLRPRFLAEEGAYFVLGSFARLSHLLRGRIQNYRAALLQTTPGTFVLP
YHLDAESIFVVWNGRGTLTLVMKDTKQSFKIENGDVIRVPAGATTYLINNHTTENLSLVQ
LFQPVNTPDLFEEFFPAGYKDPEPGSDYSFLHGTESYYSVFSNDLLEAAFDVPREQLEKA
FGQQKREGMIIRASKEQLDALSKQAYPWWRKLVPWSMGSDLNFNLLSQRPLHSNNYGKFY
EASPQEFKQLQDMNVSVAMLDINPEAMMVPHYNSKATYLMMVVDGMGYFEMACPKFTIPA
SEEEMEYQEEQADQQSGVFSKVSGKLSLGDVFVIPAGHPVSIVAQNNNNNNNNNGNQNQK
LRIVGFGINAGNNIRNFLAGQEGNIMKQMEREATQLTFGQEMEQVLTSQKQSYFVPASRR
GSSTEKA
>CAA67128.1 Allergen Tri a 17; beta-amylase [Triticum aestivum]
MAGNMLANYVQVYVMLPLDVVSVDNKFEKGDEIRAQLKKLTEAGVDGVMIDVWWGLVEGK
GPKAYDWSAYKQVFDLVHEAGLKLQAIMSFHQCGGNVGDVVNIPIPQWVRDVGATDPDIF
YTNRGGTRNIEYLTLGVDDQPLFHGRTAVQMYADYMASFRENMKKFLDAGTIVDIEVGLG
PAGEMRYPSYPQSQGWVFPGIGEFICYDKYLEADFKAAAAKAGHPEWELPDDAGEYNDTP
EKTQFFKDNGTYLTEKGKFFLSWYSNKLIKHGDKILDEANKVFLGCRVQLAIKISGIHWW
YRVPNHAAELTAGYYNLDDRDGYRTIARMLTRHHASMNFTCAEMRDSEQSEEAKSAPEEL
VQQVLSAGWREGLHVACENALGRYDATAYNTILRNARPKGINKNGPPEHKLFGFTYLRLS
NELLEGQNYATFQTFVEKMHANLGHDPSVDPVAPLERSKPEMPIEMILKAAQPKLEPFPF
DKNTDLPVKDHTDVGDEVLVAPV

>COMPARE153 calcium-binding protein, polcalcin, partial [Amaranthus retroflexus]
MAAEDTPQDIADRERIFKRKETNGDGKISSSELGDALKTLGSVTPDEVRRMMAEIDTDGD
GFISFDEFTDFARANRGLVKDVSKIF
>QCB92083.1 Putative Uro m 1; beta-expansin [Urochloa mutica]
MLAVVAVVLASMVGGALCAMGDKPGPNITATYGDKWLDAKATFYGSDPRGAAPDDHGGAC
GYKDVDKAPFDSMTGCGNEPIFKDGLGCGSCYEIKCKEPAECSGEPVLIKITDKNYEHIA
AYHFDLSGKAFGAMAKKGEEDKLRKAGELMLQFRRVKCEYPSDTKIAFHVEKGSNPNYLA
LLVKYAAGDGNIVSVDIKSKGSDEFLPMKQSWGAIWRIDPPKPLKGPFTIRLTSESGGHV
EQEDVIPEDWKPDTVYKSKIQF
>QCB92082.1 Allergen Uro m 1; beta expansin [Urochloa mutica]
DGKWLDAKATWYGKPTGAGPDDNGGACGYKDVNKAPFNSMGACGNPPIFKDGLGCGSCYE
IKCDKPAECSGEPVIVHITDQNYEPIAAYHFDLAGTAFGAMAKKGEEEKLRKAGIIDMQF
RRVKCKYPANTKIAFHVEKGCNPNYFALLIKYAAGDGDIVAVDIKEKGSEEFIPLKHSWG
AIWRIDSPKPIKGPIAVRLTSEGGTTLVQDDAIPEGWKADTVYTSKLQF
>QCB92084.1 Putative Uro m 1; beta-expansin [Urochloa mutica]
MGSLANIVAVAAVLAALVGGGSCGPPKVPPGPNITANYNGKWLPARATWYGKPTGAGPDD
NGGACGIKDVNLPPYSGMTACGNIPIFKDGKGCGSCYEIRCKAPVECSNNPVTVFITDMN
YEPIAPYHFDLSGKAFGALAKPGLNDKLRHAGIMDIEFRRVRCKYTGGQKIVFHVEKACN
PNYLAVLVKFVADDGDIVNMELKEKASAEWKPMKLSWGAIWRVDTPKALKGPFSIRVTSE
SGKKLVANDVIPANWKANTAYPSNIQF
>COMPARE060 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
APSCSTVTAK
>COMPARE061 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
APSQSTVTAKLTSCVSYLDDQ
>COMPARE063 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
LTSCVSYLDDKSAKPTSDCCAGVK
>COMPARE064 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
TVLAQATSKPDK
>COMPARE065 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
SALALVGNKVDTGR
>COMPARE066 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
SALANVGNKVDTGR
>COMPARE067 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
VDTGRVSSLPK
>COMPARE068 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
KCGMSVDLPPLDK
>COMPARE069 Allergen Ole e 7; lipid transfer protein, partial [Olea europaea]
PPIDKNYDCSKVP
>COMPARE058 gibberellin-regulated protein, partial [Solanum tuberosum]
VPSGTYGNKHECPCYRDKKNSKGKSKCP
>COMPARE107 acidic phospholipase A2, partial [Myrmecia pilosula]
MVELNADAPFCALYNDR
>COMPARE108 acidic phospholipase A2, partial [Myrmecia pilosula]
IGASVLVADTTMSR

>COMPARE109 acidic phospholipase A2, partial [Myrmecia pilosula]
GVIQRMVLGADPR
>COMPARE110 phosphoglycerate mutase, partial [Myrmecia pilosula]
DAGYTFDVAHTSVLTR
>COMPARE111 phosphoglycerate mutase, partial [Myrmecia pilosula]
YGEEQVQIWR
>COMPARE112 phosphoglycerate mutase, partial [Myrmecia pilosula]
TLPYWNETIIPQLK
>COMPARE113 phosphoglycerate mutase, partial [Myrmecia pilosula]
AAMAAVAAQGK
>COMPARE114 phosphoglycerate mutase, partial [Myrmecia pilosula]
IIIAAHGNSLR
>COMPARE115 phosphoglycerate mutase, partial [Myrmecia pilosula]
YADGPKPEEFPKFESLK
>COMPARE116 venom allergen 3-like, partial [Myrmecia pilosula]
WDNELETIAQR
>COMPARE117 hyluronidase-like protein, partial [Myrmecia pilosula]
NGGVPQEGDLKK
>COMPARE118 arginine kinase, partial [Myrmecia pilosula]
VSSTLSGLTGELK
>COMPARE119 arginine kinase, partial [Myrmecia pilosula]
LGLTEYQAVK
>COMPARE120 arginine kinase, partial [Myrmecia pilosula]
GEHTEAEGGIYDISNK
>COMPARE121 arginine kinase, partial [Myrmecia pilosula]
LVTAVNEIEK
>COMPARE122 esterase FE4-like protein, partial [Myrmecia pilosula]
DEFGGVVVAVEK
>COMPARE123 esterase FE4-like protein, partial [Myrmecia pilosula]
YAEPPTGQQR
>COMPARE124 esterase FE4-like protein, partial [Myrmecia pilosula]
APGNLGLKDQVVALR
>COMPARE125 venom dipeptidyl peptidase, partial [Myrmecia pilosula]
VYYLATAPGEPSQR
>COMPARE126 venom dipeptidyl peptidase, partial [Myrmecia pilosula]
NLYSVPLDASQKPT
>COMPARE127 venom dipeptidyl peptidase, partial [Myrmecia pilosula]
EYDHYITTNR
>COMPARE129 beta-1,3-glucanase, partial [Mangifera indica]
AGDWVQTNVLAYSADVK
>COMPARE131 beta-1,3-glucanase, partial [Mangifera indica]
GSNIELILDVPKDKLQDLTDSAK
>COMPARE132 beta-1,3-glucanase, partial [Mangifera indica]
IYDPDQATLQALR
>COMPARE133 beta-1,3-glucanase, partial [Mangifera indica]
NGNNLPPQAEVVTLYK
>COMPARE134 beta-1,3-glucanase, partial [Mangifera indica]
NVYNAIAAANLQGQIK
>COMPARE136 beta-1,3-glucanase, partial [Mangifera indica]
YIAVGNEIRPGDAEAQYVLPAMR
>COMPARE070 glyceraldedhyde-3-phosphate dehydrogenase, partial [Fusarium lateritium]
RVPTANVSVVDLTVRI

>COMPARE071 glyceraldehyde-3-phosphate dehydrogenase, partial [Fusarium lateritium]
RTTYFGPTGNDSSTVLKY
>COMPARE105 cypmaclein, Cypress gibberellin-regulated protein, partial [Cupressus sempervirens]
AQIDCDKECNRRCSKA
>COMPARE106 cypmaclein, Cypress gibberellin-regulated protein, partial [Cupressus sempervirens]
YCGICCEKCHCVPPGT
>COMPARE171 10-kDa allergen, partial [Humulus japonicus]
DNXFENGMKAXTSLYDXKYQ
>COMPARE072 elongation factor 1b/d [Echinococcus granulosus]
FDAHSYHQFPNYHEMESAYMRFLSKDIGKTSATEQKGDSYLVKEIQKVRDNIKSSLESNG
SWNERMEKLEAIVKEMSLRVNELEVQIQRLGQILPSESLKGAKPIRPVVVKAPPAEGGDD
DDIDLFGSEDEGEADKCKQMMAEQNKAAASKKEKPVAKSMIVLDVKPWDDTTNMAEMEKG
VRAITADGLLWGTSKLVPLVHGINKLQIACVVEDDKVGTDFLEESIMELEDYVQSVDVAS
FNKL
>P02845 vitellogenin [Gallus gallus]
AEAPSAVLENLKARCSVSYNKIKTFNEVKFNYSMPANCYHILVQDCSSELKFLVMMKSAG
EATNLKAINIKIGSHEIDMHPVNGQVKLLVDGAESPTANISLISAGASLWIHNENQGFAL
AAPGHGIDKLYFDGKTITIQVPLWMAGKTCGICGKYDAECEQEYRMPNGYLAKNAVSFGH
SWILEEAPCRGACKLHRSFVKLEKTVQLAGVDSKCYSTEPVLRCAKGCSATKTTPVTVGF
HCLPADSANSLTDKQMKYDQKSEDMQDTVDAHTTCSCENEECST
>P81531.2 Allergen Bet v 7; cyclophilin [Betula pendula]
DFTAGNGTGGESIYGAKDXXXXXXXTGPGILSMANAGPGTNG
>COMPARE145 pectate lyase [Hesperocyparis arizonica]
DNPIDSCWRGDSNWDQNRMKLADCVVGFGSSTMGGKGGEIYTVTSSEDNPVNPTPGTLRY
GATREKALWIIFSQNMNIKLQMPLYVAGYKTIDGRGAVVHLGNGGPCLFMRKASHVILHG
LHIHGCNTSVLGDVLVSESIGVEPVHAQDGDAITMRNVTNAWIDHNSLSDCSDGLIDVTL
GSTGITISNNHFFNHHKVMLLGHDDTYDDDKSMKVTVAFNQFGPNAGQRMPRARYGLVHV
ANNNYDQWNIYAIGGSSNPTILSEGNSFTAPNESYKKEVTKRIGCETTSACSNWVWRSTR
DAFTNGAYFVSSGKAEDTNIYNSNEAFKVENGNAAPQLTQNAGVVA
>AAC61261.1 Allergen Asp f 16; unknown function [Aspergillus fumigatus]
MYFKYTAAALAAVLPLCSAQTWSKCNPLAETCPPNKGLAASTCTADFTSASALDQWEVTA
GKVPVGPQGAEFTVAKQGDAPTIDTDFYFFFGKAEVVMKAAPGTGVVSSIVLESDDLDEV
DLVRLGGDTTQVQTNYFGKGDTTTYDRGTYVPVATPQETFHTYTIDWTKDAVTWSIDGAV
VRTLTYNDAKGGTRFPQTPMRLRLAAGPAATPATPGHHRVGRWLDRLQRGTVHHVRQVRP
YRERQPRRVLHLLGQLWLLAEHQVRRLRRYSSSSSVTSSTTSTASSASSTSSKTPSTSTL
ATSTKATPTPSGTSSGSNSSSSAEPTTTGGSGSSNTGSWLRLRLWLWLYSSTGSSTSAGA
SATPELSQGAAGSIKGSVTPALWCSAPSLPCWHSKQNDDFGLMHDTHHEGDVRTIHFGIG
VSPSFGV
>COMPARE023 2S albumin, partial [Prunus dulcis]
VTXEEGXYSSISDQSKVGE
>C0HJM6 Allergen Trip s 1; chitinase [Triplochiton scleroxylon]
EQGGSQAGGSL
>COMPARE021 Allergen Mal d 1 [Malus domestica]
GVYTFENEYTSEIPPGRLFKAFVLDADNLIPKIAPQA
>COMPARE137 Allergen Par j 1 [Parietaria judaica]
MVRALMPCLPFVQGKEKEPSKGCCSGAKRLDGETKTGPQRVHACECIQTAMKTYSDIDGK
LVSEVPKHCGIVDSKLPPIDVNMDCKTLGVVPRQPQLPVSLRHGPVTGPSRSRPPTKHGW
RDPRLEFRPPHRKKPNPAFSTLG
>AAB35977.1 Allergen Der f 7; bactericidal permeability-increasing like protein [Dermatophagoides farinae]
MMKFLLIAAVAFVAVSADPIHYDKITEEINKAIDDAIAAIEQSETIDPMKVPDHADKFER

HVGIVDFKGELAMRNIEARGLKQMKRQGDANVKGEEGIVKAHLLIGVHDDIVSMEYDLAY
KLGDLHPTTHVISDIQDFVVALSLEISDEGNITMTSFEVRQFANVVNHIGGLSILDPIFG
VLSDVLTAIFQDTVRKEMTKVLAPAFKRELEKN
>P14292.3 Allergen Cand b 2; peroxisomal protein [Candida boidinii]
MAPIKRGDRFPTTDDVYYIPPEGGEPGPLELSKFVKTKKFVVVSVPGAFTPPCTEQHLPG
YIKNLPRILSKGVDFVLVISQNDPFVLKGWKKELGAADAKKLVFVSDPNLKLTKKLGSTI
DLSAIGLGTRSGRLALIVNRSGIVEYAAIENGGEVDVSTAQKIIAKL
>COMPARE018 Putative Bra r 3; lipid transfer protein [Brassica rapa]
MKIMVLTLMVFVILLTLFPAPNEAADTNVEAACDPKQLQPCLAAITGGGQPSGDCCAKLK
EQQPCLCGFSKNPAFAQYISSPNSRKVLTACGIPYPSC
>C0HJF9.1 Allergen Act d 12; 11S globulin, glycinin, cupin, partial
[Actinidia deliciosa]
NRQPSKYGLEETI
>COMPARE020 Allergen Fra a 1; PR-10 bet v 1 homologue, partial [Fragaria
x ananassa]
KITFGEGSQYGYVK
>COMPARE176 Putative Act c 4; phytocystatin, partial [Actinidia
chinensis]
VAAGGWRPIEE
>AAX84656.1 alpha-tubulin [Tyrophagus putrescentiae]
MRECISVHVGQAGVQIGNACWELYCLEHGIQPDGQMPSDKTIGTGDDSFNTFFSETGSGK
HVPRAVYVDLEPTVVDEVRTGTYRQLFHPEQLITGKEDAANNYARGHYTIGKEIVDVVLD
RIRKLSDQCTGLQGFLIFHSFGGGTGSGFTSLLMERLSVDYGKKSKLEFAVYPAPQVSTA
VVEPYNSILTTHTTLEHSDCAFMVDNEAIYDICRRNLDIERPTYTNLNRLIGQIVSSITA
SLRFDGALNVELTEFQTNLVPYPRIHFPLVTYSPVISAEKAYHEQLTVAEITNTCFEPQN
QMVKCDPRHGKYMACCLLYRGDVVPKDVNAAIAGIKTKRSIQFVDWCPTGFKVGINYQPP
TVVPGGDLAKVQRAVCMLSNTTAIAEAWARLDHKFDLMYAKRAFVHWYVGEGMEEGEFSE
AREDLAALEKDYEEVGLDSTEAEGGDGEEF
>Q5QKR2 Allergen Eri s 2; ovary development-related protein [Eriocheir
sinensis]
MWCSILLAAVMVAVAGGQSRFSYDGTPLADDVVVGSGQRQQFFASRQPRPQQLFVQERPQ
QVFVQQQPQPPVFVQPEPQQVFVQPQPRPMFQMLPSFSQQAAVIQSVQPQVSSACPATYS
LVHTTYQGRVYHSSWCNLPGHRFSQSAARDYCRGLGEVTVMNRRGSFDLYSVDRTTDFDY
FFELLLQHQIPSVWTRDLASTAPYEIRGSITRSGDSTAGQDCLSLEASTDGLFLLQDSCS
DRKAAVCVAHWQ
>BAF43535.1 Allergen Ani s 6; serine protease inhibitor [Anisakis
simplex]
MFQSTFFLVLMVCVATARFANKDHCPPNEEYNECGNPCQEKCDNGEPVICTYQCEHRCFC
KQGYVRLTEDGECVPEEFCKPIHY
>BAF47264.1 Allergen Pan b 1; tropomyosin [Pandalus eous]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVFGLQKKLQQLENDLDSV
QEALLKANQHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>AAR08428.1 translationally controlled tumor protein,ClaTCTP
[Cladosporium herbarum]
MLIYNDIISGDELISDSYDLVEVDGVAYEADCRKITIGGETFDTGANASAEGGDEEADDQ
KETKIDVVHAFQLQETNFDKKAYLGHLKSYMKKIKESMAASGASEDEVKEFEKGAQTFAK
RVVGSFKDYEFLIGPSMDPDAMVVLLNYREDGVTPYVTLWKHGLKSTKV
>COMPARE162 arabinase, partial [Aspergillus fumigatus]
EDYQFGWNQL
>COMPARE163 Allergen Asp f 15; cerato-platanin, partial [Aspergillus
fumigatus]

WPTFGSVPGFAR
>COMPARE164 Allergen Asp f 15; cerato-platanin, partial [Aspergillus fumigatus]
PTLPGWNSPNCG
>COMPARE139 Allergen Blo t 12; chitin binding protein [Blomia tropicalis]
MKSVLIFLVAIALFSANIVSADEQTTRGRHTEPDDHHEKPTTHATHEETTSTQHHHEEVT
TQTPHHEEKTTTEETHHSDDLIVHEGGKTYHVVCHEEGPIPHPGNVHKYIICSKSGSLWY
ITVMPCSIGTKFDPISRNCVLDN
>P86699 arginine kinase [Chionoecetes opilio]
MADAATISKLEEGFKKLQGATDCKDVFDQLKQTDKHPNKDFGDVNQFVNVDPDGKFVIST
RVRLIDDHFLFKEGDRFLQAANACRYWPSGRGIFHNDKKIISMQMGGDLGQVYRRLVSAV
NEIEKRVPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKXEKLEEVAGKYSLQVRGTRGE
HTEAEGGVYDISNKRRMGLTEFQAVKEMQDGILELIKIEKEMQ
>ACT37323.1 Allergen Sta c 3.0101; SchS34, partial [Stachybotrys chartarum]
AGPIASRQIVPNYPASSTSKGFHLVVNVTDPSADFTPSINNFYVNSIHVGAALNYVGVTA
VPGRIFYQNGTAEEIRYAQSTVISDGATPPVPFGLSLRPDEGSDVVSTARLDAGPGTTGV
RVSRFPEPYRFLQPETFLACNESLAYYQGDYFTVIKQADVTVGDDGSIDYNVPDNCISVR
LIPECTELNELPEDAYASHEFAADTQCYDDVSALNWSEYGP
>ACV96855.1 arginine kinase [Scylla serrata]
MADAAVIEKLEEGFKKLEAATDCKSLLKKYLTKSVFDQLKGKKTSLGATLLDVIQSGVEN
LDSGVGVYAPDAEAYTLFAPLFDPIIEDYHKGFKQTDKHPNKDFGDVNQFVNVDPDGKFV
ISTRVRCGRSMEGYPFNPCLTEAQYKEMESKVSSTLSNLEGELKGTYYPLTGMTKDVQQK
LIDDHFLFKEGDRFLQAANACRYWPTGRGIYHNDNKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVSAVNEIEKRVPFSHHDRLGFLTFCPTNLGTTVRASVHIKLPKLAANREKLEEV
AGKYSLQVRGTRGEHTEAEGGVYDISNKRRMGLTEFQAVKEMQDGILELIKMEKEM
>ADM53099.1 fibronectin-binding protein [Staphylococcus aureus]
MAYDGLFTKKMVESLQFLTTGRVHKINQPDNDTILMVVRQNRQNHQLLLSIHPNFSRLQL
TTKKYDNPFNPPMFARVFRKHLEGGIIESIKQIGNDRRIEIDIKSKDEIGDTIYRTVILE
IMGKHSNLILVDENRKIIEGFKHLTPNTNHYRTVMPGFNYEAPPTQHKINLYDITGAEVL
KYIDFNAGNIAKQLLNQFEGFSPLITNEIVSRRQFMTSSTLPEAFDEVMAETKLPPTPIF
HKNHETGKEDFYFIKLNQFNDDTVTYDSLNDLLDRFYDARGERERVKQRANDLVRFVQQQ
LHKYQNKLAKLIEEYEQSKNKDTEQLYGELITANIYRIKQGDKEVTALNYYTNEEVVIPL
NPTKSPSANAQYYYKQYNRMKTRERELQHQIQLTKDNIDYFSTIEQQLHHISVHDIDEIR
DELAEQGFMKQRKNQTKKKKAQIQLQHYVSTDGDDIYVGKNNKQNDYLTNKKAKKTHTWL
HTKDIPGSHVVIFNDAPSDTTIKEAAMLAGYFSKAGNSGQIPVDYTLIKNVHKPSGAKPG
FVTYDNQKTLYATPDYELIQKMKQS
>CAY85463.1 Allergen Tri a 35; dehydrin [Triticum aestivum]
MEHQGHGAGEKKGVVESITEKLPGGHGDHQQATGGTYGQQGHAGVTGENIKEKLPGGHGD
HQQTTGMTGSETHATTATTDGNYGKSGHTGTDGTGENKSIMDKIKDKLPGQH
>COMPARE057 28 kDa major allergen [Phaseolus mungo]
GRREDDYDNLQL
>BAL72725.1 Allergen Pen m 4; sarcoplasmic calcium-binding protein [Penaeus monodon]
MAYSWDNRVKYVVRYMYDIDNNGFLDKNDFECLAVRNTLIEGRGEFSADAYANNQKIMRN
LWNEIAELADFNKDGEVTVDEFKQAVQKHCQGKKYGEFPGAFKVFIANQFKAIDVNGDGK
VGLDEYRLDCITRSAFAEVKEIDEAYNKLTTEDDRKAGGLTLERYQDLYAQFISNPEESC
SACYLFGPLKVVQ
>COMPARE140 PR-10, partial [Foeniculum vulgare]
GVQKSEVVITSA
>COMPARE141 lipid transfer protein, partial [Foeniculum vulgare]
AITXGQVTSKLG
>COMPARE142 lipid transfer protein, partial [Foeniculum vulgare]
GGGDPTPACCGGVK

>COMPARE143 lipid transfer protein, partial [Foeniculum vulgare]
GINYGAASALPGK
>COMPARE144 lipid transfer protein, partial [Foeniculum vulgare]
CGISIPYPISPSTNCSR
>AER70365.1 Allergen Ves v 6; vitellogenin [Vespula vulgaris]
MRSRFILLLLGVAVSNLDNNIEHGWKVGEEYQYLVRSRTLTGLQTLSDQYAGILMKATLR
IQCNSPDTLRAQLLKPQYAQIHKKLPDGWDSRISDQMLEHKHLPLSNEPFVIKLKHGVIR
DLIVSKNVPTWEVNIIKSIISQFQADTQGENLKGNKNTQIPEDDNPFATFRVMEDCVSGK
CEVLYDVVPLTEDVLQHRPHILPKPELRGNGEHIYITKTRNYDKCEQRMDYYFGISGNAN
WESDIRNNDKIMKKSSTSNMVISGNLKNFVIQTAVTTTEIIMKPRLVDDQESIVISKMNV
TLVSVNKVSSPIPAPNNPESTGNLVYTYNDPFSKTVQRRLGRPSVSPNSMSNELDSSADS
DEDLRLMREKYGKSDKMNVVSDEDKAFRQMKPTLHEAPKNPMLPLFIGNNGKAVVMSDKI
NSGKMVMTLVQEIASEMEDPNVMPDRETLEKFTIVSRLISSMSLEQINKAEGSLHSVWNE
IGSDETNRMKKENARAVFRDAIANAGTGPALMTIKRWIEKKEIEGCEAADVLASIPKTAR
TPTAEYVDAFFSLASNPEVQKQTCLNSSAVLSFAELVHRAQVSNSSIYNHYPVNVFGRLS
SRRNDAVLRKYIPFFAEELKKAIKDGDSPRIQVYILALGLTGHPKILNVLEPYLEGKERV
STYQRFLMVMSLRKLCEVKPSLARSVLYKIYLNTWDVHQIRCAAVNLIMRTNPPLDMLTR
MAQFTNTDFSGQVNSAVKSAIESAANLNYPEWEELTRNARKVLHLMNTESDKYYYSESHF
TEMEENDQLSYRMMLNYIGSVDNVIPLSTHFALQPSYNGFLSPVYELDMSISSVKSLLEM
YWHKSEKGDTEESFAEKTAKMLHIESDNVEQVEGNVFFKTPYLNRYFSFDNHTIERILHD
MVSPRHSHHVNMNKLLSYDITLSFPTETGLPFVYSLHVPTIKKFSVISKPDMKSKFDVRL
LTSTKHQGRVGFITPFDHQAFLSGIDNNMQVFLPCKLDFHLNNEKSRLDAALQPLKHNSK
TRLGHFSVIPYTSQYEIMSLRPLLLEKNTHRIQEKKTTHIRIPQNPNSIFSVEVEADNLA
EKIQQWLRSENKWEDMLSPSSLALGTYEKIDLFVKPDLQENEAVKFTATLDTKEIRSNNL
DTNDESWKSGNKVLKTMHQALDSPARRKEFLQEVVKGINSGKAYVIDAGLEVPGLWKSNH
ACTLCLASSNDENKFRSIFYWYTNIPSQDITYQMCVNGQTRSSPTTPFDYKKILDSNPTN
EFSINIQSGRTCTDNSLVTIKGQIKQSEDYKTYVQESRIVKRCDENVRNSVKDCQKAAEM
AKNLNEIDMTITKHNSAEESDTELEKIFHGTKKMLTGLNVRVVSEIQEHSDVNDNDIRVQ
IKLSPNMTSAEGMASKSGQILTFSDIHIDMGIDNDDEMNEIEKGILHGATCTLRNNEAET
FDGKVYPLKLGKCAHVLFTTYPRNAPNEPNKRMSIPENMKVTVIAEETENNKKELQILLG
NDEILFKSSGTEVSAWVNGQKVKCSQKESYQHIKNDETLFEIFELPGPAIKLISDKYDIK
LAYDTDHVQIEVPHTYQQSVRGLCGDFDGRSENDFVTPKNCMLQKPEEFAATYILKERCE
GPALNNAKKAERSKCIRKVLRFSDVISDGEAGRPYVNWKQWGYHKKENKKQCNTYRTQII
TKDDNICFTIRPVPTCSSGCKSVVTKLKEYQLYCLPKNDSSLGMKKRIEQGANPDLSQRT
PTDNAMISVPLECVAT
>COMPARE079 glutathione-S-transferase [Dermatophagoides farinae]
MELGTLEGSMSETKPILGYWDARGLGQAIRLLLTYAGVDFIDKRYTVGPPPNYDRSQWLN
DKYNLGLDFPNCPYYIDGNVKLSQSLAIIRYIARKQKLIGQNEHEEIRASLAEQQIIDMN
MAIARIAYNFNCEKLKPEFLKSLPEQVELLSKFLGDQPFTAGANISYADFLLYEYLTKLK
ILVPEVYDKFENLKKFHGNVLEALPRVSEYIKKQQPKAFHGPTSLWNGTYA
>AGF86397.1 Allergen Mel l 1; tropomyosin [Penaeus latisulcatus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANIRAEKAEDDVNKLQKKLQQLENDFDQV
QEALLLANTNAVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAG92398.1 lipid transfer protein [Oryza sativa Japonica Group]
MARAQLVLVAVVAALLLAAPHAAVAITCGQVNSAVGPCLTYARGGGAGPSAACCNGVRSL
KSAARTTADRRTACNCLKNAARGIKGLNAGNAASIPSKCGVSVPYTISASIDCSRVR
>Q28895 Allergen Can f 7; NPC2-like protein [Canis lupus familiaris]
MRLLVAAFLLLALGDLGPGGAVHFKDCGSAVGVIKELNVNPCPAQPCKLHKGQSYSVNVT
FTSNIPSQSSKAVVHGIVLGVAVPFPIPEADGCKSGINCPIQKDKTYSYLNKLPVKNEYP
SIKLVVQWMLLGDNNQHLFCWEIPVQIEG
>COMPARE029 11S globulin, partial [Lupinus albus]

PAEVLANAFGLR
>BAO50858.1 13S globulin [Fagopyrum esculentum]
MSTKLILSFSLCLMVLSCSAQLLPWQKGQRSRPHHGHQQFQHQCDVQRLTASEPSRRVRS
EAGVTEIWDNDTPEFRCAGFVAVRVVIQPGGLLLPSYSNAPYITFVEQGRGVQGVVVPGC
PETFQSESEFEYPQSQRDQRSRQSESEESSRGDQRTRQSESEEFSRGDQHSRQSESEESS
HGDQHQKIFRIRDGDVIPSPAGVVQWTHNDGDNDLISITLYDANSFQNQLDGNVRNFFLA
GQSKQSREDRRSQRQTREEGGDRQSRESDDDEALLEANILSGFQDEILQEIFRNVDQETI
SKLRGETDQRGFIVQARDLKLRVPEEYEEELQRERGDRKRGGSGRSNGLEQAFCNLKFKQ
NVNRPSRADVFNPRAGRINTVNSNNLPILEFIQLSAQHVVLYKNAILGPRWNLNAHSALY
VTRGEGRVQVVGDEGRSVFDDNVQRGQILVVPQGFAVVLKAGNEGLEWVELKNDDNAITS
PIAGKTSVLRAIPVEVLANSYDISTKEAFRLKNGRQEVEVFRPFQSRDEKERERYSIV
>AAS48514.1 Allergen Fag e 5; 8S globulin, vicilin [Fagopyrum esculentum]
IAVVTNGKGKFQMACPHISAEGKQSKRQREGKSIVHYETVNGDLSSGTVFVVPAGHPFVT
AASLEDNLELICFEVNADDNERIPLAGKNSLFKQFEREAKELAFEEKADVVDKLLEKQQQ
EFFFEGPRRRKEQEAGRSDA
>COMPARE101 Allergen Phod s 1; lipocalin, partial [Phodopus sungorus]
AGQETNEMYVVGK
>COMPARE102 Allergen Phod s 1; lipocalin, partial [Phodopus sungorus]
FKPVYATPENIVFTNK
>COMPARE167 vicilin-like protein, partial [Cocos nucifera]
ELAAAFGVSEEQLER
>COMPARE168 vicilin-like protein, partial [Cocos nucifera]
VSEGDVFWLPR
>COMPARE169 vicilin-like protein, partial [Cocos nucifera]
LSPHVNPSATEYGLLLR
>ACS49840.1 Allergen Gly m 7; seed biotinylated protein [Glycine max]
MASEQLARRENTTTEKEIHVEKHRVPKMATHFEHLAEQAKESDITAGKDTPQGSIEALQA
GERVKDHAGKAMGDIGGRGKARETHELGAHFESLADKVTDHAAANVVGNKESQREARGGV
RDVGKFEMRTEGGEKGNKDRPELKTRTREVIGRTEKERGRESGGQVVAEKGRETETARGR
VGAENEGARTTAVITCTLEKGGGTQKPIREEERESESERSAWEQISNYSDQATQGVKEKY
ERAKQAASETLNTTTQTAQEKSAQAKNLAAQAKDATLEKGQQGYAVTKDTISSAAKTASE
KTAPVAEKAKDYTLQAAEKAKSAGGTTASYVGEKAVQAKDVAVESGKSAAGYAAKVAADL
RDKATAVGWAAAHFSAEKTVEGTKAAAHVVEGAAGYAGHKAAELASMSAGAVKGLAASAG
ETAKEYTAKKKEEAQRELEAKKPSQPQEAEERPSEGIGETVRQYAQKPKPSERNPQKEGT
GSIVFTAIGETVSSAGEKVKKPFKNTTGGESEGGGGKEEGKSVIGKSLTSIGEKLGDAKQ
REELLDNVTGNITEGGGEVLGAVGETVAEIGQNMMKPAEIVQERAHVRQAGGVLDAIGET
IAEIAETTRVMVSGEDERVLRQSVVLETRVTGRAKHEEGSHGA
>CTQ87571.1 Allergen Pin p 1; 2S albumin, conglutin [Pinus pinea]
MGVFSSPMSTLRWVTLFAALLSLLEWGTAHEDIVMDGDQVVQQQGRSCDPQRLSACRDYL
QRRREQPSERCCEELQRMSPHCRCRAIERALDQSQSYDSSTDSDSQDGAPLNQRRRRRGE
GRGREEEEAVERAEELPNRCNLRESPRRCDIRRHSRYSIIGGSD
>XP_014705584.1 Allergen Equ a 6; lysozyme [Equus asinus]
MRSTLIISLLSCFFAVYEAKVFSKCELAHKLKAQEMDGFGGYSLANWVCMAEYESNFNTR
AFNGKNANGSSDYGLFQLNNKWWCKDNKRSSSNACNIMCSKLLDDNIDDDISCAKRVVRD
PKGMSAWKAWVKHCKDKDLSEYLASCNL
>P11376 Allergen Equ c 6; lysozyme [Equus caballus]
KVFSKCELAHKLKAQEMDGFGGYSLANWVCMAEYESNFNTRAFNGKNANGSSDYGLFQLN
NKWWCKDNKRSSSNACNIMCSKLLDENIDDDISCAKRVVRDPKGMSAWKAWVKHCKDKDL
SEYLASCNL
>XP_018814692.1 Allergen Jug r 6; 7S globulin, vicilin [Juglans regia]
MAFKPKIPIALLLLTSLLAICAGLALAMQDPELKQCKHQCRHQRQFDEQEKEHCQRSCDE
YHIEKKARERAERRRSEEGSSREEGYEEEELGGEREEENPYVFEDEDFETRVRTDEGRIQ
VLEKFTKRSKLLRGIENFRVAILEANPQTFISPAHFDAELVVFVAKGRATITTVREEKRE
NFNVEQGDIMRIPAGTPVYLINRDENEKLYIVKILRPVSVPGHFEAFHGSGGEDPESFYR

AFSWEVLEAALKTRRDQLEKLFGKQTQGVIIKASKEQIRSMSKHEETTPRIWPFGGDSTH
PFNLFHKRPSQSNQFGRLFETDPKECKQLQDLDLMVSFANITKGSMAGPYYNSRATKISV
VIEGEGYFEMACPHLSSSGSRGQREGSGSSRRRSRSGPSYQQIRGRLRPGMVFVAPAGHP
VAVIASRNKNLQVLCFDVNAQGNIRFPLAGKNNIVNEFEKEAKELAFNFPAREVEKIFRN
QDQEFFFPGPSRQPEEGGRAFE
>COMPARE165 Df642, partial [Aspergillus fumigatus]
RLQSEVEVAIMD
>COMPARE166 Df642, partial [Aspergillus fumigatus]
QALIAELAQVH
>COMPARE178 Allergen Act d 12; partial [Actinidia deliciosa]
GEAVFNDRIR
>COMPARE180 Allergen Act d 12; partial [Actinidia deliciosa]
LVENIDNPSRADIFNPR
>COMPARE015 Allergen Act d 12; partial [Actinidia deliciosa]
LTSVNSFNLPILNYLRLSAEKGVLYR
>COMPARE080 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
DVDEIVLVGGSTR
>COMPARE081 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
AKFEELNMDLFR
>COMPARE082 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
ITPSYVAFTADGER
>COMPARE083 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
NQLTTNPENTVFDAKR
>COMPARE084 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
DNHLLGKFDLTGIPPAPR
>COMPARE085 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
KVTHAVVTVPAYFNDAQR
>COMPARE086 Allergen Aed a 8; HSC-70, partial [Aedes aegypti]
IEIESFYEGDOFSETLTR
>COMPARE150 Alt a 1 homologue [Ulocladium botrytis]
MQFTTIASLFAAAGLAAAAPLESRQDNASCPVTTKGDYVWKISEFYGRKPEGTYYNSLGF
NIKATNGGTLDFTCSAQADKLEGHKWYSCGENSFMDFSFDSDRSGLLLKQKVSDE
>COMPARE158 Allergen Tha p 2; unknown function, partial [Thaumetopoea
pityocampa]
SYSQSYSYVQCIQDSECNGCWK
>COMPARE159 Allergen Tha p 2; unknown function, partial [Thaumetopoea
pityocampa]
KAEEAIDLTYQEK
>COMPARE160 Allergen Tha p 2; unknown function, partial [Thaumetopoea
pityocampa]
NNLFNLGSVAGDILSR
>COMPARE044 7S globulin, vicilin, gamma-conglutin, partial [Lupinus
angustifolius]
AGIALGAHHLEENLVVFDLERSR
>COMPARE030 7S globulin, vicilin, gamma-conglutin, partial [Lupinus
albus]
AGIALGTHQLEENLVVFDLAR
>COMPARE054 conglutin beta, partial [Lupinus luteus]
AIFIVVVDEGEGNYELVGIR
>COMPARE055 putative TAG factor protein, partial [Lupinus luteus]
AVCNLFALEGATVIFTYVK
>COMPARE034 7S globulin, vicilin, gamma-conglutin, partial [Lupinus
albus]
HSIFEVFTQVFANNVPK

>COMPARE046 7S globulin, vicilin, gamma-conglutin, partial [Lupinus angustifolius]
ISGGAPSVDLILDKNDAVWR
>COMPARE048 7S globulin, vicilin, gamma-conglutin, partial [Lupinus angustifolius]
KISGGAPSVDLILDK
>COMPARE036 7S globulin, vicilin, gamma-conglutin, partial [Lupinus albus]
KISGGVPSVDLIMDK
>COMPARE056 conglutin alpha, partial [Lupinus luteus]
RPFYTNAPQEIYIQQGR
>COMPARE051 7S globulin, vicilin, gamma-conglutin, partial [Lupinus angustifolius]
SRVGFNSNSLK
>COMPARE041 7S globulin, vicilin, gamma-conglutin, partial [Lupinus albus]
SRVGFNTNSLK
>COMPARE052 conglutin beta, partial [Lupinus angustifolius]
SVPAEATEVGLLVFST
>COMPARE053 7S globulin, vicilin, gamma-conglutin, partial [Lupinus angustifolius]
VGFNSNSLKSYGK
>COMPARE043 7S globulin, vicilin, gamma-conglutin, partial [Lupinus albus]
VGFNTNSLKSHGK
>COMPARE146 dioscorin, partial [Dioscorea opposite]
VEDEFSYIEGNPH
>COMPARE087 Allergen Aed a 5; Sarcoplasmic Ca+ (EF-hand) binding protein, partial [Aedes aegypti]
AFIDAHYQMMDINNDGLVSIEEYR
>COMPARE088 Allergen Aed a 5; Sarcoplasmic Ca+ (EF-hand) binding protein, partial [Aedes aegypti]
YQELYAQFMGNESDK
>COMPARE089 Allergen Aed a 5; Sarcoplasmic Ca+ (EF-hand) binding protein, partial [Aedes aegypti]
KVDDSYNQLVSDEDNK
>COMPARE090 Allergen Aed a 5; Sarcoplasmic Ca+ (EF-hand) binding protein, partial [Aedes aegypti]
ALWDEISALADLDHDGK
>COMPARE091 Allergen Aed a 5; Sarcoplasmic Ca+ (EF-hand) binding protein, partial [Aedes aegypti]
VDDSYNQLVSDEDNKR
>COMPARE181 Allergen Aed a 6; Porin3, partial [Aedes aegypti]
VTANNFALGYSTGDFVLHTNVNDGR
>COMPARE092 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
DPSAAEGGEIIFGGSDSNK
>COMPARE093 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
QTFAEAINEPGLVFVAAK
>COMPARE094 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
SFDLEGADYVLR

>COMPARE095 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
YTGDFTYLSVDRK
>COMPARE096 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
ECSFTNIACLMHNK
>COMPARE097 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
VVFDTGSSNLWVPSK
>COMPARE098 Allergen Aed a 11; Lysosomal aspartic protease, partial [Aedes aegypti]
YYTEFDMGNDR
>COMPARE154 Allergen Beta v 1; Che a 1/Ole e 1 homologue, partial [Beta vulgaris]
VQGMVYCDTCR
>COMPARE155 Allergen Beta v 1; Che a 1/Ole e 1 homologue, partial [Beta vulgaris]
AEGLYNMLIERD
>COMPARE156 Allergen Beta v 1; Che a 1/Ole e 1 homologue, partial [Beta vulgaris]
DCNEIPTEGWAKPSLKVSLTSNNGEASDIRSANALGFMR
>ABC88428.1 alcohol dehydrogenase [Curvularia lunata]
MSNIPQEQWAQVIEKTGGPVEYKKIPVQKPGPDEVLVNIKFSGVCHTDLHAVNGDWPLPT
KLPLVGGHEGAGVVVARGELVNDVELGDHVGVKWLNGSCLSCDYCQTADEPLCPKPLLSG
YTVDGTFQQYCIAKAAHVARIPKECDLAAIAPVLCAGITVYKGLKESGVKPGQFAAIVGA
GGGLGSLACQYAKAMGVRTIAIDAGEEKKKMCVNDLGAETFVDFSTSKNLVADVQKATPD
GLGPHVVILVAVNEKPFQQAAEYVRPRGTVICIGLPAGAYLKAPVFETVIKMIRIQGSYV
GNRKDSSEAIEFFRRGLIKAPFKIVGLSELQMVYDKMHQGAVVGRYVLDTSK
>COMPARE152 Alt a 1-like protein, partial [Stemphylium botryosum]
KISEFYGRKPEGTYYNSLGFNIKATNGGTLDFTCSAQADKLEDHKWYSCGENSFMSFSFD
SDRS
>COMPARE174 probable vicillin-like protein, partial [Fagopyrum esculentum]
GDYPLEXCRQKIEH
>COMPARE175 trypsin inhibitor [Fagopyrum esculentum]
SDKPQQLLEECRYLXRI
>COMPARE100 Allergen Gal d 9; enolase, partial [Gallus gallus]
SIQKIHAREI
>AAB32317.1 Allergen Cyn d Ib isoallergen {N-terminal} [Cynodon dactylon]
AIGDKPGPKITATYXXKWLEAKATFYGSNPRGAA
>AAQ24545.1 Putative Blo t 7 allergen [Blomia tropicalis]
MKSTIVLLACFVGIAFSDDAANQLVDQVVDALKTQKGFDSMHVGKHTTELDQKIGLVTFK
GKLIIKDATVTGLSRAAGDSDVKIHSNIELIVGLIQSHLTLDVDIGKLQIMFSAGLAAEG
PSVKDFHIDEFEAVRIHVHGLGPLDPFIDIIGDAIIXLAXSQVREMISXMMRPIIESEVK
KFLQNTTPAPAF
>QEQ43417 Allergen Sola m 1; profilin [Solanum melongena]
MSWQTYVDDHLMCDLEGHHLASAAILGFDGSVWAQSPAFPKEQHTMCDRCSRSGVNCYIM
RPLYLYQAKFKPEEITNIMKDFDEPGFLAPTGLFLGGTKYMVIQGEPGAVIRGKKGSSGI
TIKKTGQALIFGIYEEPVTPGQCNMVVEKIGDYLVDQGY
>QCI56568.1 tropomyosin 1 [Acheta domesticus]
MDAIKKKMQAMKLEKDNAMDKADTCEGQAKDANNKADKINEDVQELTKKLAQVENDLITT
KANLEQANKDLEDKEKALQAAESEMAALNRKVQLVEEDLERSEERAATAATKLQEASEAA
DEAQRMCKVLENRSQQDEERMDQLTNQLKEARLLAEDADGKSDEVSRKLAFVEDELEVAE
DRVKSGDSKIMELEEELKVVGNSLK

>QCI56569.1 tropomyosin 2 [Acheta domesticus]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANLRAEKAEEEARGLQKKIQTIENELDQT
QEQLMQVNAKLEEKDKALQTAEGEIAALNRRIQLLEEDLERSEERLATATAKLAEASQAA
DESERARKILENRSLADEERMDALENQLKEARFLAEEADKKYDEVARKLAMVEADLERAE
ERAEAGESKIVELEEELRVVGN
>QCI56570.1 tropomyosin [Gromphadorhina portentosa]
MDAIKKKMQAMKLEKDNAMDRALLCEQQARDANIRAEKAEEEARSLQKKIQQIENDLDQT
LEQLMQVNAKLDEKDKAFQNAESEVAALNRRIQLLEEDLERSEERLATATAKLAEASQAA
DESERARKILESKGLADEERMDALENQLKEARFMAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANLREEEYKQQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVHEKEKYKYICDDLDMTFTELIGN
>QCI56571.1 tropomyosin 1 [Galleria mellonella]
MDAIKKKMQAMKLEKDNALDRAAMCEQQAKDANLRAEKAEEEARQLQKKIQTIENDLDQT
QESLMQVNGKLEEKEKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLSEASQAA
DESERARKVLENRSLADEERMDALENQLKEARFLAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREEEYKNQIKTLTTRLKEAEARAE
FAERSVQKLQKEV
>QCI56572.1 tropomyosin 2 [Galleria mellonella]
MDAIKKKMQAMKLEKDNAMDKADTCEQQARDANLRAEKVNEEVRELQKKLAQVEEDLTLN
KNKLDQANKDLEEREKQLAATEAEVASLNRKVQQIEEDLEKSEERSGTAQQKLLEAQQSA
DENNRMCKVLENRAQQDEERMDQLTNQLKEARLLAEDADGKSDEVSRKLAFVEDELEVAE
DRVKSGDAKISELEEELKVVGN
>QCI56573.1 tropomyosin [Litopenaeus setiferus]
MDAIKKKMQAMKLEKDNAMDRADTLEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDQV
QESLLKANIQLVEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVN
>QCI56574.1 tropomyosin 1 [Tenebrio molitor]
AKLIAEEADKKYEEVARKLVLMEQDLERAEERAEQSESKIVELEEELRVVGNNLKSLEVS
EEKATLKEEEYSVTLKQVDQRLQEAEARAEFAERSVQKLQKEVDRLEDDLLA
>QCI56575.1 tropomyosin 2 [Tenebrio molitor]
RKLAMVEADLERAEERAEAGESKIVELEEELRVVGNNLKSLEVSEEKANQREEEYKNQIK
NLTTRLKEAEARAEFAERSVQKLQKEVDRLEEELVAEKERYKEIGDDLDTAFVELIL
>QCI56576.1 tropomyosin [Zophobas atratus]
EARFLAEEADKKYDEVARKLAMVEADLERAEERAEAGESKIVELEEELRVVGNNLKSLEV
SEEKANQREEEYKNQIKNLTTRLKEAEARAEFAERSVQKLQKEVDRLEDELVAEKERYKE
IGDDLDTAFVELIL
>COMPARE209 Allergen Aed al 2; D7 like salivary odorant-binding protein, partial [Aedes albopictus]
QSYFEFCENK
>COMPARE211 Allergen Aed al 2; D7 like salivary odorant-binding protein, partial [Aedes albopictus]
KSYFEFCENK
>COMPARE214 Allergen Aed al 2; D7 like salivary odorant-binding protein, partial [Aedes albopictus]
CMEDNLEDGPNR
>COMPARE216 Allergen Aed al 3; 30 kDa salivary protein, partial [Aedes albopictus]
VVAILDKDTK
>COMPARE217 Allergen Aed al 3; 30 kDa salivary protein, partial [Aedes albopictus]
VDNIQSEYLR

>COMPARE219 Allergen Aed al 3; 30 kDa salivary protein, partial [Aedes albopictus]
SALNNDLQSEVR
>COMPARE221 Allergen Ano d 2; odorant-binding protein, partial [Anopheles cracens]
NAVDYNELLK
>COMPARE223 Allergen Ano d 2; odorant-binding protein, partial [Anopheles cracens]
ANTFYTCFLGTSSSPAFK
>COMPARE224 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
FQQAVQALGTIDSADCLK
>COMPARE228 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
YGPVHAQFTDVQR
>COMPARE229 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
EITDKIYNSDSTVK
>COMPARE230 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
SNFKDGSEELCTLR
>COMPARE231 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
TGITTNNNHLDCLFR
>COMPARE232 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
NGNINPDEIK
>COMPARE233 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
DKDAAVDNALNNCK
>COMPARE234 Allergen Cul q 2; salivary odorant-binding protein, partial [Culex quinquefasciatus]
YFIENTDPYDVAK
>COMPARE235 Allergen Cul q 3; salivary odorant-binding protein 2, partial [Culex quinquefasciatus]
GFIQVNNANKGVLEK
>COMPARE236 Allergen Cul q 3; salivary odorant-binding protein 2, partial [Culex quinquefasciatus]
NGEMDESAILR
>COMPARE237 Allergen Pru p 9; PR1-like protein, partial [Prunus persica]
MAFNTKLLLAICCVALVFTLVSANISK
>COMPARE238 Allergen Pru p 9; PR1-like protein, partial [Prunus persica]
VGDCAMEHSMGR
>COMPARE239 Allergen Pru p 9; PR1-like protein, partial [Prunus persica]
TTEVGCGISKCNNGQNYVVCSYDPMYQPEDERPY
>QFI57017.1 Allergen Scy p 9; filamin C [Scylla paramamosain]
MPSGKSDVPVIEDNRDGTVSVRYSPREEGLHELHVKYNAEHVQGSPFKFHVDSIASGYVT
AYGPGLVHGITGEPANFTISTKDAGAGSSTLRGGLSLAVEGSSKAEISCHDNKDGTVSVS
YLPTAPGEYKVSVKFAEKHIRGSPYSVKITGEGRKRNQISVGSQSEVSLPGKVTDSDIKS
LNASIQAPSGLEEPCFLKKLPNGHLGISFTPREVGEHLVSVKRMGNHIANSPFKINVGEK
EVGDASKVKISGKCLSEGQTHKENQFTIDTRDAGYGGLSLSIEGPSKADIQCKDNEDGTL
TIGYTPTEPGYYIINLKFADNHVPGSPFTVKVTGEGTNRQTERIKRQREAVPLTEVGSQC
RLTFKLPGISPFDLGATVTSPGGVTEAAEIGEVEDGLYGVNFVPKELGVHTVSVKYQEMH
IPGSPFQFTVGPLKDGGAHRVHAGGPGLERGEQGMPNEFNVWTREAGAGSLAISVEGPSK

AEIDFKDRKDGSCYVSYVVAEPGEYRVGIKFNDKHIPDSPYKVYITPSLGEARKVELAQL
PEQGSMPNKAQSLLVCKNGAKGTLDCKFVAPSGAEEDCFTDLLDGDLYSVRFVPKEMGIH
YVHIKFNGIHIPGSPFRLRIGKDEADPAAVSVSGKGLESCVSGQKTDFIVDTCNAGAGTL
AVTIDGPSKVSMDCTEVEEGYKVRYTPLVPGDYYIAVKYNAYHVVGSPWKVKCTGEAHAE
KGTIQESSSVVVETVEKTKSGDKGHHGTIIPKFHSDANKVTSKGLGLKKAHINRQNNFTV
NASGAGNNILYVGVYGPKSPCEEVYIKHVGHNNYQVSYKVKERGNHILMVMWGEEHIPGS
PFKLDMF
>QIJ32297.1 Allergen Cra a 4; calcium-binding protein, sarcoplasmic calcium-binding protein [Crassostrea angulata]
MDYLNKKWKIWYNSLDVNHDGKISIEDVEESRNKFTNLHELVGDKAKGVQVNFEDWWNKY
IFRTGAGKEISESEFVQQLTEAYKKDKVGFIKEMQACFDCIFDVIDTNKDRTIDEDEFVY
AFKAFGHENEALVRKAFSLYNKENKHVPLKDIVSEWVKFVTEEDTGKKDIIMEAFKEGF
>COMPARE240 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFTYESEFTSVIPPARLYNAFVLDADNLIPKIAPQAVKSTEILEGDGGVGTIKKINFG
EGSTYSYVKHRIDGLDKDNFVYKYSVIEGDAISETIEKISYETKLVASDSGSIIKSTSHY
HTKGDVEIKEEHVKAGKEKASHLFKLIENYLLEHHDAYN
>COMPARE241 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVLTYETEYASIIPPARLYNALVLDADNLIPKIAPQAVKTVEILEGDGGVGTIKKVSFG
EGSEYNYVKHKVEGIDKDNFVYSYSLIEGDAISDKIEKISYEIKLVASGSGSIIKNISHY
HTKGDFEIKEEHVKAGKERAHGLFKLIENYLVANPDAYN
>COMPARE242 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFTYESEFTSVVPPARLFNAFVLDADNLIPKIAPQAVKSTEILEGDGGVGTIKKINFG
EGSTYSYVKHRIDGVDKDNFVYQYSVIEGDAISETIEKISYETKLVASGSGSVIKSISHY
HTKGDVEIKEEHVKAGKEKASHLFKLIENYLLEHHDAYN
>COMPARE243 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVTKISQKFVTQVTPQRMFNALILDAHNICPKLMFSSIKSIEFLSGSGEVGTIKQINFT
EASPMKYAKHRIDALDKEALSCTYTFIESDATDHLLDKLEYITYDVKFEGYGRGGCICHL
TSTYKAKDDIQIKEEDIELGKDRAIGMYEVLEAYLMAHPRAYV
>COMPARE244 Allergen Mal d 1; pathogenesis related protein / PR-10 / Bet v 1-like protein [Malus domestica]
MGVFTYETEFASVCAPARLYNALVLDADNLIPKIAPQAVKTAEILEGDGGVGTIKKISFG
EGSEYSYVKHKVDGIDKDNFVYNYSLIEGDVISDKIEKISYETKLVASGSGSVIKSTSHY
HTKGDVEIKEEHVKAGKERAHGLFKLIENYLVANPDAI
>COMPARE245 Allergen Mal d 2; thaumatin like protein [Malus domestica]
MTMMKSQVASLLGLTLAILFFSGAHAAKITFTNNCPNTVWPGTLTGDQKPQLSLTGFELA
SKASRSVDAPSPWSGRFWGRTRCSTDAAGKFTCETADCGSGQVACNGAGAVPPATLVEIT
IAANGGQDYYDVSLVDGFNLPMSVAPQGGTGECKPSSCPANVNKVCPAPLQVKAADGSVI
SCKSACLAFGDSKYCCTPPNNTPETCPPTEYSEIFEKQCPQAYSYAYDDKNSTFTCSGGP
DYVITFCP
>COMPARE246 Allergen Mal d 4; profilin [Malus domestica]
MSWQQYVDDHLMCDIDGNRLTAAAILGQDGSVWSQSASFPAFKPEEIAAILKDFDQPGTL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGITIKKTSQALLIGIYDEPVTPGQCNIVVE
RLGDYLIEQGL
>ALU66112.1 Allergen Der f 23; peritrophin like protein [Dermatophagoides farinae]
MKFNITIAFVSLAILVHSSYADIDHFDNDDQNSSTSRPDDDPTTMIDVQTTTVQPSSMPT
TSESESTVKPTTTTVKPSPTTVKPTTTTVKLTTTTVKPSPTTVKPTTTTVKPSPTTTTTT
TTEQPEDEFECPTRFGYFADPKDPCKFYICSNWEAIHKSCPGNTRWNEKELTCT
>AVV30163.1 Allergen Ole e 15; cyclophilin [Olea europaea]
MANPKVFFDMTIGGQPVGRIVMELFADVVPRTSENFRALCTGEKGVGKSGKPLHYKGSAF

HRVIPNFMCQGGDFTAGNGTGGESIYGSKFADENFVKKHTGPGILSMANAGPGTNGSQFF
ICTAKTEWLDGKHVVFGQVVEGFYVVKAIEQVGSGSGKTAKPVVVADCGQLS
>COMPARE188 enolase, partial [Penaeus monodon]
AGAAELGIPLYR
>COMPARE189 enolase, partial [Penaeus monodon]
AAVPSGASTGVHEALEMR
>AAD32205.1 Allergen Pru ar 5; Hev b 5 like acidic protein [Prunus armeniaca]
MATVEVAPAATLQENEAKTVEVIKTEEKTPEEPVAAAPAAVPESEAATTEEPKETTPVEA
EAEAEAEAPAAPEAETPVPAEVETKEVAEEPKAAEAEAEEPAATETEKTEKTEAEEPKEV
TAAEPVAAVAEETKEETTESAETPAAPPAEEEKAEEATTDVPVEKTEE
>QDO73345.1 Allergen Pru du 8; Antimicrobial seed storage protein [Prunus dulcis]
MATMTKAELPLLVLFLSTLLLATSVPSVRAQVTCEEGCYSISDQSKVGECLQMCSSHGQS
CEDRCMREARWPQQQEQCLRMCRQQEQGHHLPCREQCIRSPDREMCERACQQQQGQGGGR
QCLQRCKMITRDPRERLKCVRTCTQGQQQGVFQGQQQQQQVEQQCRQHCQSERDPMRQQE
CQEYCVGQMMQQEYEQQCRSRCQWERPRREQQEQCQEECTEKIRQLEQCQEGCKIQGQYG
PQQQECQRMCREQFEQGQGIRMVA
>AIO08849.1 Allergen Der f 32; secreted inorganic pyrophosphatase [Dermatophagoides farinae]
MSTTNYSVDHRGSFNSLDYRIYFKDNSNGKIISPWHDIPLFVDKSAKHYNMVVEIPRWTN
EKMEIATAEPMSPIKQDIKKGALRYVKNVFPHKGYIWNYGAFPQTWENPNHIDQDTKTKG
DNDPIDVIEIGSRVAKRGDVVPVKILGTIALIDEGETDWKIIAIDTRDELASQMNNVDDV
EKLLPGLLRATVEWFKIYKIPDGKPANKFAFNGEAKDREFAEKIVEETHQYWQEMMENKS
GEHKLDLKNVTLGNSFSINDEQAKQFLETRPSSDAVEPTPIADQVAIDKWHHVKLI
>AHF71021.1A Allergen Art ab 1; defensin-like protein, partial [Artemisia absinthium]
AGSKLCEKTSKTWSGKCDNKKCDKKCIEWEKAQHGACHKREAGKESCFCYFDCSK
>AHF71022.1A Allergen Art an 1; defensin-like protein, partial [Artemisia annua]
TWSGKCDNKKCDKKCIEWEKAQHGACHKREAGKESCFCYFDCSK
>AHF71023.1A Allergen Art c 1; defensin-like protein, partial [Artemisia californica]
CDNKKCDKKCIEWEKAQHGACHKREAGKESCFCYFDCSK
>AHF71024.1A Allergen Art f 1; defensin-like protein, partial [Artemisia frigida]
SGKCDNKKCDKKCIEWEK
>AHF71024.1B Allergen Art f 1; defensin-like protein, partial [Artemisia frigida]
EAGKESCFCYFDCSK
>AHF71026.1A Allergen Art t 1; defensin-like protein, partial [Artemisia tridentata]
CDNKKCDKKCIEWEK
>AHF71026.1B Allergen Art t 1; defensin-like protein, partial [Artemisia tridentata]
EAGKESCFCYFDCSK
>KC700036.1A Allergen Art l 1; defensin-like protein, partial [Artemisia ludoviciana]
SGKCDNKKCDKKCIEWEK
>KC700036.1B Allergen Art l 1; defensin-like protein, partial [Artemisia ludoviciana]
EAGKESCFCYFDCSK
>ABG76185.1 Allergen Blo t 2; group 2 allergen [Blomia tropicalis]
MFKFICLALLVSYAAAGDVKFTDCAHGEVTSLDLSGCSGDHCTIHKGKSFTLKTFFIANQ

DSEKLEIKISATMNGIEVPVPGVDKDGCKHTTCPLKKGQKYELDYSLIIPTILPNLKTVT
TASLVGDHGVVACGKVNTEVVD
>QDH76468.1 Allergen Scy p 3; myosin light chain [Scylla paramamosain]
MAADLSARDVERAKFAFSIYDFEGKGTMDAFYVGDCLRALNLNPTLAVIEKVGGKTKKKE
KMLKVDDFLPIFAQVKKDKDAGSFEDFMEVLKLYDKTENGTMLYAELEHILLSLGERLEK
SELEPVLKDCCDEEDEDGFIPYEPFLKKLTQLL
>COMPARE210 defensin-like protein, partial [Buchanania lanzan]
MAGFCIFFLILFLAQEYGVEGK
>COMPARE212 defensin-like protein, partial [Buchanania lanzan]
ECLNLSDKFK
>COMPARE213 defensin-like protein, partial [Buchanania lanzan]
DIEHLLSGVCR
>COMPARE182 Allergen Tri a 19; omega-5 gliadin, partial [Triticum
aestivum]
HLNPSDQELQSPQQQFLEK
>COMPARE183 Allergen Tri a 19; omega-5 gliadin, partial [Triticum
aestivum]
TNNSLATPTTIPPATATTIPPATR
>COMPARE184 Allergen Tri a 19; omega-5 gliadin, partial [Triticum
aestivum]
TNNSPATATTIPPAPQQR
>COMPARE185 Allergen Tri a 19; omega-5 gliadin, partial [Triticum
aestivum]
SSQQPQQPFSLQPQQPFS
>APP94292.1 Allergen Scy p 8; triose-phosphate isomerase [Scylla
paramamosain]
MANQRKFFVGGNWKMNGDKAAIDGIISFMKGPLNADTEVVVGCPQCYLMYTREHMPANIG
VAAQNCYKTAKGAFTGEISPAMIKDCGCEWVILGHSERRNVFGEPDQLISEKVGHALEAG
LKVIPCIGEKLEERESNRTEEVVFAQMKALVPNISDWSRVVIAYEPVWAIGTGKTATPEQ
AQDVHAKLRQWLRDNVSPQVAESTRIIYGGSVSAGNCKELAKTGDIDGFLVGGASLKPDF
VTIINARA
>QBP14757.1 elongation factor 2 [Dermatophagoides farinae]
MVNFTVDEIRVLMNKKRNIRNMSVIAHVDHGKSTLTDSLVSKAGIIAAAKAGEMRFTDTR
KDEQERCITIKSTAISMYFEMREQDMVFITSADQKESDEKGFLINLIDSPGHVDFSSEVT
AALRVTDGALVVVDCVSGVCVQTETVLRQAIAERIKPVLFMNKMDLAMLTLQLEQEDLYQ
KFTRIVENVNVIISTYADENGPMGDIRVDPSKGSVGFGSGLHGWAFSLKQFAELYSEKFK
IDVDKLMNRLWGENFYNPTAKKWSKRFDEGYKRAFCMFVLDPIFKVFDAIMNFKKEETAK
LLEKLNIVLKGEDKEKDGKNLLKVVMRTWLPAGDSLLQMIAIHLPSPITAQKYRMELLYE
GPHDDEAAVAIKSCNPEGPLMMYISKMVPTSDKGRFYAFGRVFSGIVASGQKVRIMGPNY
VHGKKEDLVEKAIQRTVLMMGRYVESIENVPCGNICGLVGVDQFLVKTGTISTFKDAHNM
KVMKFSVSPVVRVAVEPKNPADLPKLVEGLKRLAKSDPMVQCIIEESGEHIVAGAGELHL
EICLKDLEEDHAQIPIKTSDPVVSYRETVSEESEIMCLSKSPNKHNRLFMKACPLQDGIA
EDIDKGDINPRDDFKVRARFLADKYNWDATDARKIWAFGPEGTGPNLLVDVTKGVQYLNE
IKDSVVAGFQWATKESVLCEENMRGVRFNIHDVTLHADAIHRGGGQIIPTARRCLYACLL
TAQPRLLEPVYLVEIQCPEQAVGGIYGVLNRRRGHVFEESQVVGTPMFTVKAYLPVNESF
GFTADLRSNTGGQAFPQCVFDHWQILPGDPLDGKSRPYQIVMDTRKRKGLKDSLPELDNY
FDKL
>COMPARE215 Allergen Exo m 1; tropomyosin [Exopalaemon modestus]
MDAIKKKMQAMKLEKDNAMDRALTCEQQNKEANNRAEKSEEEVHNLQKRMQQLENDLDSV
QEALLKANAHLEEKDKALSNAEGEVAALNRRIQLLEEDLERSEERLNTATTKLAEASQAA
DESERMRKVLENRSLSDEERMDALENQLKEARFLAEEADRKYDEVARKLAMVEADLERAE
ERAETGESKIVELEEELRVVGNNLKSLEVSEEKANQREEAYKEQIKTLTNKLKAAEARAE
FAERSVQKLQKEVDRLEDELVNEKEKYKSITDELDQTFSELSGY
>BAM22586.1A vitellogenin A, partial [Gadus chalcogrammus]

KKILNPSVKRSSSSSSSSSSSAKLFSSSSSSSSSSSRSSSSSSRSSRSSKLNSKSSSSSS
SSSSSSSSRSARSRLSNTVVYP
>BAM22586.1B vitellogenin A, partial [Gadus chalcogrammus]
QVYEAQCSYAKNTLTTFNNRRYKNEMPLSCNQVLAQDCSKELKFMVLLKKDNIEQNWINV
KLADIDIDLYPENDNMIVKVNGMQIPISNLPYQHPTGTIQIKSNGEGISVYAASHGLHEV
YFDRSSWKVKLADWMKGQTCGICGKADGEVRQEFRTPNGQLAKDAVSYAHSWVIPAENCQ
DASECRMRQESVKLEKQIMVHGQESNCHSVETVLRCLPGCIPVKTTPVTVGFHCLPISAE
QQRSGDLSSVLEQSVDLRESVMAHLACNCANLCA
>ALM24136.1 Allergen Rhi o 2; cyclophilin A [Rhizopus oryzae]
MSNPKVFFDVSANSKPLGRIVMELRADVVPQTAENFRALCTGEKGFGYKGCSFHRVIPEF
MLQGGDFTNHNGTGGKSIYGNKFRDENFTLKHTGPGDLSMANAGPNTNGSQFFITTIKCS
WLDGKHVVFGRVTEGMDVVQNIESLGSPNGTPRAKIIIDNCGQL
>CAA55009.1 Allergen Pru du 6; amandin, 11S globulin legumin-like protein
[Prunus dulcis]
MAKAFVFSLCLLLVFNGCLAARQSQLSPQNQCQLNQLQAREPDNRIQAEAGQIETWNFNQ
GDFQCAGVAASRITIQRNGLHLPSYSNAPQLIYIVQGRGVLGAVFSGCPETFEESQQSSQ
QGRQQEQEQERQQQQQGEQGRQQGQQEQQQERQGRQQGRQQQEEGRQQEQQQGQQGRPQQ
QQQFRQLDRHQKTRRIREGDVVAIPAGVAYWSYNDGDQELVAVNLFHVSSDHNQLDQNPR
KFYLAGNPENEFNQQGQSQPRQQGEQGRPGQHQQPFGRPRQQEQQGNGNNVFSGFNTQLL
AQALNVNEETARNLQGQNDNRNQIIQVRGNLDFVQPPRGRQEREHEERQQEQLQQERQQQ
GEQLMANGLEETFCSLRLKENIGNPERADIFSPRAGRISTLNSHNLPILRFLRLSAERGF
FYRNGIYSPHWNVNAHSVVYVIRGNARVQVVNENGDAILDQEVQQGQLFIVPQNHGVIQQ
AGNQGFEYFAFKTEENAFINTLAGRTSFLRALPDEVLANAYQISREQARQLKYNRQETIA
LSSSQQRRAVV
>COMPARE218 glutelin type-A 1, partial [Oryza sativa]
GLLLPHYTNGASLVYIIQGR
>ADG36438.1 Allergen Mus a 5; glucanase [Musa acuminata]
IGVCYGMLGNNLPPPSEVVSLYKSNDIARMRLYDPNQAALQALRNSNIQVLLDVPRSDVQ
SLASNPSAAGDWIRRNVVAYWPSVSFRYIAVGNELIPGSDLAQYILPAMRNIYNALSSAG
LQNQIKVSTAVDTGVLGTSYPPSAGAFSSAAQAYLSPIVQFLASNGAPLLVNVYPYFSYT
GNPGQISLPYALFTASGVVVQDGRFSYQNLFDAIVDAVFAALERVGGANVAVVVSESGWP
SAGGGAEASTSNAQTYNQNLIRHVGGGTPRRPGKEIEAYIFEMFNENQKAGGIEQNFGLF
YPNKQPVYQMSF
>AAX93750.1 Allergen Cro s 1; Ole e 1-like protein [Crocus sativus]
MGKCQAVFLLVGALCVLSLAGVANAAENHFKVQGMVYCDTCRIQFMTRVSTIMEGATVKL
ECRNITAGTQTFKAEAVTDKVGQYSIPVHGDFQDDICEIELVKSPNSECSEVSHDVYAKQ
SAKVSLTSNNGEASDIRSANALGFMRKEPLKECPEVLKELDLYDVKAN
>COMPARE220 Allergen Tri a 28; alpha amylase inhibitor, partial [Triticum
aestivum]
EHGVSEGQAGTGAFPSCR
>COMPARE222 alpha amylase inhibitor, partial [Triticum aestivum]
STEWHIDSELVSGR
>X76395 Allergen Ole e 1; major pollen allergen [Olea europaea var.
sylvestris]
EDVPQPPVSQFHIQGQVYCDTCRAGFITELSEFIPGASLRLQCKDKENGDVTFTEVGYTR
AEGLYSMLVERDHKNEFCEITLISSGRKDCNEIPTEGWVKPSLKFILNTVNGTTRTVNPL
GFFKKEALPKCAQVYNKLGMYPPNM
>COMPARE225 malate dehydrogenase, partial [Cynodon dactylon]
TPASGQPERKVAILG
>COMPARE226 similar to pollen allergen, Phl p 11-like protein, partial
[Cynodon dactylon]
FTVTGEVYXDPXRA
>COMPARE227 Allergen Lac s 1; lipid transfer protein, partial [Lactuca
sativa]

AISXGQVTANLA
>BAA09632.1 polcalcin, partial [Brassica napus]
MADAEHERIFKKFDTDGDGKISAAELEEALKKLGSVTPDDVTRMMAKIDTDGDGNISFQE
FTEFASANPGLMKDVAKVF
>BAA09633.1 polcalcin, partial [Brassica napus]
ADATEKAEHDRIFKKFDANGDGKISASELGDALKNLGSVTHDDIKRMMAEIDTDGDGYIS
YQEFSDFASANRGLMKDVAKIF
>COMPARE190 beta conglycinin (vicilin), partial [Phoenix sylvestris]
EAVILPTSPHR
>COMPARE191 beta conglycinin (vicilin), partial [Phoenix sylvestris]
GPELAAAFGVSEEQLER
>COMPARE192 beta conglycinin (vicilin), partial [Phoenix sylvestris]
NRPQFLVGASSLLHSMR
>COMPARE193 beta conglycinin (vicilin), partial [Phoenix sylvestris]
YFPFCQIASNGAPLEFFGFTTSAR
>COMPARE194 carbonic anhydrase, partial [Phoenix sylvestris]
TYPFVEEALEK
>COMPARE195 carbonic anhydrase, partial [Phoenix sylvestris]
YAGVGSAIEYAVHHLK
>COMPARE196 carbonic anhydrase, partial [Phoenix sylvestris]
VVFDFQPGEAFTVR
>COMPARE197 alpha 1, 4 glucan synthase, partial [Phoenix sylvestris]
MAGASVKPTPLLKDELDIVIPTIR
>COMPARE198 alpha 1, 4 glucan synthase, partial [Phoenix sylvestris]
YDDMWAGWCTK
>COMPARE199 alpha 1, 4 glucan synthase, partial [Phoenix sylvestris]
YFGLMGDGQPIGR
>COMPARE200 alpha 1, 4 glucan synthase, partial [Phoenix sylvestris]
VPEGFDYELYNR
>COMPARE201 glycerol kinase, partial [Phoenix sylvestris]
GSLDKGTTSTR
>COMPARE202 isoflavone reductase, partial [Phoenix sylvestris]
PSEFGNDVDR
>COMPARE203 isoflavone reductase, partial [Phoenix sylvestris]
YTTVDEYLNR
>COMPARE204 s-adenosyl methionine synthase, partial [Phoenix sylvestris]
FVIGGPHGDAGLTGR
>COMPARE205 s-adenosyl methionine synthase, partial [Phoenix sylvestris]
TLFHLNPSGR
>COMPARE206 s-adenosyl methionine synthase, partial [Phoenix sylvestris]
YKNEGGAMVPLR
>COMPARE207 beta galactosidase, partial [Phoenix sylvestris]
EIQNAGLYAILR
>COMPARE208 beta galactosidase, partial [Phoenix sylvestris]
WLLLFEEAKTRR
>COMPARE186 gamma-35 secalin, prolamin, partial [Secale cereale]
NMQVGPSGQVEWPQQQPLPQPQQ
>COMPARE187 gamma-3 Hordein, partial [Hordeum vulgare]
ITTTTMFNPSGLELERPQQLFPQW
>COMPARE00247 NPC2-like protein, partial [Felis catus]
EPVIFKDCGSGFGVIKELNVSPCPTQPCKLHKGQSYSVNVTFTSNVSSQGSKALVYGILM
GVAVPFPIPEADGCKSGINCPIQQGKTYSYLNKLPVKNEYPSIKVMVKWQLLGDKEQNLF
CWEIPVQIEG
>A0A484HRI4 Allergen Cav p 1; lipocalin [Cavia porcellus]

MVQILLLALAVGLSCVESSQISGDWDTIALSADNKEKIEEGGPLRVYFRQIDCNADCSEI
TFRLYVKLNGECKESTVVASQSLGGLYTVQFAGQNTFVIVDKQEDTITFFNTNVDENGLV
TRGYVVVGKRDSLTPEETLSFEEANEVKGIPQENIEYLAGTDDCPE
>ABU97467.1 apolipophorin [Blomia tropicalis]
MSAVGTANSHEHLAQLEVTYPKDAPKEVKLLLKSPENSFETKFALNLDASRNLDIKLNLP
HLIDIHLKNQFEKDKETNLMKNDMVLEYKFPNDETVHTLKTHHELGYNLKRNGKDKVANF
DFKSKFESSRRPFLNHRSLVQFKYRPYKLQELVLEFGYGEKMDNVYKFSRISKIDVQEFK
PFKMNSETDLNIVATDFDVDYEIKADNRVLNDRGNALEFDMNLKGKDRSKRAAENGNQEI
EGKIKYRNKGSAVDSKLEASLKGVGHDFAWNSELKQVEPQKYEGKITIQTEKDKKIFITH
KEEISKPTKEIHFKSEADISYSYKPDKKTYVMEAKKQGTAYILKGEAKKDGTVIFSNDIN
FESSNGNLKALIKRDTRSYDLNVDNVFRPREATLLFKIKDREYNIKMDREPFKYINLKVD
GNENALIKNGKAHLSIMDPTTLNLVTKANSNVDFSMDLFASIRHQIALKIDSPKYNFFHD
GDIDLSIVNRRLLWKSLTKKDDREYKFNADIARKGSMISLTKVTPDRTSSVQYSRNGEKI
EVNIDTEYLEGKVEGDRFSGKIVLKNKQNDYELESTYKRENGRLVIESVNGKNAKMEAVF
SRKEPSKFVLETPNTKAKIDMDLTAPVKTFKLDFDNPRYQKKIDASMEPESKFKYSSYSN
QKNEKKERKIEIDGVHMKELNVDIDFPDFKFKVKQPESSKKVEFSYTFNNYTETEEYDFD
PHKAYLVNWVNALRQYVQTFVVQN
>AAQ24549.1 chitinase [Blomia tropicalis]
MTKLCLVALATLATIAALVPVNHATKDPKTVCYYESWVHWRHGDGKMEPNEIDTSLCTHI
VYTYFGIDAITHELKWLDPYLMKDLHDIEKFVQAKGKAKAMIAIGGASMSDQFSITAGNE
QYRDIFARSVVNFLAQYHFDGIMIDWYGVQERDSENLIHLLDKFDEKFASTTYSMGITLP
ATVATLDHYNVPKITVYVDFINVLTLDYAGPWGKVVDNASPLPEQLKTMEEYHKRGAPRS
KLVMAVPMYARTWRLASPLHQDLGDAAISGGTKGPYTDTEGILSYNELCVRIKGSPNSFN
IVRDVANTAVHAVYLHGNEAEFYSFEDTKTLAAKAHNVTTMGYGGLSIFTLSNEDSHGTC
GKKYPLLHSIVENYNHDPIDEVPITTIPPPTPHPTEVVTDIPGVFKCHSVGKFRDHEYCF
KYYDCVMGDFGLESTVMYCERHQAFDEKTYKCVEASQIPGC
>D2T2K2 Allergen Tri a 14; lipid transfer protein [Triticum aestivum]
ISCSQVDSTLMPCLQYVQQGGSPARGCCTGIQNLLAEANNSPDRRTICGCLKNVANGASG
GPYITRAAALPSKCNVALPYKISPSVDCNTVH
>AHX03180 Allergen Der f 4; alpha-amylase [Dermatophagoides farinae]
MLPKFFFILITVLTLLVSLFVNGDSKFSNPHFIGNRSVITHLMEWKYDDIGDECERFLGP
YGYGGVQVSPVNEHAIMDGRPWYERYQPVSYDIHTRSGDEQQFRRMVQRCNKAGVRIYVD
IVLNHMTGGQSGLGTNGHHYDGVAMQYPGVPFGPNDFHGHETCPTNDLEIHNYSNRIEAR
NCRLVGLRDLKQQSEYVKQKQVDFLNHLIDIGVAGFRSDASTHQWPDDLRSIYSRLHNLN
NEFFTENSHPFIYHETIYYGGNGINSNEYTSLGRIIEFRFYKEITNVFRNNNQLRWLRNF
GTEWGLVPSGDALVMIDSHDLRVGHTGQLGFNINCFEARLLKAATAFMLAWNYGIPRVMS
SYFWDQIIRDGKDVNDWVGPPTDQHGNILSVHPNPDMTCNHEWICEHRWREIYNMVKFKL
IAGQEPVNNWWDNGDNQIAFSRGNRAFIAINLQKNGNDHDKNLQKRLQTGLPPGIYCDII
SGNLINNRCMGKSIQVDKNGLSDIYVGHDEFDAFVAYHIDARVES
>NP_001103782.1 Allergen Bomb m 3; tropomyosin [Bombyx mori]
MDAIKKKMQAMKLEKDNALDRAAMCEQQAKDANLRAEKAEEEARQLQKKIQTIENELDQT
QESLMQVNGKLEEKEKALQNAESEVAALNRRIQLLEEDLERSEERLATATAKLSEASQAA
DESERARKVLENRSLADEERMDALENQLKEARFLAEEADKKYDEVARKLAMVEADLERAE
ERAESGESKIVELEEELRVVGNNLKSLEVSEEKANQREEEYKNQIKTLTTRLKEAEARAE
FAERSVQKLQKEVDRLEDELVAEKEKYKDIGDDLDTAFVELILKE
>AAU21501.1 Allergen Ara h 15; oleosin [Arachis hypogaea]
MSDQTRTGYGGGGSYGSSYGGGGTYGSSYGTSYDPSTNQPIRQAIKFMTASTIGVSFLIL
SGLILTGTVIGLIIATPLLVIFSPILVPAAITLALAAGGFLFSGGCGVAAIAALSWLYSY
VTGKHPAGSDRLDYAKGVIADKARDVKDRAKDYAGAGRAQEGTPGY
>QCY53440.1 Allergen Cten i 1; parvalbumin [Ctenopharyngodon idella]
MAFAGILNDADIAAALEACKAADSFNHKAFFAKVGLSAKSGDDVKKAFAIIDQDKSGFIE
EDELKLFLQNFKADARALTDAETKIFLKAGDSDGDGKIGVDEFAALVKA
>XP_019446786.1 Allergen Lup an 3; lipid transfer protein [Lupinus
angustifolius]

MAGIVKLACAVLICMVVVSAPLTKAITCGQVTANLAQCLNYLRSGGAVPAPCCNGIKNIL
NLAKTTPDRRTACNCLKAAAANTPGLNPSNAGSLPGKCGVNIPYKISTSTNCASIK
>COMPARE00280 Allergen Lup a 5; profilin [Lupinus albus]
SWQTYVDEHLLCDIEGNQLTSAAIIGQDGSVWAQSSSFPQFKPEEITAIVNDFAEPGSLA
PTGLYLGGTKYMVIQGEPGAVIRGKKGPGGVTVKKTNQALIIGIYDEPMTPGQCNVVVER
LGDYLIDTGL
>AFN42528.1 Allergen Can s 5; pathogenesis related protein, PR-10, Bet v
1-like protein [Cannabis sativa]
MGVFTYESEFTSSIAPARLFKAFVLDGDNLVPKIAPQAVEKVEILEGNGGVGTIKKITFG
QGVPFKYVKHKIEAIDKESLTYSYSIIEGDALEGNQLEKITHESKLVASGDGGNVIKTVS
KYYSAGDAQVNEEKVKEGEKQATQMLKTVEAYLKDHPEAYN
>P84527.2 Allergen Act d 5; kiwellin [Actinidia deliciosa]
MAQLALLLLSLFLTLISLAPPGASISSCNGPCRDLNDCDGQLICIKGKCNDDPQVGTHIC
RGTTPSPQPGGCKPSGTLTCRGKSYPTYDCSPPVTSSTPAKLTNNDFSEGGDDGGPSECD
ESYHNNNERIVALSTGWYNGGSRCGKMIRITASNGKSVSAKVVDECDSRHGCDKEHAGQP
PCRNNIVDGSNAVWSALGLDKNVGVVDITWSMA
>P62927 2S albumin, conglutin [Pisum sativum]
MASVKLASLMVLFATLGMFLTKNVGAASCNGVCSPFEMPPCGSSACRCIPVGLVVGYCRH
PSGVFLRTNDEHPNLCESDADCRKKGSGNFCGHYPNPDIEYGWCFASKSEAEDFFSKITQ
KDLLKSVSTA
>GFG40850.1 arginine kinase [Coptotermes formosanus]
MVDQAVLDKLEAGYAKLAASDSKSLLKKFLTKEVFDNLKTKKTPSFGSSLLDVIQSGLEN
HDSGVGIYAPDAEAYSVFADLFDPIIEDYHGGFKKTDKHPPKDWGDVDTLGNLDPAGEYI
ISTRVRCGRSLEGYPFNPCLTEAQYKEMEEKVSSTLSGLEGELKGQFYPLTGMTKEVQQK
LIDDHFLFKEGDRFLQAANACRFWPTGRGIYHNDAKTFLVWCNEEDHLRIISMQMGGDLG
QVYRRLVTAVNDIEKRIPFSHDDRLGFLTFCPTNLGTTVRASVHIKVPKLAADRAKLEEV
AGKYNLQVRGTRGEHTEAEGGVYDISNKRRMGLTEYEAVKEMHDGIAELIKLESSL
>QOL11118.1 pectin methylesterase [Humulus japonicus]
SVTAAKDGTGDFRTINDALAAIPTKYEGRYVIYVKEGLYEETVTVTKKMANVTMYGDGSQ
KSIITGSKNFVDGVRTFQTATFVVLGGGFMGKAMGFGNTAGPEKHQAVAARVQADRAIFA
NCRFEGYQDTLYTQTHRQFYRSCVVAGTIDFIFGDAAVVFQNCMLVVRLPMANQKNIVTA
RGRVDKQQTTGIVIHNCRIMADKKLEPEKARVKSFLGRPWKEYSRTIIMESTIEDLIHPD
GWLPWEGEFALKTLYYAEYNNKGPGAKVTTRVNWPGYSVINKKEAEKFTVENFLQGNDWL
NIKGIPVRYTLILRANRSEVQ
>ABM53752.1 Allergen Tyr p 13; fatty acid-binding protein [Tyrophagus
putrescentiae]
MANKLLLALALVLAATTSAVLAEDIDFSGRYKMTVADTSNYKDLLYELGIGYFKRLAAGA
SGSEYVITRNKEAGTYTLQTVTTFSTAAVTFKSGEEFDEPRADGQTVKSTIVIAGNKWTH
VQKGSPTVTIERTFQGGNPPTYIDVITKCNAVPVTRKYERQ
>A0A161X1M2 Allergen Dau c 1; pathogenesis related protein, PR-10, Bet v
1-like protein [Daucus carota]
MGVQKTEAEVTSSVSAEKLFKALCLDIDTLLPQVLPGAIKSSETLEGDGGVGTVKLVHLG
DASPFKTMKQKVDAIDKESFTYAYSIIDGDILLGFIESINNHFAYVPNADGGCTVKSTIT
FNTKGDAVVPEENIKFANDQNRAIFQAVEAYLIAN
>COMPARE00248 peroxidase-1, partial [Triticum aestivum]
GAVVSCADILALAAR
>COMPARE00249 peroxidase-1, partial [Triticum aestivum]
LFPRPDPTINPPFLAR
>COMPARE00250 peroxidase-1, partial [Triticum aestivum]
DIGLAAGLLR
>COMPARE00251 peroxidase-1, partial [Triticum aestivum]
TPNVFDNQYYVDLVNR
>COMPARE00252 peroxidase-1, partial [Triticum aestivum]
DFFEQFGVSMGK

>COMPARE00253 beta-glucosidase 4, partial [Triticum aestivum]
IVGAFADYAEFCFK
>COMPARE00254 beta-glucosidase 4, partial [Triticum aestivum]
TEPYIVTHNIILSHAAAVQR
>COMPARE00255 beta-glucosidase 4, partial [Triticum aestivum]
VVGYFAWSLLDNFEWR
>COMPARE00256 beta-glucosidase 4, partial [Triticum aestivum]
DFHIGWFLDPITNGR
>COMPARE00257 beta-glucosidase 4, partial [Triticum aestivum]
IGILLDFVWYEPHSNSNADQGAAQR
>COMPARE00258 beta-glucosidase 4, partial [Triticum aestivum]
FGIAYVDFNTLK
>COMPARE00259 luminal-binding protein 5, partial [Delonix regia]
RVEIESLFDGIDFSEPLTRA
>COMPARE00260 luminal-binding protein 5, partial [Delonix regia]
KFDLSGIPPAPRG
>COMPARE00261 ATP synthase beta subunit, partial [Delonix regia]
KVVDLLAPYQRG
>COMPARE00262 ATP synthase beta subunit, partial [Delonix regia]
RVLNTGSPITVPVGRA
>COMPARE00263 ATP synthase beta subunit, partial [Delonix regia]
RIPSAVGYQPTLATDLGGLQERI
>COMPARE00264 ATP synthase beta subunit, partial [Delonix regia]
RVGLTGLTVAEHFRD
>COMPARE00265 actin, partial [Delonix regia]
RAVFPSIVGRPRH
>COMPARE00266 actin, partial [Delonix regia]
KSYELPDGQVITIGAERF
>COMPARE00267 actin, partial [Delonix regia]
KDLYGNIVLSGGSTMFPGIADRM
>COMPARE00268 actin, partial [Delonix regia]
RTTGIVLDSGDGVSHTVPIYEGYALPHAILRL
>COMPARE00269 actin, partial [Delonix regia]
KAEYDESGPSIVHRK
>COMPARE00271 ADP, ATP carrier protein 1, partial [Delonix regia]
RLADDDEFMVPSVFNSRF
>COMPARE00272 ADP, ATP carrier protein 1, partial [Delonix regia]
KGNFLIDFLMGGVSAAVSKT
>COMPARE00273 S-adenosylmethionine synthase 1-like, partial [Delonix regia]
RFVIGGPHGDAGLTGRK
>COMPARE00274 S-adenosylmethionine synthase 1-like, partial [Delonix regia]
KTAAYGHFGRDDPDFTWETVKL
>COMPARE00275 S-adenosylmethionine synthase 1-like, partial [Delonix regia]
KTCPWLRPDGKT
>COMPARE00276 unknown function, partial [Delonix regia]
REGEGEGGVAAAGVGVRR
>COMPARE00277 UDP-arabinopyranose mutase, partial [Delonix regia]
KTINVPDGFDYELYNRN
>COMPARE00278 UDP-arabinopyranose mutase, partial [Delonix regia]
MSKPATPVAPPLKDELDIVIPTIRN
>COMPARE00279 UDP-arabinopyranose mutase, partial [Delonix regia]

KASNPFVNLRK
>S0BDX9 Allergen Cav p 6; lipocalin [Cavia porcellus]
MKLQLLCLGLILLCTQGEGDEVVRGNFDAEKISGNWYTVKEASDKRETIEEGGSMRVFVE
SIEPVKDSALSFKFWAHENGECKQISLICNRVAEGVYAVEYDGYNVFRVAETDYKNYAIF
QLRNFKAEGSFQLLELYGREPDVSGEIKTRFEDFCHKNGIGEGNIIDMTTVDRCLQARGE
K
>C0HLQ1 Allergen Cry j 7; gibberellin-regulated protein [Cryptomeria japonica]
AHIDCDKECNRRCSKASAHDRCLKYCGICCEKCNCVPPGTYGNEDSCPCYANLKNSKGGH
KCP
>C0HLQ0 Allergen Jun a 7; gibberellin-regulated protein [Juniperus ashei]
AQIDCDKECNRRCSKASAHDRCLKYCGICCKKCHCVPPGTAGNEDVCPCYANLKNSKGGH
KCP
>QID21357.1 Allergen Pop n 2; profilin [Populus nigra]
MSWQVYVDDHLMCDIEGNTLTSAAIIGHDGSVWALSASFPQFTQEEVSAIMKDFEEPGSL
APTGLFLGGTKYMVIQGEPGAVIRGKKGSGGVTVKKTNQALIIGVYDEPLTPGQCNMIVE
RLGDYLIDQGL
>QGS84240.1 Allergen Que i 1; pathogenesis related protein, PR-10, Bet v 1-like protein [Quercus ilex]
MGVSTHESQETSVIPPARLFKAFVLDSDNLIPKVLPQAIKSIERIEGNGGPGTIKKITFG
EASKFKYSKHRIDALDPENCTYSFSVIEGDALTDMVSVSTEIKFVASPDGGSIKKSTTKY
QTKGDFQLKEEQIQATIEKITGLSKAVEAYLLAHPDLYT
>ABM53753 Allergen Tyr p 1; cysteine protease [Tyrophagus putrescentiae]
MALLFYILFLFFTFIQCRHLEKVPTWEQYKVKFGKNYLTINEENFRKNNYFNSLTKIVKN
NGKNGVTLGLNDMSDWSDEEFFSLNSKSPSSVFVSARPTSTVNTSPFPKSWDWRNIIAFN
SIEQQGRCSSCWAFAAATTVEAAYAHQKNKHNLHLSRQELVDCTNRTFDQHYLNYGCKGG
WPTEAYKYIMDHGVYEDKLYHYTETFNEVCYADKVAHDKGHPVKYYISNYGRLAYNDTDE
AIMAMLVTYGPGTVDIHGTSDTFRFYKGGIMRNVMPNSAYTNHIVVVVGYGTDSSGVDYW
IIRNSWGKTWGEHGYGRLERHPNLLGFNNKYNYPIL
>ABM53750 Allergen Tyr p 7; bactericidal permeability-increasing like protein [Tyrophagus putrescentiae]
MKSAVLVLVACFAGIAVADNGNANQFVDQIVTALKTQKNFDPLVIPPHHMNIDRKIGAIH
LKGTADLKETKITGLSHVRRVGDALLKNENGSFTAKLHLGDDNVKLFSDISLHFLHNIIH
PNLKVEIDIGNIGVGFGVTIGADGKPALKDFDIEEFKHVKIHVHGLGPLDHLVDLIGEAY
ISLANTQARHMITGIVRPILDQELKNFKMGGF
>QOI58528.1 Allergen Tyr p 20; arginine kinase [Tyrophagus putrescentiae]
MVDQATLDKLEAGFKKLQSSGDACHSLLKKYLTEDVFNKLKDKKTGMGATLLDVIQSGVE
NLDSGVGLYAPDAEAYTLFADLFNPVIEGYHGGFKSTDKHPPSDFGDINQLVNVDPNNEF
VISTRVRCGRSLQGYPFNPCLTEAQYKEMEEKVKAQLESFEGELKGTYYPLTGMDKATQQ
QLIDDHFLFKEGDRFLQAANACRFWPTGRGIFHNASKTFLMWVNEEDHLRIISMQKGGDL
KEVFGRLVKAVQHIEKKIPFSRDDRLGFLTFCPTNLGTTIRASVHIKLPKLAADRKKLEE
VAAKYNLQVRGTAGEHTESVGGVYDISNKRRMGLTEYQAVKEMQDGILELIKIEKSL
>AII81930 Allergen Bla g 12; chitinase [Blattella germanica]
MKTSQILFLCGVVFLSVLVSTSGDKPSRVVCYFSNWAVYRPGLGSYKIEDIPTDLCTHLI
YSFIGVSNVTWGPLILDQENDVDLRGFLNFTDLKAKGVKTSVAMGGWGEGGRKYSHLVSD
KKLRDTFIPALVEFLHKYNFDGLDIDWEYPGASDRGGSYGDRQNFFYFVEELRRAFDKEG
KGWEITMAVPLANFRLNEGYHVPDLCELIDAVHVMAYDLRGNWAGFADVHSPLYQRPNEG
YGYQALNDNDGMQLWVDKGCSPDKLVLGTPFYGRTFTLSQGNTNKDIGTYINKDAGGGDA
GPYTGAKGMLAYYEICNMLQVNASKWTQKFDDIGKCPYAYDDGNQWVGYDNEISLQYKMD
FIKEKGYLGAMTWAIDMDDFHGTCGQKNPLINVLAKNMKDYVVPTLQISTTPRPEWDRPK
STTFEGGSVTTSTTTTTTMKTTIPETTTTGTTTSTIDPTITTPSFPPSETTTDATTGGPT
VTPSCANANFYPAANCNQYYMCNQGTPILMTCPSGTVWVQEGIRCDWPAASTRAECRSA
>C0HLQ2 Allergen Cup s 7; gibberellin-regulated protein, cypmaclein [Cupressus sempervirens]

AQIDCDKECNRRCSKASAHDRCLKYCGICCEKCHCVPPGTAGNEDVCPCYANLKNSKGGH
KCP
>COMPARE00338 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
ATATDRAPHQVQVHTPTTQR
>COMPARE00281 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
MADMADYVGQK
>COMPARE00282 Allergen Cuc ma 5; 2S albumin, conglutin, partial
[Cucurbita maxima]
PWRREGGSFD
>XP_030492464 Allergen Can s 2; profilin [Cannabis sativa]
MSWQTYVDEHLMCDIDGQGQHLTAAAIIGHDGSIWAQSSSFPQLKAQEITDITKDFEEPG
HLAPTGLHLSGTKYMVIQGEPGAVIRGKKGSGGVTIKKTGQALIFGIYEEPVTPGQCNMV
VERLGDYLVDQGL
>COMPARE00283 Allergen Act d 3; unknown function, partial [Actinidia
deliciosa]
FTDGLMKNGNFELAP
>COMPARE00284 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
RGYDVSGGGIKTLLPER
>COMPARE00285 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
RGYDVSGGGVKTFLPDR
>COMPARE00286 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
QVHGTTVPDQLDSVK
>COMPARE00287 Allergen Ara h 14; oleosin, partial [Arachis hypogaea]
QVHGTTVPDQLDSAK
>COMPARE00288 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
REILDSRGNPTVEVDLHTAKGHFRAAVPSGASTGIHEALELRDGDKKRF
>COMPARE00289 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
KAVEHINKTIGPALIEKKISVVEQEKIDKVMIEMDGTENKSKFGANAILGVSLAVCKA
>COMPARE00290 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
KAGAAEKGVPLYRHIADLAGNTELILPVPAFNVINGGSHAGNKLAMQEFMVLPVGAASFH
DAMRVGAEVYHSLKGVIKA
>COMPARE00291 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
KAAIAQAGYTDKVVIGMDVAASEFCRDGRYDLDFKS
>COMPARE00292 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
KRIITGEQLGEIYRGFIKDYPVVSIEDPFDQDDWEAWKRF
>COMPARE00293 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
KVNQIGSVTESIQACKLAQSHGWGVMVSHRSGETEDTFIADLVVGLCTGQIKTGAPCRSERL
>COMPARE00294 Allergen Gal d 9; beta-enolase, partial [Gallus gallus]
RIEEALGDKAKF
>COMPARE00295 Allergen Gal d 10; aldolase, partial [Gallus gallus]
PHQYPALTPEQKKELHDIAKRIVAPGKGILAADESTGSIAKRLSSVGAENTEENRRW
>COMPARE00296 Allergen Gal d 10; aldolase, partial [Gallus gallus]
RVDPCIGGVILFHETLYQKADDGRPFPQVIKS
>COMPARE00297 Allergen Gal d 10; aldolase, partial [Gallus gallus]
KVDKGVVPLAGTNGETTTQGLDGLMERC
>COMPARE00298 Allergen Gal d 10; aldolase, partial [Gallus gallus]
KKDGADFAKWRCVLKISEHTPTRLAIMENANVLARYASICQQNGIVPIVEPEILPDGDHDLKH
>COMPARE00299 Allergen Gal d 10; aldolase, partial [Gallus gallus]
KKYSPEEIAMATVTALRRT
>COMPARE00300 Allergen Gal d 10; aldolase, partial [Gallus gallus]
RALQASALRAWAGKK
>COMPARE00301 Allergen Gal d 10; aldolase, partial [Gallus gallus]
KAAQEEYVKRA

>COMPARE00302 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
LVPEQISFILSTR
>COMPARE00303 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
NGVFLTLDSLKKGGILNK
>COMPARE00304 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
ALLEKNDCMVISIDWRNGACTNEFQILKFIGYPKAVENTR
>COMPARE00305 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
YIADFSKLLMQK
>COMPARE00306 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
LIGHSLGAQIAGFAGK
>COMPARE00307 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
LGKYPEIIGLDPAGPLFK
>COMPARE00308 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
ICETDAHYVQIIHTSNNLGTER
>COMPARE00309 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
AVQYFTECIRHECCLIGVPQSK
>COMPARE00310 Allergen Vesp v 1; phospholipase A1, partial [Vespa velutina]
CTRNECVCVGLNAKRYPKTGSFYVPVESKAPYCNNK
>COMPARE00311 Allergen Vesp v 5; unknown function, antigen 5, partial [Vespa velutina]
SGIHTLCKYGTSTKPNCGR
>COMPARE00312 Allergen Vesp v 5; unknown function, antigen 5, partial [Vespa velutina]
AEKLEILKQHNEFR
>COMPARE00313 Allergen Vesp v 5; unknown function, antigen 5, partial [Vespa velutina]
GLETRGNPGPQPPAKSMNTLVWNDELAQIAQVWASQCK
>COMPARE00314 Allergen Vesp v 5; unknown function, antigen 5, partial [Vespa velutina]
NTAKYLVGQNIAEQSTTAASFEPVSNMVKMWSDEVKDYQYGSSKNKLNDVGHYTQMVWAK
TKEIGCGNIKYIENGWHHHYLVCNYGPAGNIGNEPIYEKK
>COMPARE00315 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
ITELEDSCEQLR
>COMPARE00316 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
QLENENAGLQR
>COMPARE00317 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
VANAELTERNDNLQR
>COMPARE00318 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
DTEDALRDAEAKLANAQAALNQLR
>COMPARE00319 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
LREKDEEIENIRR
>COMPARE00320 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
ELEGALDNANRANAEYLKQIK
>COMPARE00321 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
LADELRQEQENYK

>COMPARE00322 Allergen Rap v 2; paramyosin, partial [Rapana venosa]
VRDLEAELENEAR
>COMPARE00323 Allergen Pru du 10; mandelonitrile lyase 2, partial [Prunus dulcis]
GSLPTAYPNVLTADGFVYNLQQEDDGKTPVERFVSEDGIDNVRGRVLGGTSIINAGVYAR
>COMPARE00324 Allergen Pru du 10; mandelonitrile lyase 2, partial [Prunus dulcis]
KTAFLEAGVHPNHGFSLDHEEGTRITGSTFDNKGTRHAADELLNKGNSNNLRVGVHASVE
KIIFSNAPGLTATGVIYRDSNGTPHQAFVR
>COMPARE00325 Allergen Pru du 10; mandelonitrile lyase 2, partial [Prunus dulcis]
DFYQCSFSSLPFTTPPFGFFPSASYPLPNSTFAHFASKVAGPLSYGSLTLKSSSNVRVSP
NVKFNYYSNLTDLSHCVSGMKKIGELSTDALKPYKVEDLPGVEGFNILGIPLPKDQTDDA
AFETFCRESVASYWHYHGGCLVGKVLDGDFRVTGINALRVVDGSTFPYTPASHPQGFYLM
LGRYVGIKILQER
>COMPARE00326 Allergen Pru du 8; cysteine-rich anti-microbial protein, partial [Prunus dulcis]
AQVTCEEGCYSLSDQSKVGECLQMCSSHGQSCEDR
>COMPARE00327 Allergen Pru du 8; cysteine-rich anti-microbial protein, partial [Prunus dulcis]
WPQQQEQCLR
>COMPARE00328 Allergen Pru du 8; cysteine-rich anti-microbial protein, partial [Prunus dulcis]
RCMQVEQQGVFQGQQQQQQQQVEQQCRQHCQSERDPMRQQECQEDCVGQMMQQEYEQQCR
>COMPARE00329 Allergen Pru du 8; cysteine-rich anti-microbial protein, partial [Prunus dulcis]
REQQEQCQEECTEKIRQLEQCQEGCKMQGQYGPQQQECQR
>COMPARE00330 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
GLLLPGFSNAPK
>COMPARE00331 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
GIAIPGCAETYQTDLR
>COMPARE00332 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
EGDLLVVPAGVSHWMYNRGQSDLVLIVFADTRNVANQIDPYLRKFYLAGRPEQVER
>COMPARE00333 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
SGNIFSGFADEFLEEAFQIDGGLVR
>COMPARE00334 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
IVQVDEDFEVLLPEKDEEER
>COMPARE00335 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
GRYIESESESENGLEETICTLR
>COMPARE00336 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
GVLYSNAMVAPHYTVNSHSVMYATRGNARVQVVDNFGQSVFDGEVR
>COMPARE00337 Allergen Cuc ma 4; 11S globulin, glycinin, cupin, partial [Cucurbita maxima]
MLPLGVLSNMYR