

ABF protein sequence information

>Unigene0003302

RPPNIFPLTRQSSVYSLTFDEFQSTVGGSIGRDFGSMNMDELLKNIWTTEETQHISGPSGNP
CNYLQSQGS LTPRTLSQKTVDEVWKDLSGEKTDPLRQPTLGEVTLEEFLLRAGVVREE
TKFPEKPHNFDLLGDLTRRPVSDQPLGFGFQNANGHIVNNNNRSELRADNIQVPLNGTRQQ
LILPKQAQLSYANQIPIQGLNGNLVHNGGQGMIGNGVTVATESAALS YDGIGRTNGDNSY
VSPIPYVFTGGLRGRRSSNKVEKVIERRHRRMIKNRESAARSARKQAYTTELEKEIAKLK
EENQELLKKQAE LRKMQKKQVFEMMNMPRGGKRKRLKRTRTGPW

>Unigene0007479

MGSYMNFG EAPLNRGTGLEAAVTTPLIRQSSVYSLTFDEFQNTLGGSGKDFGSMNMDELL
KSIWTAEETQAMATSSKVLGQGTCNNISSGNLQRQGS LTPRTLSQKTVDEVWREVFSEN
SGVKDVSNNPSLGSNLQQQRQPTLKEVTLEEF LFKAGVVREDAPPQMAKQNNNGFYV
GFQNNIGMNNSILNGNMSVVRPSQQLPPLPKESIVTFASSMPMANNTT IASPGTRGL
FKGGPLGIGGLASGAVKGSTVNQLSPDVAAGSSGDVSSVSPPSYMLTSGASRRKG GTLEK
AMERRHRRMIKNRESAARSARKQAYTLELEAEVAKLKEMNEELRKKQE EFMEMQKNQ
VL

>Unigene0007480

MGSYINFKVN SPQNQINVSKPSITPLQRQSSIFELTFDEFQNTLGGNGKDFGSMNLDEF LN
NIWTAEETQTMATSAVAGNLQRQDSLTPPILGQKTVDDVWIEMFKENCGGKEVNSPNLQ
QQQRHPTLGEVTLEEF LSRAGVASETDDDIGFNRNNIVMKTEIMENNFPINTSGMRPSQQ L
ASIGTRGPILGISDYSVKNGLFQGGALGVGALLSGDKQFSPDGDTSARGRKGV SLEKATER
RNKRMIKNRESAERSARKQAYTFELEAEVAKLKEINDELLKKQDEITDMQKNQVQETK
QMPPENKKLCLRRTLTGPW

>Unigene0007482

MGSYMNFKNFGETPQNQCTGSIPSVSTPLVRQSSIFELTFDEFQNTLGGGGKDFGSMNMD
EFLKNIWTAEETQAMATSAVFGQGSNNAPSGNLQRQGS LTPRTLSQKTVDEVWREMYK
ENCGVKDVNPPNL PQQRQPTLGEVTLEEF LFKAGVVREDAQQMVRAHNNGFYNGGSS
EPNNNTGLTIGFQQPPHNNIVANNQILENNNLVPNQLSSLPMNMSGIRPSQQLPQSLFPKQS
TVNFTSSMPMTNNTQLASPGTMGPVIGISDPSIKNGIFQGGPLGMGALFPGAKMNGVMAS
PAKQLSPDGDMSVSSPSYRVGDGGRGRKSGTLEKATERRHHRMIKNRESAARSARKQ
AYTLELEAEIAKLKETNEELRKKQDEIMEMQKNQVQETMKTPWGNKKQCLRRTLSGPW

>Unigene0078257

MNFKNFSDEPPGSGGSRPPNIFPLARQSSVYSLTFDEFQSTMGGSIGKDFGSMNMDELLK
NIWTAEDIQQPAGQANPDSSGNPSNYLQRQGS LTPRTLSQKTVDEVWKDLSTGMTNLPL
RQQTLEVTLEEF LFRAGVVREEQKLPEKPQNFDLLGDLTRPVSNQPLGFGFQNTGNNNK
QQPIFPKQPAFAYNNCIPNANSTQVVNP GIRTGMTGIADPHHPNSNGRMGMVGITDPHHP
PDGGLGMIGNGVTVATDSPTLSSDGIGRNNGDNSSVSPLPYIFTGGLRGRRSNNAVEKVIE
RRQRMIKNRESAARSARKQAYTTELEAEVAKLKEENEKLLKKQAEIMEMQKNQVSE
MMTMPQGGKRRRLTRTQTGPW

> Actinidia_chinensis(Achn131571)

MNFRNFENEARVELGAGGGGRPPGIFPLARQSSVYSLTFDEFQSTIGGSEKDFGSMNMDE
LLKNIWSAEEIQT LGSTSVGQEGVASGGYLQRQGS LTPRTLSQKTVDEVWRDLAKESSG
GTDWNSAGGMNLPQRQRTFGEMTLEEF LVRAGVVREDVQLPMKPNNNGFFGDLTGSGN
NNGVGIGFQQMGRNMGLVGNRIPEVNNQTAIQSANLPLNVNGVRSSQQQLFMPQQQQQ

QQHQQLFPKQPTLAYTNPMPIPSSTQLNSQGIRGGIVGITDQSMNGNLVQSGALQGGGMG
MIGFWAGAVTVATGSPASDGLARSNGDMSSVSPVPYVFNGGLRGRKGNHPVEKVVERRQ
RRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELRKKQEEILEMWKNQVLEMMN
TELGVKRRCLRRTQTGPW

>Arabidopsis_thaliana(AT4G34000.1)

MGSRLNFKSFVDGVSEQQPTVGTSLPLTRQNSVFSLTFDEFQNSWGGGIGKDFGSMNMDE
LLKNIWTAESHSMGNNTSYTNISNGNSGNTVINGGGNNIGGLAVGVGGESGGFFTGGG
LQRQGSLLTPRTISQKRVDVWKEMLKEDDIGNGVVNGGTSGIPQRQQTLEEMTLEEFV
RAGVVREEPQPVESVTNFNGGFYGFSGNGGLGTASNGFVANQPQDLSGNGVAVRQDLLT
AQTQPLQMQQPQMVQQPQMVQQPQQLIQTQERPFQKQTIAFSNTVDVVNRSQPATQCQ
EVKPSILGIHNHPMNNNLLQAVDFKTGVTVAASVSPGSQMSPDLTPKSALDASLSPVPMFG
RVRKTGAVLEKVIERRQKRMKNRESAARSARKQAYTMELEAEIAQLKELNEELQKKQ
VE IMEKQKNQLEPLRQPWGMGCKRQCLRRTLTGPW

>Arabidopsis_thaliana(AT4G34000.2)

MGSRLNFKSFVDGVSEQQPTVGTSLPLTRQNSVFSLTFDEFQNSWGGGIGKDFGSMNMDE
LLKNIWTAESHSMGNNTSYTNISNGNSGNTVINGGGNNIGGLAVGVGGESGGFFTGGG
LQRQGSLLTPRTISQKRVDVWKEMLKEDDIGNGVVNGGTSGIPQRQQTLEEMTLEEFV
RAGVVREEPQPVESVTNFNGGFYGFSGNGGLGTASNGFVANQPQDLSGNGVAVRQDLLT
AQTQPLQMQQPQMVQQPQMVQQPQQLIQTQERPFQKQTIAFSNTVDVVNRSQPATQCQ
EVKPSILGIHNHPMNNNLLQAVDFKTGVTVAASVSPGSQMSPDLTPKSALDASLSPVPMFG
RVRKTGAVLEKVIERRQKRMKNRESAARSARKQAYTMELEAEIAQLKELNEELQKKQ
VE IMEKQKNQLEPLRQPWGMGCKRQCLRRTLTGPW

> Nicotiana_tabacum(XP_016506615.1)

MGSNFNFKNFGNEPPGEGGKQPGNFQLPRQPSIYSLTFDEFLLSTTGGSGKDFGSMNMDEL
LKNIWNAEESQTMGGSGINGQEVGGVQSGHLQRQGSLLTPRTLCHKTVDEVWRDMSKE
YGGGKDGNSVGVPTNLPQRQQTLEITLLEFLVRAGVVREDAQLVAKSNNVGGIFADLSY
AGNNTGLGFGYQHQQTNRTGETGIQAANLPLNVNGVRSTQQQLRAQQLQQQQPQPQQ
QQPHQQPLFPKQPALAYAAPMAIPNSGQLGSPGMRGGMVGISDPAINSNFVQGAALTGGG
IGMVGLGAGGVTVATASPAVSSDGLGKSNGDTPSVSPLPYVFNGGIRGRKYSTVEKVVER
RQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELQKKQEEMLEIQKNQVMMEM
MNLQKG AKRRCLRRTQTGPW

>Nicotiana_tabacum(XP_016486495.1)

MGSYLNFKNFADTSQPESGGKPMNNDNFSLARQSSIYSFTFDELQSTCGLGKDFGSMNM
DDLKNIWTAESQAMSSSVAGGNVSPVGNLQRQGSLLTPRTISQKTVDVWKDFQKET
VNANDGSAPGASNFGQRQSTLGEMTLEEFVLRAGAVREDMQPTRYSKDVTFTSGFTQPSS
NSSLNIAFQQATQNPQQLSNQAENSIFNVTTTSSQKPPQAQPLFPKQTTVAFASPMQ
LGNTAQLASPGTRAPIVGMSNPVNTSIIQGSIMQGGVMDMAGLHNGVTSVKGGSPGNL
DPSSLSPSPYAFGEGGRGRRSCNSLEKVVERRRRKRMKNRESAARSARKQAYTLELEAE
VEKLKEINEELQKKQAEFIEMQKNQLMEKMNPWGNKLRCLRRTLTGPW

>Nicotiana_tabacum(XP_016441338.1)

MGSYMNFKNFADTPLTESNGGMSMGSGNFPLARQSSVYSLTFDELQSTCGLGKDLGSMN
LEDLLKNIWTAESNVVASAAGVGNANTTGGNLQRQGSLLTPRTLSQKTVDVWRDFQK
ETTISSKDGSGTEWPNLGQRQSTLGEMTLEEFVLRAGVVREDMQPTGSSTDVRFTHGLLSQ
PSTNNNGLNIAFQQPTQTPGLLSNQFEDNNMLNVVSATSSQQILNVAFTSPMQLGTNVQL

ANAGAREPAVSMSSPSVNTSTIVQGSVMQGGTKGLAGLRNGVTPAKRGSPGNQLSPDMM
SKKVLDRSSLSPPYAFIEGGKGRRPCNSLEKVVERRRRKRMKNRESAARSARKQAYTLE
LEAEVEKLKEINKELHKKQAEFIEMQKNQLMEKMNMPWGNKLRCLRRTLTGPW

>Nicotiana_tabacum(XP_016458525.1)

MGSYLNFKNFADSPQPESNGGKSMCNGNFPLARQSSVYSLTFDELQTTFSGLGKDFGSMN
MEDLLKNIWTAETQATASTTGGVDGSVAAENLQRQGSITLPRTLSQKTVDEVWRDFQK
ETVSAKEGSDTGNSNFGQRQSTLGEMTLEEFVLRAGVVREDMQCTNSNGITFDNGSSQQS
NNNGLNIAFQQPTQNNGLLINQIAANNMLNVVGATPSQQQPQHQQPLFPKQTTVAFASPM
QLSNNHGLASPRTRAPVVGMS

GSSVNTNMAQGGVVRGMAGFHNGVSPAKGGSPGNDFVARSNNTDTSSLSPSPYAFNEGVRG
RRSGSSLEKVVERRRRRMKNRESAARSARKQAYTLELEAEVAKLKEINEELRKKQAEI
MEKQKNQLLEKRNMPGKYLRLCLRRTLTGPW

>Nicotiana_tabacum(XP_016441813.1)

MNFKNFADTPQTESNSGMSMGSGNFPLARQYSVYSLTFDELQSTCGLGKDLGSMNLEDL
LKNIWTAEEESQVVASSAGVGNLQREGSLTLPRTLSQKTVDELWRDFQKETTSSKDVSGT
EWPNLGQSSTLGEMTLEEFVLRAGVVREDMQPTGSTNDVRFTGGISQPSTNNNGLNIAF
QQPTQNPGLFSNQFEEKNMLNVVSATSSQQKPNVAFASPMQLGKNGQLASTAAREPVVS
MLSPSVNTSTIVQGSVMQGGVKGLAGLHNGVALAKRGSPGNQLSRDMIKKDQDTSSLS
PSPYAFGEGGRGRRSCNSLEKVVERRRRKRMKNRESAARSARKQAYTLELEAEVEKLKE
INEELQKKQAEFIEMQKDQLMEKMNMPWGNKLRCLRRTLTGPW

>Nicotiana_tabacum(XP_016441811.1)

MNFKNFADTPQTESNSGMSMGSGNFPLARQYSVYSLTFDELQSTCGLGKDLGSMNLEDL
LKNIWTAEEESQVVASSAGVGNLQREGSLTLPRTLSQKTVDELWRDFQKETTSSKDVSGT
EWPNLGQSSTLGEMTLEEFVLRAGVVREDMQPTGSTNDVRFTGGISQPSTNNNGLNIAF
QQPTQNPGLFSNQFEEKNMLNVVSATSSQQKPNVAFASPMQLGKNGQLASTAAREPVVS
MLSPSVNTSTIVQGSVMQGGVKGLAGLHNGVALAKRGSPGNQLSRDMIKKDQDTSSLS
PSPYAFGEGGRGRRSCNSLEKVVERRRRKRMKNRESAARSARKQAYTLELEAEVEKLKE
INEELQKKQAEFIEMQKDQLMEKMNMPWGNKLRCLRRTLTGPW

> Nicotiana_tabacum(XP_016441812.1)

MNFKNFADTPQTESNSGMSMGSGNFPLARQYSVYSLTFDELQSTCGLGKDLGSMNLEDL
LKNIWTAEEESQVVASSAGVGNLQREGSLTLPRTLSQKTVDELWRDFQKETTSSKDVSGT
EWPNLGQSSTLGEMTLEEFVLRAGVVREDMQPTGSTNDVRFTGGISQPSTNNNGLNIAF
QQPTQNPGLFSNQFEEKNMLNVVSATSSQQKPNVAFASPMQLGKNGQLASTAAREPVVS
MLSPSVNTSTIVQGSVMQGGVKGLAGLHNGVALAKRGSPGNQLSRDMIKKDQDTSSLS
PSPYAFGEGGRGRRSCNSLEKVVERRRRKRMKNRESAARSARKQAYTLELEAEVEKLKE
INEELQKKQAEFIEMQKDQLMEKMNMPWGNKLRCLRRTLTGPW

>Nicotiana_tabacum(XP_016444817.1)

MQYCLLVNIIYLLGLHQNIKNESHGQLLPDLLLLLRVLRNLNLFTRFYSPSPSHTMGSYLN
KNFADTSQ

PESSGGKPMNNDNFSLARQSSIYSFTFDELQSTCGLGKDFGSMNMDDLLKNIWTAEEESQA
LSSSVAGGNVSPVGNLQRQGSITLPRTISQKTVDEVWKDFQKETVNANDGSAPGASNFG
QRQSTLGEMTLEEFVLRAGAVREDMQPTRYSKDVTFTSGFTQPSSNNSSLTIAFQQATQNP
QQLSNQIAGNNIFNVTTTSSQQKPPQAQPLFPKQTTVAFASPMQLGNTAQLASPGTRAPI
VGMSNPVNTTIIQGSIMQGGVDMAGLHNGVTSVKGGSPGNLDPSPSLSPSYACGEGGRG

RRSCTSFEKVVERRRRKRMKNRESAARSRRDKQAYTLELEAEVAKLKEIKQELQKKQAEF
IEKQKNQLLEKMNMPWENKLICLRRTVTGPW

> *Nicotiana_tabacum*(XP_016451400.1)

MGSYLNFKNFADTPQPESYGGKSMCNGNFPLARQSSIYSLTFDELQTTFSGLGKDFGSMN
MEDLLKNIWTAEESQATASTTGSDGSAAGNLQRQGSITLPTLSQKTVDEVWRVFQKE
TVSAKEGSDTGNSNFGQRQSTLGEMTLEEFVLRVGVVREDMQCTNSNGITFDNGSSQHSN
NNGLNIAFQQPTQNNGLLINQIAANNMLNVVGATPSQQQPQHQQPLFPKQTTVAFASPMQ
LSNNGHLAPVGMSPSVNTNMAQGGVGRVTVFHNGVSPAKGGSPGNDFVARSNTDTSS
LSPSPYAFNEGVRGRRSGSSLEKVVERRRRRMKNRESAARSRRDKQAYTLELEAEVAKL
KEINEELQKKQAEIMEKQKNQLLEKRNMPGCGYKLRCLRRTLTGPW

> *Actinidia_chinensis*(Achn227711)

MYFKNYGSEPPAVNGGVRPPEDFPLTRQQSIYSLTFHEFQSTVGGIGKEFGSMNMDELLRN
IWSAEETQTMGSTYCGQESGAPGGYLQRQGSITLPTLSQKTVDEVWRDIATGGGGGGD
SNLPQRQQTLEITLLEFLVRAGVVREDIQLPGKLSNSGGFGDLRPRNDSALGFGFQQMG
QRTGLSNSNQIPTIQSANLPANVNGVRSTQQQMYIPQPQQQQQQQQQHSILTKQSNLAY
ANPMPISNGTHLGSPGIRSGIVGNTDSSMNGNLVQGGGMGTIGLGAGGPVMPDGRGKS
NGDMSSVSPVPYAFNGGLRGRKNGNAVEKVVERRHRRMIKNRESAARSRRDKQAYTTEL
EEEVAKLKEENQVLRKRQVEIVEMQKNQVLEMMNTQQGAQRRCLRRTQTSPW

> *Nicotiana_tomentosiformis*(XP_009592272.1)

MGSNFNFKNFGNEPPGEGGKQPGNFQLPRQPSIYSLTFDEFLSTTGGSGKDFGSMNMDEL
LKNIWNAEESQTMGGSGINGQEVGGVQSGHLQRQGSITLPTLSHKTVDDEVWRDMSKE
YGGGKDGNSVGV
PTNLPQRQQTLEITLLEFLVRAGVVREDAQLVAKSNNVGGIFADLSYAGNNTGLGFGYQ
HQQTNRNTGETGIQAANLPLNVNGVRSTQQQLRAQQLQQQPQPQQQPPHQQPLFPKQP
ALAYATPMAIPNSGQLGSPGMRGGMVGTSDPAINSNFVQGAALTGGGIGMVGLGAGGVT
VATASPAVSSDGLGKSNGDTPSVSPLPYVFNGGIRGRKYSTVEKVVERRQRRMIKNRESAA
RSRARKQAYTMELEAEVAKLKEENEELQKKQEEMLEIQKNQVMEMMNLQKGAKRRCL
RRTQTGPW

> *Nicotiana_tomentosiformis*(XP_009592273.1)

MGSNFNFKNFGNEPPGEGGKQPGNFQLPRQPSIYSLTFDEFLSTTGGSGKDFGSMNMDEL
LKNIWNAEESQTMGGSGINGQEVGGVQSGHLQRQGSITLPTLSHKTVDDEVWRDMSKE
YGGGKDGNSVGV
PTNLPQRQQTLEITLLEFLVRAGVVREDAQLVAKSNNVGGIFADLSYAGNNTGLGFGYQ
HQQTNRNTGETGIQAANLPLNVNGVRSTQQQLRAQQLQQQPQPQQQPPHQQPLFPKQP
ALAYATPMAIPNSGQLGSPGMRGGMVGTSDPAINSNFVQGAALTGGGIGMVGLGAGGVT
VATASPAVSSDGLGKSNGDTPSVSPLPYVFNGGIRGRKYSTVEKVVERRQRRMIKNRESAA
RSRARKQAYTMELEAEVAKLKEENEELQKKQEEMLEIQKNQVMEMMNLQKGAKRRCL
RRTQTGPW

> *Manihot_esculenta*(Manes.18G037900.1.p)

MGTNINFKNFTNDPSADAGGGAGSATRPPGNFPLARQTSIYSLTFDEFQNTMGGIGKDFGS
MNMDELLKNIWSAEETQSMVASSGAAQENLQRQGSITLPTLSQKTVDEVWKDISKDYG
NGGGTAAANLPQRQQTLEITLLEFLVRAGVVREDVQLAAKVNANGGFLADLSKTGTY
SALGMGFQQNRSLGLNNNNTNQISMHSSNLPLNVNGVRSNQAQVQQQQQIFPKQPNLGY
ATQMPLQSSPGMRGGIMGIGDQGISGGLMQGGALGMVGLGGAVTGSPANQLSSDGITKS

GDTSSVSPVPYVFNGGLRGRRASGAVEKVVERRQRRMIKNRESAARSARKQAYTMELE
AEVAKLKEENQELLKKQAAMMEMQKNQVMEMMNQQQGVKKRCLRRTQTGPW

> *Manihot_esculenta*(Manes.18G037900.2.p)

MGTNINFKNFTNDPSADAGGGAGSATRPPGNFPLARQTSIYSLTFDEFQNTMGGIGKDFGS
MNMDPELLKNIWSAEETQSMVASSGAAQENLQRQGSLLPRTLSTQKTVDEVWKDISKDYG
NGGGTAAANLPQRQQTGEMTLEEFVLRAGVVREDVQLAAKVNANGGFLADLSKTGT
SALGMGFQQNRSLGLNNNTNQISMHSSNLPLNVNGVRSNQAQVQQQQQIFPKQPNLGY
ATQMPLQSSPGMRGGIMGIGDQGSGGLMQGGALGMVGLGGAVTGSPANQLSSDGITKS
GDTSSVSPVPYVFNGGLRGRRASGAVEKVVERRQRRMIKNRESAARSARKQAYTMELE
AEVAKLKEENQELLKKQAAMMEMQKNQVMEMMNQQQGVKKRCLRRTQTGPW

> *Citrullus_lanatus*(Cla022580)

MNFKDFGNDPSAGNGGGGRPPANYPLARQSSIYSLTFDEFQSMGSIGKDFGSMNMDPELL
KNIWSAEEMQTMASAAVDEKAGSVGRSGGYLQRQGSLLPRTLSTQKKVDEVWKDII
NEHASAKDGATVASNLQQRQQTGEMTLEEFVLRAGVVREDTQVTANPNNGGFFGNNTG
FGIGFQRQAKVPENNNHIPIQSSNLPLNVNGVVRTHQPPIPKQPAVTYGSQALPSDGGQLA
SPGIRGGIMGIGDQGLNTNLMQGSALQGGRMGVVNIAAAPLPIATESPRDQLSSDGIGKSN
GDTSSVSPVPYALNGGIRGRRSNGIVDKV

VERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENQELRQKQAEIMEMQKNRA
LEVMDKQQGIKKRCLRRTQTGPWCRVAYVSRRLACRVSYNVFASKWIIKSSVAFEWKQN
T

> *Sesamum_indicum*(XP_011074426.1)

MGSNINFKNFGSEPPAEAGGGGRLPGNFPLTRQPSIYSLTFEEFQSTVGGSGKDFGSMNMD
ELLKSISAEENQNVGSTSGGGCQEGSGYLQKQGSLLPRTLSTQKTVDEVWRDISKEYGGG
KDATGSISGFGVPQRQQTGELITLLEEFVLRAGVVKEETQLAAKAKNVGFFGDLSRPVNGS
MLEFGYQQQQPARGTAGLMGGRITSSNQIALQSATLPLNVNGARSATQQLGSSQQQLSQP
QQQPLLPKQPTLAYGIPRSSQLGSPGIRSGIIGISDPAINDSMVQNVTLQGGGVGMVGLGA
NGVTVTGSPAASSDGLTKSNGDTSSVSPVPYVFNGCLRGRKSAALEKVVERRQRRMIKN
RESAARSARKQAYTMELEAEVAKLKEENEELRKKQAEIMEMQKNQVQEMMNQQNGN
KRRCLRRTQTGPW

> *Sesamum_indicum*(XP_011074427.1)

MGSNINFKNFGSEPPAEAGGGGRLPGNFPLTRQPSIYSLTFEEFQSTVGGSGKDFGSMNMD
ELLKSIWSAEENQNVGSTSGGGCQEGSGYLQKQGSLLPRTLSTQKTVDEVWRDISKEYGG
GKDATGSISGFGVPQRQQTGELITLLEEFVLRAGVVKEETQLAAKAKNVGFFGDLSRPVNG
SMLEFGYQQQQPARGTAGLMGGRITSSNQIALQSATLPLNVNGARSATQQLGSSQQQLSQ
PQQQPLLPKQPTLAYGIPRSSQLGSPGIRSGIIGISDPAINDSMVQNVTLQGGGVGMVGLGA
NGVTVTGSPAASSDGLTKSNGDTSSVSPVPYVFNGCLRGRKSAALEKVVERRQRRMIKN
RESAARSARKQAYTMELEAEVAKLKEENEELRKKQAEIMEMQKNQVQEMMNQQNGN
KRRCLRRTQTGPW

> *Salix_purpurea*(SapurV1A.0167s0060.3.p)

MGSDFNFKNFSNDPSDACGGRPPGNFPLTRQSSIYSLTFDELQNAMGGSLGKDFGSMNMD
ELLKNIWSAEESQTMAAATSSGVQESGGLQRQGSLLPRTLSTQRTVDEVWKDMSKEYVIN
GTSAGAANNVPQRQPTLGEITLEDVLRAGVVREDIQEAARVNTNGGFLGDLSRSANNSL
AIGFQQNRGVGLNNDNTNQISLQSSNLPLNVNGVRSNQPQVQQQQQIFPNQPNIGYVTHM
PLQNGPGIRGGLLEIGDQIDGGLMQGGGMGVVGLGGIATGSPANQLSSDGIGKSNGDTS

SVSPVPYVFRESVRGRRAGGAVEKVVERRQRRMIKNRESAARSRARKQAYTMELEAEVA
KLKEENEELRKKQAEMMEMQKNQVAEMMNTQQGGKKRCLRRTQTGPW

> *Salix_purpurea*(SapurV1A.0167s0060.2.p)

MGSDFNFKNFSNDPSDACGGRPPGNFPLTRQSSIYSLTFDELQNAMGGSLGKDFGSMNMD
ELLKNIWSAEESQTMAAATSSGVQESGGLQRQGS�TLPTLSQRTVDEVWKDMSKEYVIN
GTSAGAANNVPQRQPTLGEITLEDFLVRAGVVREDIQEAARVNTNNGGFLGDLRSANNSL
AIGFQQNRGVGLNNDNTNQISLQSSNLPLNVNGVRSNQPVQQQQQIFPNQPNIGYVTHM
PLQNGPGIRGGLLEIGDQGIDGGLMQGGGMGVVGLGGIATGSPANQLSSDGIGKSNGDTS
SVSPVPYVFRESVRGRRAGGAVEKVVERRQRRMIKNRESAARSRARKQAYTMELEAEVA
KLKEENEELRKKQAEMMEMQKNQVAEMMNTQQGGKKRCLRRTQTGPW

> *Nicotiana_sylvestris*(XP_009795221.1)

MGSNLNIKNYGNPEPPGESGGAGVPLVRQSSVYSLTFDEFLRGSGKDFGSMNMDELLK
NIWSAEESQNMGTSGVGGQEVGVPGGNLQRQGS�TLPTLSQKTVDEVWRDMSKEYCS
GKDGNGDVGLSNM
PRRQQTŁGEMTLEDFLVRAGVVREDAQLAAKASNVGVFGDMSHAGHSLGVGFGYQQSN
GNTAMVASRNIDNNSGIGVQSGNLPLNVNGIISVQQQQGTMLQQQPQQQQQQQQQPLF
PKQPLAYGAPMAIPTSGQLGSPGMRGGIVGISDPALGSSLVQTAALTGGGMNMVGFAG
GVTGATGSPAVSS

DGLGKSNGDTSSISVPYVFSGGLRGRKGGAVEKVVERRQRRMIKNRESAARSRARKQA
YTMELEAEVAKLKEENEELRKKQAEMMEMQKNRVQEMMNLQRGAKRRCLRRTQTGPW

> *Cucumis_melo*(MELO3C010850P1)

MNFKDFGNDPSAGNGGGGGRPPANYPLARQSSIYSLTFDEFQSMGSIGKDFGSMNMDELL
KNIWSAEEMQTMASAAAVGKEGGGSAGGSSGYLQRQGS�TLPTLSQKKVDEVWKDII
NEHASAKDGATVAPNLQQRQQTŁGEVTLEEFLFRAGVVREDTQVTANPNNGGFFGNNTG
FGIAFQRQAKVPENNNHIQIQSSNLNANGVRAHQPPQIFPKQATŁTYGSQŁALPSDGQL
ASPGIRGGIMGIADQGLNTNLMQGSALQGGRMGVVNIAAAPŁPIATESPGNQLSSDGIGKS
NGDTSSVSPPYALNGGIRGRRGNGIVDKVVERRQRRMIKNRESAARSRARKQAYTMEL
EAEVAKLKEENQELRQKQAEIMEMQKNRALEVMDKQQGIKKQCLRRTQTGPW

> *Cucumis_sativus*(Cucsa.396070.1)

MNFKDFGNDPSGGNGGGGGRPPANYPLARQSSIYSMTFDEFQSMGSIGKDFGSMNMDEL
LKNIWSAEEMQTMASAAAVGKEGGGSAGGSSGYLQRQGS�TLPTLSQKKVDEVWKDI
INEHASAKDGAT

LAPNLQQRQQTŁGEVTLEEFLFRAGVVREDTQVTANPNNGGFFGNNTGFGIAFQRQPKVP
ENNNHIQIQSSNLNANGVRAHQPPQIFPKQATŁTYGSQŁTLPSDAQŁASPGIRGGIMGIA
DQGLNTNLMQGTALQGGRMGVVNIAAAPŁPIATESPGNQLSSDGIGKSNGDTSSVSPPY
ALNGGIRGRRGNGIVDKVVERRQRRMIKNRESAARSRARKQAYTMELEAEVAKLKEENQ
ELRQKQAEIMEMQKNRALEVMDKQQGIKKRCLRRTQTGPW

> *Manihot_esculenta*(Manes.18G037900.3.p)

MGTNINFKNFTNDPSADAGGAGSATRPPGNFPLARQTSIYSLTFDEFQNTMGIGKDFGS
MNMDELLKNIWSAEETQSMVASSGAAQENLQRQGS�TLPTLSQKTVDEVWKDISKDYG
NGGGTAAANLPQRQQTŁGEMTLEEFLVRAGVVREDVQLAAKVNANGGFLADLSKTGTY
SALGMGFQQNRSLGLNNNNTNQISMHSSNLPLNVNGVRSNQAQVQQQQQIFPKQPNŁGY
ATQMPLQSSPGMRGGIMGIGDQGISGGLMQGGALGMVGLGGAVTGSPANQLSSDGITKS
GDTSSVSPPYVFNGGLRGRRASGAVEKVVERRQRRMIKNRESAARSRARKQAYTMELE

AEVAKLKEENQELLKKQVMEMMNQQQGKVRCLRRRTQTGPW

> *Populus_euphratica*(CCG027764.1)

MGTNFNFKNFSNDPSDAVGGPPGNSPLTRQSSIYSLTFDELQNTMGGSLGKDFGSMNMD
ELLKNIWSAEETQTIATATSTGVQEGGALQRQGSITLPTLSQRTVDEVWKDMSKEYVIN
GTSAGAANNVPQRQPTLGGMTLEEFLLRAGVAIEDIQVAPKVNTNGGLLGDLRSANNSL
AIGFQQNRGVGLDNDNTNQISLQSSNLPLNVNGVRSNQAQVQQQQQQIFPKQPNMGYVT
QPNNDSTNQISLQSSNLPLNVNGVRSNQAQVQQQQQQIFPKQPNLGYVTQMPLQSGPGIRGG
MLGIGDQGMDSGLMQGGGMGVVGLGGIATGSPANQLSSDGIGKSNGDTSSVSPVPYVFR
ESVRGRRAGGAVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELR
KKQAEMMEIQKNQVAEMMNMQQGKVRCLRRRTQTGPW

> *Lactuca_sativa*(Lsa004053)

MNFKNLGNQTAEVGNRPPGGFHLARQGSYSLTFDELQNTMGGSIGKDFGPLNMDLL
KSIWNAEEVQTTGTNIGVQEPTGDGGANIQRQGSITLPTLSQKTVDEVWKDISKEFSFGF
QPNLPQRQQTLGEMTLEEFVLKAGVVREEPPQLPSKQNDNGLFPNLTPQNNSGFGAIGF
QQAPARNNNQIAFQPANLPLNVNGVRSNPQQQLFPKQPKLSYGAPMAAIPPSKQMGRNGI
VGLSDPAMNGNLVSNMGMAMVAVGSPAVSSDGIGKTNGDTSSVSPVPYEFSGAMRGRK
SGAVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVSKLKEQNQELKRKAEMME
MQQNQQVMEMMNTQPEAKRRYIRRTQSGPW

> *Nicotiana_sylvestris*(XP_009793574.1)

MGSNFNFKNFGNEPPGEGSSVGGKQPGNFQLPRQPSYSLTFDEFLSTTGGSGKDFGSMN
MDELLKNIWNAEESQTMGGSGINGQEVGSVQSGNLQRQGSITLPTLSHKTVDEVWKD
MSKEYGGGKDGNSIGVSATLPQRQQTLGEITLEEFVLVAGVVREDAQLAAKSNVGGIFA
DLSYAGNNTGVGFGYQQANRNTGETGIQAANLPLNVNGVRTQQQLRAQQQLQQQQPQPQ
QQQPQQQLFPKQPALAYAAPMAIPNNGQLGSPGMRGGLVGISDPALNSNFVQGAALTGG
GMGMVGLGAGAVTVATASPAVSSDGLGKSSGDTSPVSPLPYVFNGGIRGRKYSTVEKVVE
RRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELQKKQEEMLEMQKNQVME
MMNLQREAKRRCLRRRTQTGPW

> *Populus_trichocarpa*(Potri.002G125400.1)

MGTNFNFKNFPNDPSDAVGCRPPGNSPLTRQSSIYSLTFDELQNTMGGSLGKDFGSMNMD
ELLKNIWSAEETQTMATATSTVVEEGGGLQRQGSITLPTLSQRTVDEVWKDMSKEYVIN
GTSAGAANNVPQRQPTLGGMTLEEFLLRAGVAREDTQVAPKVNTNGGFFGDLRSANNS
LAIGFQQNRGVGLNNDNTNQISLQSSNLPLNVNGVRSNQAQVQQQQQQIFPKQPNMGYVT
QPNNDNTNQISLQSSNLPLNVN
GVRSNQAQVQQQQQQQIFPKQPNMGYVTQMPLQSGPGIRGGMLGIGDQGIDSGLMQGG
GMGVVGLGGIATGSPANQLSSDGIGKSNGDTSSVSPVPYVFRESVRGRRPGGAVEKVVER
RQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELRKKQAEMMEIQKNQVAEM
MNMQQGGKVRCLRRRTQTGPW

> *Glycine_max*(Glyma.04G039300.1.p)

MNFKSFGNEAGGGGGRQAGNFSLTRQPSVYSLTFDEFMNSMGGSGKDFGSMNMDELLK
NIWTAEEVQTMASAGVAADDGGAGVSHLQRQGSITLPTLSQKTVDEVWKDISKDHGGP
NLAQTQREPTLGEVTLEEFVLVAGVVREDAKPNESVFDLSRVGNNSGLGLGFQQRNKV
AAATGLMGNRLNNDPLVGLQPSANLPLNVNGVRTSNQQPQMOSPQSQHQHQHQHQHQ
QQIFPKQSAMSAAAQMPQGMVRGGVVGLGDQGLSVQGGGIGMVGLAPGSVHVATGSP
AANQLSSGDRIGKSNGDSSSVSPVPYVFNGSLRGRKNGGAVEKVIERRQRRMIKNRESAA

RSRARKQAYTMELEAEVAKLKEENQELQKKQAEIMEIQKNQVKEMMNLRQREVKRRRLR
RTQTGPW

> Glycine_max(Glyma.04G039300.3.p)

MNFKSFGNEAGGGGGRQAGNFSLTRQPSVYSLTFDEFMNSMGGSGKDFGSMNMDELLK
NIWTAEVQTMASAGVAADDGGAGVSHLQRQGSLLPRTLSTQKTVDEVWKDISKDHGGP
NLAQTQREPTLGEVTLLEEFVLRAGVVREDAKPNEVFVDLSRVGNNSGLGLGFQQRNKV
AAATGLMGNRLNNDPLVGLQPSANLPLNVNGVVRTSNQQPQMSPQSQHQHQHQHQHQ
QQIFPKQSAMSAAAAQMPQGMVRRGGVGLGDQGLSVQGGGIGMVGLAPGSVHVATGSP
AANQLSSGDRIGKSNGDSSSVSPVPYVFNGSLRGRKNGGAVEKVIERRQRRMIKNRESAA
RSRARKQAYTMELEAEVAKLKEENQELQKKQAEIMEIQKNQVKEMMNLRQREVKRRRLR
RTQTGPW

> Actinidia_chinensis(Achn026271)

MNFRNFGNEPSAELVAGGGGRSPGIFPLARQSSVYSLTFDEFQSTIGGSGKDFGSMNMDEL
LKNIWSAEETQTVGSTSIGQEGVAPGGYLQKQGSLLPRTLSTQKTVDEVWRDLAKESSGG
TDRNSAGGTNLPQAQRQRTLGEMLTLEEFVLRAGVVREDVQLPMKPNNSGFFGDLMSG
NNNGVGIGFQQMGRNTGLAGNRIPDVNNQTAMQSANLPLNVNGVRSSQQQLFMPQQQQ
QQQQQQQQQLFPKQPTLAYANPMAIPSSQTLNSQVIRGGIVGITDQSMNGNLVQSGALQGG
GMGMIGFGAGAVTVATGSPASDGLARSNGDTSSSVSPVPYVFNGGLRGRKGNNPVEKVVE
RRQRRMIKNRESAARSARKQAYTTELEVEIAKL
KEENEVLRRKQEEILETRKNQLEPFNTWETGYADGIGDDEQAAGSKETMPEANANWPMV
KGVIDSIVET

> Solanum_pennellii(Sopen04g032440.1)

MGSNYHFKNFGNEPPGEGGSGGGGKQPGNFGLPRQPSIYSLTFDEFLSSTGGSGKDFGSM
NMDELLKNIWNAEENQTIGGPGINGQEVGPVGGHLQRQGSLLPRTLSTQKTVDEVWRDM
SKEHGGGKDGNSVGVPNPQTQRQQNLGEITLLEEFVLRAGVVREDAQFAAKSNNAGGIF
GDLSYAGNNTGLAFGYQQANSRNTGLMPGSIPNKNGETVIQSANLPLNVNGVRSTQQQL
RPQQQLQQNQSQSQPQQQPIFPKQ
PALPYGAPMAIPNSGQLSSPGMRAGMVGIPDPALNSNFIQGASLMGGGMNMVGLGASGV
TVATASPGVSSSDGLGKSNGDTPSVSPVPYVFNGGLRGRKYSTVEKVVERRQRRMIKNRE
SAARSARKQAYTMELEAEVAKLKEENDELQKKQEEMLEMQKNQVMEMMNLRQKGA
RRCLRRTQTGPW

> Solanum_pimpinellifolium(Sopim04g078840.0.1)

MGSNYHFKNFGNEPPGEGGSGGGGKQPGNFGLPRQPSIYSLTFDEFLSSTGGSGKDFGSM
NMDELLKNIWNAEENQTIGGPGINGQEVGPVGGHLQRQGSLLPRTLSTQKTVDEVWRDM
SKEHGGGKDGNSVGVPNPQTQRQQNLGEITLLEEFVLRAGVVREDAQFAAKSNNAGGIF
GDLSYAGNNTGLAFGYHQANSRNTGLMAGSIPNKNGETVIQSANLPLNVNGVRSTQQQL
RPQQQLQQNQSQSQPQQQPIFPKQPALPYGAPMAIPNSGQLGSPGMRAGMVGIPDPALNSNFI
QGASLMGGGMNMVGLGASGVTVATASPGVSSSDGLGKSNGDTPSVSPVPYVFNGGLRG
RKYSTVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENDELQKKQEE
MLEMQKNQVIEMMNLRQKGAARRCLRRTQTGPW

> Solanum_lycopersicum(Solyc04g078840.2.1)

MGSNYHFKNFGNEPPGEGGSGGGGKQPGNFGLPRQPSIYSLTFDEFLSSTGGSGKDFGSM
NMDELLKNIWNAEENQTIGGPGINGQEVGPVGGHLQRQGSLLPRTLSTQKTVDEVWRDM
SKEHGGGKDGNSVGVPNPQTQRQQNLGEITLLEEFVLRAGVVREDAQFAAKSNNAGGIF

GDLSYAGNNTGLAFGYHQANSRNTGLMAGSIPNKNGETVIQSANLPLNVNGVRSTQQQL
RPQQQLQQNQSQPQQQPIFPKQPALPYGAPMAIPNSGQLGSPGMRAGMVGIPDPALNSNFI
QGASLMGGGMNMVGLGASGVTVATASPGVSSSDGLGKSNGDTPSVSPVPYVFNGGLRG
RKYSTVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENDELQKKQEE
MLEMQKNQVIEMMNLQKGAKRRCLRRTQTGPW

> *Eucalyptus_camaldulensis*(EcC009711.80)

MGSNINFKNFGTDPTPTNNRPPGNTLLTRQPSVYTLTFEEFQNSIGKDFGSMNMDELKNI
WSAEENQSMASASGPGGGGGQDGIGVPGGHLQRQGSLLPRTLSTQKTVDEVWKNISKED
SVGKDGGLVTGGPVVPQRQQTGEMTLEEFVFRAGVVREDAQYSGKPNGGGLFGELPRA
GNNAGLEFGFPQPGKAENLMGMRNLEVGNLNSMHPLNMPVNNANANGIRSNQQQVTQP
QAHQPQILPKQPILPFSQQIPSPNNTQLNGHGFGRGGLMAIPDQVMTNNLVQGGALHGGGM
GMVGLGAGPAGMPTGSPANPVSSDGMGRSNGDTSSVSPVPYVFNGSVRGRKSNSAVEKV
VERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKDENEELRKKQAEIMEIQKNQVI
EMMNTQRGAKKRCLRRTQTGPW

> *Citrus_clementina*(Ciclev10001159m)

MGSNINFKNFSNEPPNDVGKPPGNIPLTRQSSVYSLTFEEFQNTVGGMGKDFGSMNMDEL
LKNIWSAEETQNMVASSSGNQPDCTNGLQRQGSLLPRTLSTQKTVDEVWKDISKEYSLKD
GIAGSGVGQGPNNMPQAQRQQTGEMTLEEFVFRAGVVREDLQFGGGVGGKVNNGNS
GLFGDLRSANNTGMGIGFQQMGKGASLMGNRNLETGNQINIQSSNLPLNVNGARMNQ
HPLARQQHNQQTQQQPQQPQIFPKQPAMAYATQMPLQSSPGIKSGIVGVGDQAMNGNLIH
GGALQGGGMGMVGLGAPPVGVSSGSPANQLSSDGIGKSNGDTSSVSPVPYMFNGSLRGR
RFNGNVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENEELRKKQDE
MMEMQKNQVLEMMNMQQGGKRRCLRRTQTGPW

> *Phaseolus_vulgaris*(Phvul.009G065500.2)

MNFKSFGNEAGGDGGGRPPGNFSLTRQSSVYSLTFDEFMNTMGGSGKDFGSMNMDELLK
NIWTAEVQTMASAGVAADDGGAGISHLQRQGSLLPRTLSTQKTVDEVWKDISKDYGGH
GEPNLAQTPRQPTLREMTLEEFVFRAGVVREDAKPNDGVFMDLARAGNNNGLGFEFQQ
MNKVAAATGLMGNRLNNDPLVGLQSSANLPLNVNGVRSSSQPQMSPQSQQQHQQQ
IFPKQSAMSYAVAQMPQGMVRGGIVGLGGDQGLSVQGGGIGMVGLAPGSVHVATGSPAA
NQLSGDKMAKSNGDTSSVSPVPYVFNGGMRGRKSGGAVEKVIERRQRRMIKNRESAARS
RARKQAYTMELEAEVAKLKEENQELQKKQAEIMEIQKNQVKEMMNLQREVKRRRLRRT
QTGPW

> *Phaseolus_vulgaris*(Phvul.009G065500.1)

MNFKSFGNEAGGDGGGRPPGNFSLTRQSSVYSLTFDEFMNTMGGSGKDFGSMNMDELLK
NIWTAEVQTMASAGVAADDGGAGISHLQRQGSLLPRTLSTQKTVDEVWKDISKDYGGH
GEPNLAQTPRQPTLREMTLEEFVFRAGVVREDAKPNDGVFMDLARAGNNNGLGFEFQQ
MNKVAAATGLMGNRLNNDPLVGLQSSANLPLNVNGVRSSSQPQMSPQSQQQHQQQ
IFPKQSAMSYAVAQMPQGMVRGGIVGLGGDQGLSVQGGGIGMVGLAPGSVHVATGSPAA
NQLSGDKMAKSNGDTSSVSPVPYVFNGGMRGRKSGGAVEKVIERRQRRMIKNRESAARS
RARKQAYTMELEAEVAKLKEENQELQKKQAEIMEIQKNQVKEMMNLQREVKRRRLRRT
QTGPW

> *Glycine_max*(Glyma.04G039300.4.p)

MNFKSFGNEAGGGGGRQAGNFSLTRQPSVYSLTFDEFMNSMGGSGKDFGSMNMDELLK
NIWTAEVQTMASAGVAADDGGAGVSHLQRQGSLLPRTLSTQKTVDEVWKDISKDHGGP

NLAQTQREPTLGEVTLEEFVLRAGVVREDAKPNESVFVDLSRVGNNSGLGLGFQQRNKV
AAATGLMGNRLNNDPLVGLQPSANLPLNVNGVRTSNQQPQMOSPQSQHQHQHQHQHQ
QQIFPKQSAMSAAAAQMPQGMVRGGVVGLGDQGLSVQGGGIGMVGLAPGSVHVATGSP
AANQLSSGDRIGKSNGDSSSVSPVPYVFNGSLRGRKNGGAVEKVIERRQRRMIKNRESAA
RSRARKQAYTMELEAEVAKLKEENQELQKKQVKEMMNLQREVKRRRLRRTQTGPW

> Glycine_max(Glyma.04G039300.2.p)

MNFKSFGNEAGGGGGRQAGNFSLTRQPSVYSLTFDEFMNSMGGSGKDFGSMNMDELLK
NIWTAEEVQTMASAGVAADDGGAGVSHLQRQGSITLPRITLSQKTVDEVWKDISKDHGGP
NLAQTQREPTLGEVTLEEFVLRAGVVREDAKPNESVFVDLSRVGNNSGLGLGFQQRNKV
AAATGLMGNRLNNDPLVGLQPSANLPLNVNGVRTSNQQPQMOSPQSQHQHQHQHQHQ
QQIFPKQSAMSAAAAQMPQGMVRGGVVGLGDQGLSVQGGGIGMVGLAPGSVHVATGSP
AANQLSSGDRIGKSNGDSSSVSPVPYVFNGSLRGRKNGGAVEKVIERRQRRMIKNRESAA
RSRARKQAYTMELEAEVAKLKEENQELQKKQVKEMMNLQREVKRRRLRRTQTGPW

> Solanum_pimpinellifolium(Sopim11g044560.0.1)

MGSNYHFKNFGNEPPGEGSGGGGKQPGNFGILPRQPSIYSLTFDEFISSTGGSGKDFGSM
NMDELLKNIWNAEENQTIGGPINGQEVGVPGGHLQRQGSITLPRITLSHKTDEVWRDM
SKEHGGGKDGNISVGVPPNIPQTQRQQNLGETLEEFVLRAGVVREDAQFAAKSNNAGGIF
GDLSYAGNNTGLAFGYHQANSRNTGLMAGSIPNKNGETVIQSANLPLNVNGVVRSTQQQL
RPQQLQQNQSQPQQQPIFPKQPALPYGAPMAIPNSGQLGSPGMRAGMVGIPDPALNSNFI
QGASLMGGGMNMVGLGASGVTVATASPGVSSSDGLGKSNGDTPSVSPVPYVFNGGLRG
RKYSTVEKVVERRQRRMIKNRESAARSARKQAYTMELEAEVAKLKEENDELQKKQEE
MLEMQKNQVIEMMNLQKGAKRRCLRRTQTGPW

EIN3/EIL1 protein sequence information

>Unigene0036810

KYMLKMMEACKAQQGFVFGIIPKKGKPIIGSSENLRWWEEKVQFERNGPATISKYISENS
NSAQYESSTHTLIELQDITLRSLLSILMQHCDPPQRKFPLDKGIPPPWWPTGNEEWWAE
LGIYPGPPPYKKPHDLRKPKWKVIVLTAVIKHMSPNIGKIRKLVLHSLQDKMSAKESAT
WMAVLGREEALLHPD

>Unigene0036956

MGILEDMGFCSNDFLSAPPGEGEVALEPEQEAAMEEDYSDEEMDVDELERRMWRDRM
LLRRLKEQNKAKDGVNLIKQRQSSEQARRKKMSRAQDGILKYMLKMMEVCKAQQGFVY
GIIPEKGKPVSGASDNLRAWWKEKVRFRNGPAAISKYQADHSIPGKNEDCITVAST

>Unigene0036957

EDCITVASTPHTLQELQDITLGSLLSALMQHCEPPQRRFPLEKGVPPPWWPTGNEEWWPQ
LGLPNDQGPPPYKKPHDLKKAWKVSILTAVIKHMSPDIAKIRKLVRQSKCLQDKMTAKES
ATWLAIIINQEESSLRKLYPDSCPPASFAAGSGSFVISDVSDYDVEGVDDDPNTEVEECKPRD
GTIFNLGMGGSKDRFVVPPLAQIKGEIITNSDFIQKRKQPSDEQHIMMEQKTYTCEFPQCP
YNNYQSGFFDRTSRNNHQMNCOPYRNNSCQGFEMPNFHINNDKAPAFSSSFAQPKPTPRTL
NQGSPSFHVTGLGLPEDGQKMISDLFSFYDTNLQQTKSLNSGSLNVIEDHTPQQQKFQLQ
LDDNFYGGQVIMEETNMPLNHSVFPSTEFQFDQCKAYASPFDTNGNDNMADFRFGSPMN
LGSVDYPIDPMPKHDASAWFL

>Unigene0042138

IGFKVMGFCDDLNFSCGPSGEANQFTPKPEAEVAEDEYSDDDEIDVDELEKRLLRDKMRL
KRLKELNKGKESVDMVKQRQSEEQARRKKMSRAQDGILKYMFKMMEICKAQQGFV

>Unigene0071273

EWWKDKVRFRNGPAAIAKYQADNLIPGKNESSSAVGPTPHTLQELQDITLGSLLSALM
QHCDPPQRRFPLEKGVPPPWWPTGNEEWWPQLGLQKDQGPPPYKKPHDLKKAWKVG
LTAVIKHISPDIAKIRKLVRQSKCLQDKMTAKESATWLAIIINQEEALARELYPDRCPLLSSG
GSGSFAINDCSEYDVEGAEDEPNFDVQEQKPNLNLNMGMERIKDRLPVQQLTHPIKDE
VITNLDFTKRKPTNDLNTIMDHKIYTCFLQCPHSELCRGFHDRSSRDNHQLTCPFRSNSS
EFVLNPFHSNEFKPVVFPFSFAQPKSAVPSVDSIQPSFDLSGLGVPEDGQKMISELMSFYDA
NIQGNKHSNSVSIPVTKGQTLSQLPQPNVHCQQENNYILGQGAVMEGGGNIFEEANMPV
NCQMFSQQEDRYDQGKVLNSPFANPNDNFHLMFGSPFNLQSVDYAEGFPGVARDTLAK
QDVSIWY

>Unigene0071274

MMIMFDEMFGGDLDFFSAPLGEGDSAAPQAEPEAVVDDDYSDDEIDVDELERRMWRD
KMRLKRLKEMNKGKEGVDAKQRQSSEQARRKKMSRAQDGILKYMLKMMEVCKAQQ
FVYGIPEKGKPVSGASDNLREWWKDKVRF

>Unigene0071276

MLGETGFCGDLDFSTPVGEKDAVAPQPNPNPTLNNDYSDEDVDIDIDELEKRICNDKMK
LKRLKEIAKNKENIQNTDNYSKSEEQARRKKMSRAQDGILKYMLKMMEVCNAQGFVYG
IPEKGKPVGTASDNLREWWKDKVRFRNAPAAIGKYQLDHSMVCKDEGFNPVESTPRT
LMELQDITLGSLLSALMQHCDPPQRRFPLERGVPPPWWPTGDEFWWAELGLGLGPGLGP
IPYKKPHDLKKAWKVGVLTVIKHMSPNFAKICKLVRQNKCLQDKMTAKESATWLAVVY
REKALARELYPNLSIPVSGHQESCVFVISDSSAYDVEGVEDMASFDILEQKPSVDDLMKLD
FSKKRKQSSEMELCRGFSDRSSIENHQLASAFRSNSSHFGLSDFSENEVKPIIFPFADVSRIG

VPEDGRKSINDLMSFYDSNIQKYTNPVSQCDSGIYIKGQMMGSSFADVASMKMIHTGFPQ
HDGVYNNQFEANPNENFNFKFGSSLNIPSVVYTDGLSARDSNNFTLSEPDVFTWY

>Unigene0074938

KSRKSPNKKPHDLKKS WKVGVLTAVNKHMSPDIAKIUKLVMRSKCLQDKMAAKESAT
WLTIIHQEEALVRELYPDRCPLLSSN

>Unigene0000457

MGAFDEMGYCGNFEFLYPPQRVEREEPLGVEPEQEEDSSDEEMNEEEEIEKRIWRDKMRLK
RLKEEKNKGKVKDENALETSKQRHSQEQARRKKMSRAQDGILKYMLKMMEVCKAQQF
VYGIPEKGKPVSGASDNLRAWWKDKVRFDRNAPAAILKYQYEHSLGRNEDFGHVGPPT
HTLHELQD TTLSLLSALMQHCNPPQRRFPLEKGVAPPWWPTGEEGGPPYKKPHDLKKA
WKVSVLTAVIKHMSPDIGKIRKLVRQSKCLQDKMTAKESATWLAIIQGEEAEIRKLYPERSP
PLAFSGSGSYVISDSSDYDVEGLDDVANIDVGDLKPKSNLGNDFPMGSNPIKGEIIEISSDIA
QKRKLPGNEHDTLMMDQKIYTCEYPKCPFTNPQVGFLDRISRNHQMCPFQVNTNTNI
SQGFEITNFQDNNEKSPAVYSIPSFAIPKSAPPPLNHGLTNHGFGLPHFTGLQEHTQKGLNV
PGQQAQFIYDSPYERNNIREQNMVLNDSMVASNEFQIDLCKAYASSAFDSIGNENVGSPFN
FG

> Arabidopsis thaliana (AT3G20770.1)

MMFNEMGMCGNMDFFSSGSLGEVDFCPVQAEPDSIVEDDYTDDEIDVDELERRMWRD
KMRLKRLKEQDKGKEGVDAAKQRQSQEQARRKKMSRAQDGILKYMLKMMEVCKAQQ
FVYGIIPENGKPVGTGASDNLREWWKDKVRFDRNGPAAITKYQAENNIPGIHEGNNPIGPTP
HTLQELQD TTLSLLSALMQHCDPPQRRFPLEKGVPPPWWPNGKEDWWPQLGLPKDQG
PAPYKKPHDLKKA WKVGVLTAVIKHMFDPDIKIRKLVRQSKCLQDKMTAKESATWLAII
QEE SLARELYPESCPPLSLSGGSCSLLMNDCSQYDVEGFEEKESHYEVEELKPEKVMNSSNF
GMVAKMHD FVPKKEVPAGNSEFMRKRKPNRDLNTIMDRTVFTCENLGCAHSEISRGFLD
RNSRDNHQLACPHRDSRLPYGAAPSRFHVNEVKPVVGFPQPRPVNSVAQPIDLTGIVPEDG
QKMISELMSMYDRNVQSNQTSVMENQSVSLLQPTVHNHQEHLQFPGNMVEGSFFEDL
NIPNRANNNNSSNNQTFQGNNNNNNVFKFDTADHNNFEAAHNNNNNNSSGNRFQLVFDS
TPFDMASFDRDDMSMPGVVGTMDGMQKQKQDVSIF

> Nicotiana tabacum (XP_016477306.1)

MMMFEE MGFPGNFEFMSDPLGCGGDVAQEVEHKPTGVEENYSDEEMDVDELERRMWR
YRMLWRLKEKNKNKEVGGDGAKQRQSQEQARRKKMSRAQDGILKYMLKMMEVCNA
QGFVYGIPEKGKPVGTGASDNLRAWWKEKVRFDNRNGPAAIAKYQADNQIPGRIEDSSVIVS
TPHTLQELQD TTLSLLSALMQHCDPPQRRFPLEKGVAPPWWPSGKEEWWGQLGLPNDQ
VPPPYKKPHDLKKA WKVGVLTAVIKHISPDIKIRKLVRQSKCLQDKMTAKESATWLAII
QEEALARKLYPDSCPQGS LAVGNGSYFISDTSYDVEGVDDERNNEVECKPHDINLLTGI
MVPKERILMPALAPVKGEIIDLTSDFIQKRKHPSFEESVDQKLYTCEYLHCPYSNYQAGFL
DRTSRNHQMDCPFRFNSAQR LGMPPKYQINNENNTVFPTQTATPKPATSSVTASSSMTVS
GLGLPEDGQRMISDLFTFYDNNLQQNSSICSGNSKILANQNMQQNQTVELPMDDNFNLG
HMEAEAQETSMTMNSAYTSTEFQYDQCKLPFDAPFTGNLNDITDYRFGSPFNMGGSDYS
MDQLTKQDISTWYL

> Nicotiana tabacum (XP_016509274.1)

MMMFEE MGFPGNFEFMSDPLGCGGDVAQEIHKPTGVEEEDYSDEEMDVDELERRMWR
DRMLLRRLKEKNKNKEVGGDGAKQRQSQEQARRKKMSRAQDGILKYMLKMMEVCNA
QGFVYGIPEKGKPVGTGASDNLRAWWKEKVRFDNRNGPAAIAKYQADNQIPGRVEDSSVIV

STPHTLQELQD TT LGSLLSALMQHCDPPQRRFPLEKGVAPPWWPSGKEEWWGQLGLPND
QVPPPYKKPHDLKKAWKVGVLTA VIKHISPDIAKIRKLVRQSKCLQDKMTAKESATWLAIH
NQEEALARKLYPDSYQQGSLAVCNGSYFISDTS DYDVESVDDERNNEVECKPHDINLLTGI
MVPKDRILMPALPPVKGEIIDLTSDFIQKRKQPSFEESVDQKMYTCEYLHCPYSSYQAGFL
DRTSRNNHQMNC PFRFNSAQRLGMPPKYQINNENNTVFPAQTASPKPAASSVTASSSMTV
SGLGLPEDGQRMISDLFTFYDNNLQQNSSICSGNSKILT NQNMQQNQTVELPMDDNFNLG
HLEAEAQETSMTMNSAYPLTDFQYDQRKLPFDTPFAGNLNDITDYRFGSPFNMGGSDYSI
DQLTKQDISTWYL

> *Nicotiana tabacum* (XP_016495343.1)

MMMFEEMGFCGDLDFFPAPLKEVEVAAPHTELDGEPAMDDDYSDEDIDVDELEKRVWR
DKMKLKRMEKNQ GKEDIDSAKRRQSSEQARRKKMSRAQDGILKYMLKMMEVCKAQ
GFVYGIPEKGKPVGGASDNLREWWKDKVRFD RNGPAAIAKYQADHATPGMNEGSNPV
GPTPHTLQELQD TT LGSLLSALMQHCDPPQRRFPLEKGVSPWWPTGEEDWWPQLGLQ
KEQGPPPYKKPHDLKKAWKVGVLTA VIKHMFDPDIKIRKLVRQSKCLQDKMTAKESATW
LAISQEEALARELYPDRCPPLSSAGASGTFMSNDSSEYDVEGVQEEP NFDVHEQKPNHLS
LLNVSLERLKETLPLQQSHPNKDEMITGLDFTRKRKQSG EQVTVM DQKIYTCEFLQCPY
SELCHGFQDRSARDNHQLACPFRKTSQLGISNFHVNEVKPTVFPQQYVQS KSAALSVNPG
PGPPSFDLFGVGPEDGQRMIDELMSFYDSKIHGNKSQNTGNVALTKEQP HQQPRLNQDN
YLHSQGMERNIFKDTNISASHPILPQGNLADQCKVLNSS FDTGSSDNFN FMFGSPFNLQ
STNYTGSLPGIGCDNTPKQD IPIWY

> *Nicotiana tabacum* (XP_016495344.1)

MMMFEEMGFC	GDLDFFPAPL	KEVEVAAPHT	ELDGEPAMDD	DYSDEDIDVD
ELEKRVWRDK	MKLKRMEKN	QGKEDIDSAK	RRQSSEQARR	KKMSRAQDGI
LKYMLKMMEV	CKAQGFVYGI	IPEKGKPVGG	ASDNLREWWK	DKVRFD RNGP
AAIAKYQADH	ATPGMNEGSN	PVGPTPHTLQ	ELQD TT LGS	LSALMQHCDP
PQRRFPLEKG	VSPWWPTGE	EDWWPQLGLQ	KEQGPPPYKK	PHDLKKAWKV
GVLTA VIKHM	FPDIKIRKL	VRQSKCLQDK	MTAKESATWL	AIISQEEALA
RELYPDRCPP	LSSAGASGTF	MSNDSSEYDV	EGVQEEP NFD	VHEQKPNHLS
LLNVSLERLK	ETLPLQQSH	PNKDEMITGL	DFTRKRKQSG	EQVTVM DQKI
YTCEFLQCPY	SELCHGFQDR	SARDNHQLAC	PFRKTSQLGI	SNFHVNEVKP
TVFPQQYVQS	KSAALSVNPG	PGPPSFDLFG	VGVPEDGQRM	IDELMSFYDS
KIHGNKSQNT	GNVALTKEQP	HQQPRLNQDN	YLHSQGMER	NIFKDTNISA
SHPILPQGNL	ADQCKVLNSS	FDTGSSDNFN	FMFGSPFNLQ	STNYTGSLPG
IGCDNTPKQD	IPIWY			

> *Nicotiana tabacum* (XP_016444768.1)

MMMFEEMGFC	GDLDFFPAPL	KEVEVAAPHT	ELDGEPAMDD	DYSDEDIDVD
ELEKRVWRDK	MKLKRMEKN	QGKEDIDSAK	RRQSSEQARR	KKMSRAQDGI
LKYMLKMMEV	CKAQGFVYGI	IPEKGKPVGG	ASDNLREWWK	DKVRFD RNGP
AAIAKYQADH	ATPGMNEGSN	PVGPTPHTLQ	ELQD TT LGS	LSALMQHCDP
PQRRFPLEKG	VSPWWPTGE	EDWWPQLGLQ	KEQGPPPYKK	PHDLKKAWKV
GVLTA VIKHM	FPDIKIRKL	VRQSKCLQDK	MTAKESATWL	AIISQEEALA
RELYPDRCPP	LSSAGASGTF	MSNDSSEYDV	EGVQEEP NFD	VHEQKPNHLS
LLNVSLERLK	ETLPLQQSH	PNKDEMITGL	DFTRKRKQSG	EQVTVM DQKI
YTCEFLQCPY	SELCHGFQDR	SARDNHQLAC	PFRKTSQLGI	SNFHVNEVKP

TVFPQQYVQS KSAALSVNPG PGPPSFDLFG VGVPEdGQRM IDELMSFYDS
KIHGNKSQNT GNVALTKEQP HQQPRLNQDN YLHSQGMMER NIFKDTNISA
SHPILPQGNL ADQCKVLNSS FDTGSSDNFN FMFGSPFNLQ STNYTGSLPG
IGCDNTPKQD IPIWY

> *Nicotiana tabacum* (XP_016444767.1)

MMMFEEMGFC GDLDFFPAPL KEVEVAAPHT EPEPELVVDD DYSDEEIDMD
ELERRMWRDK MKLKRLKEMT KSKEGVDPK HRQSSEQARR KKMSRAQDGI
LKYMLKMMEV CKAQGFVYGI IPEKGKPVGG ASDNLREWWK DKVRFDRNGP
AAIAKYQADH AIPGMNEGSN PVGPTPHTLQ ELQDTTLGSL LSALMQHCDP
PQRRFPLEKG VSPPWWPTGQ EDWWPQLGLQ KEQGPPPYKK PHDLKKAWKV
GVLTAIVIKH FPDIAKIRKL VRQSKCLQDK MTAKESATWL AIISQEEALA
RELYPDRCPLSSAGASGTF ILDDSSSEYDV EGAQDEPNFD VHEQKPNHLS LLNIGVERFK
ETLPLQQQSH PNKDEFITNL DFTRKRKQAN ELTVMMDQKI YTCEFQQCPH
SELRNGFQGK SARDNHQFAC PFRNSSQFGV SNFNFNEVKP VVFPQQYVQP
KSASLPVNQG PPTFDLSGVG VPEDGQRMIT ELMSFYDSNI QGNKSQNTGN
VALTKEQPHQ QPRVNQDNYL HSQGIMEGNI FKDANISTSH SMLPQASPFN
AGPNDNFHFM FGSPFNLSA NYTGNLPGIG YDTPKQNL TWY

> *Morus notabilis* (XP_010106128.1)

MGFSGNFDFL SAPPREGEEV MEHEAEATVE EDYSDEEMDV DELERRMWRD
RMLLRRLKEQ NKGKQGADNA KQRQSSEQAR RKKMSRAQDG ILKYMLKMME
VCKAQGFVYG IPEKGKPVGT GASDNLRAWW KEKVRFDRNG PAAIAKYQAD
HSIPGHNEDE SAVASTPHTL QELQDTTLGS LLSALMQHCD PPQRRFPLEK
GVSPWWPTG NEEWWPQLGL PKDQGPPPYK KPHDLKKAWK VSVLTAVIKH
MSPDIKIRK LVRQSKCLQD KMTAKESATW LAIINQEEAL ARKLYPDRC
PMSAGSGSL VISETSYDV EGVdGEPNFE VEECKPRDIN RFNIGAVSPR DRLLMQPVVA
PQIKGELIET NTDFVQKRKQ LSEETMMLD QKVYTCEYSQ CPYNDYRLGF
LDRTSRNNHQ MNCYPYRPNSC QPFGMSNFQI NNEKPAVFPV PFSQPKPGPQ
PMSQTSFNV TGLDLPEDGQ KMISDLMSFY DNNAQQRSKD LNPGLNAME
NHNPAQQKYQ FQIDDSYFGQ GVVMGGNIPE QANISSQNAV FPSTEVQFDQ
CKAFDSPFDN NPNDNIVDLR FSSPFNMAPV EFPVDSLQK DVSLWYL

> Unigene0042139

MFTFEDMEFCGDLDFFCAPPGEINELTPKTEPEAVAEDDYSDDDEVDELERRLWRDKIRL
KRLKELNKGKESVDVAKQRQSSEQARRKKMSRAQDILKYMLKMMEVCKAQGFVYGII
PENGKPVGTASDNLREWWKDKVRFDRNGPAAIAKYKLENSSPGENRDICLAGLNTLQEL
QDTTLGSLSSLMQHCNPPQRRFPLEKGVPPPWWPNGNEEWWTQLGLQKEQGPPPYKKP
HDLKKAWKVGVLTAVIKHMSPDIAKIRKLVRQSKCLQDKMTAKESATWLAIINREEVLVR
ELYPDRCPLSANNTGCGPFVADDCWEYDVEGADNEPSFNNLQDLKPSNQNERFIGHQLP
HLTKDDIITNSDYSRKRKPTRLTNTMPPKVYTCEFCQCPYSNIHHGFSERSMRDNHQM
SYRRNSTEFLQNFNKIEVTPDVFSQQFVQPISEPSFNL SGLGVPEDGQNMINDLFSFYD
GNVGKGPSACHIFEETDLAVSGSVFPQSEDQFEHEKLFSTPFEVNPSTDFNYMLGSSFNPS
VEYSGEFSGLVKETYGKQDVSIWF

> *Actinidia chinensis* (Achn346881)

MMIFDEMFC GDVDFFSAPL GEGDVTAPQT EQEAVADDDY SDEEMDVDEL
ERRMWRDKMR LKRLKEMTKG KECVDSAKQR QSSEQARRKK MSRAQDGILK

YMLKMMEVCK AQGFVYGIIP EKGKPVSGAS DNLREWWKDK VRFDNRNGPAA
IAKYQADNSI PGKNKGSNLV GPTPHTLQEL QDTTLGSLLS ALMQHCDPPQ
RRFPLEKGVP PPWWPTGNEE WWPQLGVQMD QGPPPYKKPH DLKKAWKVG
LTAVIKHMSP DIAKIRKLVR QSKCLQDKMT AKESTTWLAI INQEEALARE
LYPDRCPPLS SSGSGSFSVI NDCSEYDVEG AEEHNFDVQ EQKPNNINLL NTGLGRIKDS
FLGQQLSHPI KDEVITNLDF TRKRKPTNEL NNAMDPQIYT CEVLQCPHSE LRCGFHDRSS
RDNHQLTCPF RSNSSEFGLT NFHNNEVKPI VFTQPFVQPH PAAPSVDSIQ RSFDISGLGV
PEDGQKMISE LMSFYDANIQ GNRQSNPMNI SGSLDRALSQ SLPQPNICQ
QDNNYIHGQG FVEGHVHEEA NLPFNLSMFS QQENRFDQRK VLSSQFEADP
NDNFPLMFGS PLYLPCMDYP EHLPAVARDT LSKPDGSIWF *

> *Actinidia chinensis*(Achn018431)

MIMFDEMFC GDLDFFSAPL GEGDMAAPQT EPEVVMDDDY SDEEIDVDEL
ERRMWRDKMR LKRLKEMNKG KECVDAKQR QSSEQARRKK MSRAQDGILK
YMLKMMEVCK AQGFVYGIIP EKGKPVSGAS DNLREWWKDK VRFDNRNGPAA
IAKYQADNSI PGKNEGSDLV GPTPHTLQEL QDTTLGSLLS ALMQHCDPPQ
RRFPLEKGVP PPWWPTGNEE WWPQLGVQMD QGPPPYKKPH DLKKAWKVG
LTAVIKHMSP DIAKIRKLVR QSKCLQDKMT AKESATWLAI INQEEALARE
RYPDRCPPL ASGGSGSFSVI NDCSEYDVEG DEEENFDVQ EQKPNSMTLL
NMGMGRIKEG LLGQQLSHPI KDEVITNLDF TRKRKPTNEL NNVM DHKIYT
CEVPQCPHSE LRCSLHDRSS RDNHQLSCP YRSNSTEFVLP SFRNNEIKPI VFPQPFVQPK
PAAQSVNSIQ HSFDSLGLGV PEDGQKMINE LMSFYDSNIQ GNKQSNPMSI SVSSNQTL
ALPQPNIDNN YIHGQGFVME RNICEEANLP VNLSMFSQQE NRFDHRKVLN
SQFEANPNDN VPLMFASPFY LPSVDYPEHL PGLPRGDTLS KPDGSVWF*

> *Actinidia chinensis* (Achn017871)

MSNRMMMFDE MGFCGDLDL SAPLGDGDVT ASQTEPEAVV DDDYSDEEMG
VDELERRMWR DKMRLKRLKE MNKGKECVAA AKQRQSQA RKKMSRAQD
GILKYMLKMM EVCKAQGFVY GIPEKGKPV SGASDNLREW WKNKVRFDNR
GPAIAKYQADNSIPGKSEG SNLVGPTPHT LQELQDTTLG SLLSALMQHC DPPQRRFPLE
KGVHPPWWPT GNEEWWPQLG VQMDQGPPPY KKPHDLKKAW KVGVLTA
HISPDIKIR KLVRQSKCLQ DKMTAKESAT WLAIINQEEA LARELYPDRC PPMSSSGSG
SFFVINDCSEY DVEGADEPN FVQEQKPNN INLLNMGFGR IKDSFLGQQL SHPIKDEVIT
NLDFTRKRKP TNELNNAMDH QIYTCILQC PHSELRHGFH DRSSRDNHQL
SCP YRINSSE FGLSNFHNNE VKSIVFSQPF VHPQPAAPSV NSIQHSFDLS GLGVPEDGQK
MISELMSVYD ANIQGNKQST PMNISGSSDR TLSQSLPQPN IQCQDNNYI
HGRGFVMEGH IREEANLPVN LSTFSQHNR FDQRKVLSSQ FEANPNDSFP
LMFGSPLYLP SMDYPEHLPA VTRDSLSPD ASIWFE*

> *Coffea canephora* (Cc01.g07490)

MMMFDDIGFC GDLEFFSAPL KEADSVTPQA EPESDPVDD DYTDEEIDVD
ELERRMWRDK MRLKRLKEMN KGKDGVDVAK QRQSQAARR KKMSRAQDGI
LKYMLKMMEV CKAQGFVYGI IPEKGKPVSG ASDNLREWWK DKVRFDNRNGP
AAIAKYQADN SIPGKNEGSN PVGPTPHTLQ ELQDTTLGSL LSALMQHCDP
PQRRFPLEKG VPPWWPTGN EEWWPQLGLQ KDQGPPPYKK PHDLKKAWKV
GVLTAVIKHM SPDIKIRKL VRQSKCLQDK MTAKESATWL AIINQEETLA
RELFPDRCPP LLSSGGSGSF AMNDSSEYDV EGVEDEPNFD IQEQKPSNLH

LLNMATDRFK DRLPVQQQSH AIKDEVVTNL DFARKRKPAN ELDVMIDHKI
YTCEFLQCPH SELRHGFQDR SSRDNHQLSC PFRNSPQFGV SNFNVNDVKP
MVFPQSFVQP KSAALPVNAN PPSFNLSGIG VPEDGQRMIN DLMSFYESNI
QGNKNADSGN AAVIKEQSVQ QPGMQCQSDN YLHGQGIMME GNIFEDTNVS
SNRSIFQQGD RFEDTNIPAS RPMFQHGDRF DQCKITSSPF NNSNENFQFM FGSPFNLPSV
DFTEGLPGIS RDNASKQDLP IWYH*

> Sesamum indicum (XP_011080515.1)

MMMFEDMGFC GDLDFSSAS IKEADVCPQLQ SAEPEPVVED DYSDEEIDVD
ELERRMWRDK MRLKRLKEMN KGKEGIDAAK QRQSSEQARR KKMSRAQDGI
LKYMLKMMEV CKAQGFVYGI IPEKGKPVSG ASDNLREWWK DKVRFDRNGP
AAIAKYQVDN AIPGKNEGSN PVGPTPHTLQ ELQDTTLGSL LSALMQHCDP
PQRRFPLEKG VPPPWWPSGK EEWWHQLGLQ KDQGPPPYKK PHDLKKAWKV
GVLTAVIKHM SPDIAKIRKL VRQSKCLQDK MTAKESATWL AIINQEEALA
RELYPDRCPP LSSPGSGTF PVSDSSEYDV EVADDESNEFD VQEQKPNTLG LLNIGMERFQ
DRLPAQQQSH AIKDELMANF DFPRKRKPGS ELNVMMDHKI YTCEFLQCPH
NELRHGFQDR ISRDNHQLSC PYKHSSEFGV SNFNINDIKP VVFPQSFVQP
KPSALPVNPT PPSFDLSGLG VPEEGQRMIN ELMSFYDNNV QGNKNSNTGN
AANAQESLQ QHSAQSRQDG YLQNQGLVLE GNIFEDKTIP NNLSIFRPPD
RFDHRSKVITS PFNPNPTENF QLMFSSPFNI PPVDYTENFP GVPRNNLPKQ DITIWY

> Sesamum indicum (XP_011080514.1)

MMMFEDMGFC GDLDFSSAS IKEADVCPQLQ SAEPEPVVED DYSDEEIDVD
ELERRMWRDK MRLKRLKEMN KGKEGIDAAK QRQSSEQARR KKMSRAQDGI
LKYMLKMMEV CKAQGFVYGI IPEKGKPVSG ASDNLREWWK DKVRFDRNGP
AAIAKYQVDN AIPGKNEGSN PVGPTPHTLQ ELQDTTLGSL LSALMQHCDP
PQRRFPLEKG VPPPWWPSGK EEWWHQLGLQ KDQGPPPYKK PHDLKKAWKV
GVLTAVIKHM SPDIAKIRKL VRQSKCLQDK MTAKESATWL AIINQEEALA RELYPDRCPP
LSSPGSGTF PVSDSSEYDV EVADDESNEFD VQEQKPNTLG LLNIGMERFQ
DRLPAQQQSH AIKDELMANF DFPRKRKPGS ELNVMMDHKI YTCEFLQCPH
NELRHGFQDR ISRDNHQLSC PYKHSSEFGV SNFNINDIKP VVFPQSFVQP
KPSALPVNPT PPSFDLSGLG VPEEGQRMIN ELMSFYDNNV QGNKNSNTGN
AANAQESLQ QHSAQSRQDG YLQNQGLVLE GNIFEDKTIP NNLSIFRPPD
RFDHRSKVITS PFNPNPTENF QLMFSSPFNI PPVDYTENFP GVPRNNLPKQ DITIWY

> Carica papaya (evm.model.supercontig_103.60)

MMMFDDMGPC GDMDFFCAPF SGGDVPAPQT EPEATVEDDY TDEEIDVDEL
ERRMWRDKMR LKRLKEQSKS KEGSDVAKQR QSSEQARRKK MSRAQDGILK
YMLKMMEVCK AQGFVYGIIP EKGKPVGTAS DNLREWWKDK VRFDNRGPAA
IAKYQAENSI PGKNEGSNPI GPTPHTLQEL QDTTLGSLLS ALMQHCDPPQ
RRFPLEKGVP PPWWPTGKEE WWPQLGLPKD QGPPPYKKPH DLKKAWKVG
LTAVIKHMSP DIAKIRKLVR QSKCLQDKMT AKESATWLAI INQEEALARE
LYPDSCPPLS SNGGSGSLVI NDCSEFDVEG AEDEPNFDVQ ERKPEKLNPP NLGVERMRI
QQQPPFPIRG EVISNLDLIR KKRPSNDLNM MMDQKIYTCE HTQCPYSEL
LGFHDRTSRD NHQLSCPYRG SSLEFGSSNF HVSEVKPVIF PQQFVRPKQA
NSVQPSIDLS GLGVPELGQK MIGELMSIYD HNVQGNKNLN QGNHVSVEAQ
TFLQPKIQHH QDQYFHGGG VMENFFFEES NVPDNHQMF S QNDNQLERLK

VMNSPF EANH NNHNFQLMFG SPFDLASFDY KEDLQAVGMD TLPKQQDVSI WFQ*

> *Actinidia chinensis* (Achn347321)

MAAPQTEPEV VVDDDDYSDEE IDVDELERRM WRDKMRLKRL KEMNKGKECI
DAAKQRQSQE QARRKKMSRA QDGILKYMLK MMEVCKAQGF VYGIIEPKGK
PVSGASDNLR EWWKDKVRFD RINGPAAIAKY QADNSIPGKN EGSDLVGPTP
HTLQELQD TT LGSLLSALMQ HCDPPQRRFP LEKGVPPPWW PTGNEEWWPQ
LGVQMDQGPP PYKKPHDLKK AWKVGVLTA V IKHMSPDITK IRKLVRQSKC
LQDKMTAKES ATWLAIINQE EALARELYPD RCHPLSSSGG SGSFVINDCS
EYDVQGAEEE PNFDVQEQKP NSITLLNMGL GRIKDSMLGQ QLSHPIKDEV
ITNLDFTKR KPTNELNNVM DHTIYTCEVL QCPHSELRRG FHDRSSRDNH
QLSCPYSNS TEFVLPSFRN NEVKPIVFPQ TFVQPQPAAP SVNSIQHSFD LSGLGVPEDG
QKMINELMSF YDSNIQGNKQ SNPLSISVSS DQTLSQLPP PNIQCQQDNN
YIHGQAFVME GNICEEASLP VNISMFSQQE NRFDHRKILN SKFEANPNND
FPLMFASPFY LPSVDYPEHV PGVPRGDTLS KPDSIWF*

> *Solanum melongena* (Sme2.5_04397.1_g00003.1)

MMMFEDMGFC GDLDFFPAPL KEVEVVAPQS QTEPESVVDD DYSDEEIDMD
ELERRMWRDK MKLKRLKEMS KSKEGVDPK QRRSQEQARR KKMSRAQDGI
LKYMLKMMEV CKAQGFVYGI IPEKGKPVSG ASDNLREWWK DKVRFRDRNGP
AAIAKYQADH PIPGMNEGSN PVGPTPHTLQ ELQD TT LGS L LSALMQHCDP
PQRRFPLEK VSPWWPTGQ EDWWPQLGLQ KDQGRPPYKK PHDLKKAWKV
GVLTA VIKHI SPDI AKIRKL VRQSKCLQDK MTAKESATWL AIINQEEALA QELYPDRCP
LSSAGVCGNF MLNDSSEYDV EGAPDEPNFD IHEQKPNHLN LLNINVERFK
EK MPLQQSY SNKEELVTNL DFLSKRKQAN EPTVMMDQKI YTCEFLQCPH
NELRHGFQDR SSRDNHQFAC PYRNSSQFGV SNFQINEVKP AVFPQQYVQT
KSSALPVNQG PPSFDLSGIG VPEDGQRMIN ELMSIYSDSV QGSKRQNRGN
VALTKEPHQ QPRVHQDNYL LSQGIMEGNI FKNTSISATQ SILPQVDPFD
QSKALNSSFN AGSNDNFHFM FGSPFNLQST NYNGNLP GIV YDTTPKQDAR IWY

> *Nicotiana tabacum* (XP_016491027.1)

MMMFEE MGFC GDLDFFPAPL KEVETAASQI EQESEPVMDD DYSDEEIDVD
ELERRMWRDK MKLKRLKEMT KGGKEGVDAV KQRQSSEQAR RKKMSRAQDG
ILKYMLKMME VCKAQGFVYG IPEKGKPV T GASDNLREWW KDKVRFRDRNG
PAAIAKYQAD NAIPGKNEGS NPIGPTPHTL QELQD TT LGS LLSALMQHCD
PPQRRFPLEK GVPPPWWPTG QEDWWPQLGL SKDQGP PPYK KPHDLKKAWK
VGVLTAVIKH MSPDI AKIRK LVRQSKCLQD KMTAKESATW LTIINQEEVL ARELYPDRCP
PLSSAGSGT FTMNDSSEYD VDGVIDEPNF DVQE QKPNHL GLLNVNVDRF
KERLTMRQQS LPIKDEIIIA NLDFTKRKRK ADELSFLMDQ KIYTCECLQC PHSELNRNGFQ
DRSSRDNHQL TCPFRNSPQF GVS NFHVDEV KP VVFPQQYV QPKPASLPIN QAPPSFDLSG
LGVPE DQRM INELMSFYDS NIQGNKNSMA GNVVMSKEQP RQQPSIQQNN
YLHNQGIVLD GNIFGDTNIS ANHSVFPQGD RFDQSKVLTS PFNAGSNDNF
HFMFGSPFNL QSTDYTEALS GITQDNMPKQ DVPVWY

> *Nicotiana glauca* (XP_009801714.1)

MMMFEE MGFC GDLDFFPAPL KEVETAASQI EQESEPVMDD DYSDEEIDVD
ELERRMWRDK MKLKRLKEMT KGGKEGVDAV KQRQSSEQAR RKKMSRAQDG
ILKYMLKMME VCKAQGFVYG IPEKGKPV T GASDNLREWW KDKVRFRDRNG

PAAIAKYQAD	NAIPGKNEGS	NPIGTPHTL	QELQDTTLGS	LLSALMQHCD
PPQRRFPLEK	GVPPPWWPTG	QEDWWPQLGL	SKDQGPPPYK	KPHDLKKAWK
VGVLTAVIKH	MSPDIAKIRK	LVRQSKCLQD	KMTAKESATW	LIINQEEVL
ARELYPDRCP	PLSSAGSGT	FTMNDSSSEYD	VDGVIDEPNF	DVQEKPKNHL
GLLNVNVDRLF	KERLTMRQQS	LPIKDEIIIA	NLDFTRKRKP	ADELSFLMDQ
KIYTCECLQC	PHSELRNGFQ	DRSSRDNHQL	TCPFRNSPQF	GVSNFHVDEV
KPVVFPQQYV	QPKPASLPIN	QAPPSFDLSG	LGVPEGDQRM	INELMSFYDS
NIQGNKNSMA	GNVVMSSKEQP	RQQPSIQQNN	YLHNQGIVLD	GNIFGDTNIS
ANHSVFPQGD	RFDQSKVLTS	PFNAGSNDNF	HFMFGSPFNL	QSTDYTEALS
GITQDNMPKQ	DVPVWY			

> *Nicotiana tomentosiformis* (XP_009607828.1)

MMMFDDMRFC	GDLFFSAPL	KEVEAAAPQT	EPEPEPVVDD	DYSDEEIDVD
ELERRMWRDK	MKLKRLKEMT	KSKEGVDPK	HRQSSEQARR	KKMSRAQDGI
LKYMLKMMEV	CKAQGFVYGI	IPEKGKPVGG	ASDNLREWWK	DKVRFDNRGP
AAIAKYQADH	AIPGMNEGSN	PVGPTPHTLQ	ELQDTTLGSL	LSALMQHCDP
PQRRFPLEKG	VSPWWPTGQ	EDWWPQLGLQ	KEQGPPPYKK	PHDLKKAWKV
GVLTAVIKHM	FPDIAKIRKL	VRQSKCLQDK	MTAKESATWL	AIISQEEALA
RELYPDRCPP	LSSAGASGTF	ILDDSSEYDV	EGAQDEPNFD	VHEQKPNHLS
LLNIGAKRFRK	ETLPLQQQSH	PNKDEFITNL	DFTRKRKQAN	ELTVMMDRKI
YTCEFQQCPH	SELRNGFQDK	SARDNHQFAC	PFRNSSQFGV	SNFNFNEVKP
VVFPQQYVQP	KSASLPVNQG	PPTFDLSGVG	VPEDGQRMIN	ELMSFYDSNI
QGNKSQNTGN	IALTKEQPHQ	QPRDNYLHSQ	GIMEGNIFKD	ANISTSHSML
PHGSPFNAGP	NDNFHCFMFGS	PFNLQSANYT	GNLPCIGYDT	TPKQDLPTWY

> *Nicotiana tomentosiformis* (XP_009607827.1)

MMMFDDMRFC	GDLFFSAPL	KEVEAAAPQT	EPEPEPVVDD	DYSDEEIDVD
ELERRMWRDK	MKLKRLKEMT	KSKEGVDPK	HRQSSEQARR	KKMSRAQDGI
LKYMLKMMEV	CKAQGFVYGI	IPEKGKPVGG	ASDNLREWWK	DKVRFDNRGP
AAIAKYQADH	AIPGMNEGSN	PVGPTPHTLQ	ELQDTTLGSL	LSALMQHCDP
PQRRFPLEKG	VSPWWPTGQ	EDWWPQLGLQ	KEQGPPPYKK	PHDLKKAWKV
GVLTAVIKHM	FPDIAKIRKL	VRQSKCLQDK	MTAKESATWL	AIISQEEALA
RELYPDRCPP	LSSAGASGTF	ILDDSSEYDV	EGAQDEPNFD	VHEQKPNHLS
LLNIGAKRFRK	ETLPLQQQSH	PNKDEFITNL	DFTRKRKQAN	ELTVMMDRKI
YTCEFQQCPH	SELRNGFQDK	SARDNHQFAC	PFRNSSQFGV	SNFNFNEVKP
VVFPQQYVQP	KSASLPVNQG	PPTFDLSGVG	VPEDGQRMIN	ELMSFYDSNI
QGNKSQNTGN	IALTKEQPHQ	QPRDNYLHSQ	GIMEGNIFKD	ANISTSHSML
PHGSPFNAGP	NDNFHCFMFGS	PFNLQSANYT	GNLPCIGYDT	TPKQDLPTWY

> *Capsicum annuum* (CA01g13570)

MMMFEDIGFC	GDLFFPAPL	KEVEAATAVP	PIEPEPLMDD	DYSDEEIDVE
ELEKRMWKDK	MKLKRLKEMS	KSKEGVDPVK	QRQSSEQARR	KKMSRAQDGI
LKYMLKMMEV	CKAQGFVYGI	IPEKGKPVGT	ASDNLREWWK	DKVRFDNRGP
AAIAKYQADN	AIPGKNEGSN	PTGPTPHTLQ	ELQDTTLGSL	LSALMQHCDP
PQRRFPLEKG	ISPPWWPNGQ	EDWWPQLGLP	KDQGPPPYKK	PHDLKKAWKV
GVLTAVIKHM	SPDIAKIRKL	VRQSKCLQDK	MTAKESATWL	VIINQEEVLA
RELYPDRCPP	LSSAAGSGTL	SMNDSSEYDV	EGAVDDPTFD	VQEKPKNHLS
LLNVDVEMFK	ALPLQQQSH	IKDELIALND	FTHKRKPADD	LSFMMDQKIY
TCECLQCPS				

ELRHGFPDRS TRDNHQLTCS FRNTSQFGVS NFHIDEVKPV IFAQQCVQPK
 QAQLPVNPAQ PSFDPSGFEV PKDGQTVIND LMSFYESNVE GNKSSMAGNV
 VMSKEQPHQL TSVQQNNFLQ SHGIVLECSI FGDNNISANH SIFVQGDRYD
 QSKVLTSPFN AGPNDNFNFM FGSPSNVQST DYSESFSSIS YDNMLKQDVP VWY*

> *Nicotiana tomentosiformis* (XP_009587969.1)

MMMFEEIMGFC GDLDFFPAPL KEVETAASQI EQEQEQEPVM DDDYSDEEID
 VDELERRMWR DKMKLKRLE MTKGGKEGVD AVKQRQSSEQ ARRKKMSRAQ
 DGILKYMLKM MEVCKAQGFV YGIIPEKGGP VTGASDNLRE WWKDKVRFDR
 NGPAAIAKYQ ADNAIPGKNE GSNPIGTPH TLQELQDTTL GSLLSALMQH
 CDPQRRFPL EKGVPWWP TGQEDWWPQL GLSKDQGPPP YKKPHDLKKA
 WKVGVLTAVI KHMSPDIAKI RKLVRQSKCL QDKMTAKESA
 TWLAIINQEEVLARELYPDR CPPLSSAGGS GTFTMNDSSSE YDVDGVVDEP
 NFDVQEQKPN HLGLLNVNVD RFKERLPMQ QSLPIKDEIM IANLDFTRKR
 KPADELTFM DQKIYTCECL QCPHSELNG FQDRSSRDNH QLTCPFRNSP
 QFGVSNFHVD EVKPVVFPQQ YVQPKPASLP INQAPPSFDL SGIGVPEDGQ
 RMINELMSFY DNNIQGNKSS MAGNVVMSKE QPRQQPSIQQ NNYLHNQGII
 LDGNIFGDTN ISANHSMFPQ GDRFDQSKVL TSPFNAGSND NFHFMMFGSPF
 NLQSTDYTEA LSGITQDNMP KQDVPVWY

> *Nicotiana tabacum* (XP_016495135.1)

MMMFEEIMGFC GDLDFFPAPL KEVETAASQI EQEQEQEPVM DDDYSDEEID
 VDELERRMWR DKMKLKRLE MTKGGKEGVD AVKQRQSSEQ ARRKKMSRAQ
 DGILKYMLKM MEVCKAQGFV YGIIPEKGGP VTGASDNLRE WWKDKVRFDR
 NGPAAIAKYQ ADNAIPGKNE GSNPIGTPH TLQELQDTTL GSLLSALMQH
 CDPQRRFPL EKGVPWWP TGQEDWWPQL GLSKDQGPPP YKKPHDLKKA
 WKVGVLTAVI KHMSPDIAKI RKLVRQSKCL QDKMTAKESA TWLAIINQEE
 VLARELYPDR CPPLSSAGGS GTFTMNDSSSE YDVDGVVDEP NFDVQEQKPN
 HLGLLNVNVD RFKERLPMQ QSLPIKDEIM IANLDFTRKR KPADELTFM
 DQKIYTCECL QCPHSELNG FQDRSSRDNH QLTCPFRNSP QFGVSNFHVD
 EVKPVVFPQQ YVQPKPASLP INQAPPSFDL SGIGVPEDGQ RMINELMSFY DNNIQGNKSS
 MAGNVVMSKE QPRQQPSIQQ NNYLHNQGII LDGNIFGDTN ISANHSMFPQ
 GDRFDQSKVL TSPFNAGSND NFHFMMFGSPF NLQSTDYTEA LSGITQDNMP KQDVPVWY

> *Nicotiana tabacum* (XP_016495136.1)

MMMFEEIMGFC GDLDFFPAPL KEVETAASQI EQEQEQEPVM DDDYSDEEID
 VDELERRMWR DKMKLKRLE MTKGGKEGVD AVKQRQSSEQ ARRKKMSRAQ
 DGILKYMLKM MEVCKAQGFV YGIIPEKGGP VTGASDNLRE WWKDKVRFDR
 NGPAAIAKYQ ADNAIPGKNE GSNPIGTPH TLQELQDTTL GSLLSALMQH
 CDPQRRFPL EKGVPWWP TGQEDWWPQL GLSKDQGPPP YKKPHDLKKA
 WKVGVLTAVI KHMSPDIAKI RKLVRQSKCL QDKMTAKESA
 TWLAIINQEEVLARELYPDR CPPLSSAGGS GTFTMNDSSSE YDVDGVVDEP
 NFDVQEQKPN HLGLLNVNVD RFKERLPMQ QSLPIKDEIM IANLDFTRKR
 KPADELTFM DQKIYTCECL QCPHSELNG FQDRSSRDNH QLTCPFRNSP
 QFGVSNFHVD EVKPVVFPQQ YVQPKPASLP INQAPPSFDL SGIGVPEDGQ RMINELMSFY
 DNNIQGNKSS MAGNVVMSKE QPRQQPSIQQ NNYLHNQGII LDGNIFGDTN
 ISANHSMFPQ GDRFDQSKVL TSPFNAGSND NFHFMMFGSPF NLQSTDYTEA

LSGITQDNMP KQDVPVWY

> *Solanum tuberosum* (PGSC0003DMP400015316)

```
MMMFEDIGFC  GDLDFPAPL  KEAETVAAPV  LIEPEPMMDD  DDSDEEIDVD
ELEKRMWRDK  MKLKRLKEMS  KGKEGVDAVK  QRQSSEQARR  KKMSRAQDGI
LKYMLKMMEV  CKAQGFVYGI  IPEKGKPVGT  ASDNLREWWK  DKVRFDNRNGP
AAIAKYQADN  AIPGKNEGSN  PIGTPHTLQ   ELQDCTLGSL  LSALMQHCDP
PQRRFPLEKG  VSPPWWPNQG  EDWWPQLGLP  NDQGPPPYKK  PHDLKKAWKV
GVLTAVIKHI SPDIKIRKL VRQSKCLQDK MTAKESATWL AIINQEEVLA RELYPDRCP
LSSGGGSGTF  TMNDSSEYDV  EGAIDDPFD  IQEQKPNHLS  LLNVSVEMFK
EKLPLLQSQS  PMKGDIFANL  DFTRKRKPAD  DLTFMLDPKI  YTCECLQCPH
SELRNGFPDR  SSRDNHQLTC  LFRNTSQFGV  PNFHVEEVKP  VVFPQQYAQP
KQASLPVNPA  PPSFDTSGLG  VPADGQRVIN  ELMSFYESNV  QGNKSSMAGN
VVMSEKQPLQ  QPSIQNNYL  QSQGNVLEGS  IFGDTNISAN  NSMFVQGDRF
DQSKVLTSPF NAGSNDDFNF MFGSPFNLQS TDLSECLSGISHDDMTKQDT SVWY*
```

> *Solanum tuberosum* (PGSC0003DMP400015315)

```
MMMFEDIGFC  GDLDFPAPL  KEAETVAAPV  LIEPEPMMDD  DDSDEEIDVD
ELEKRMWRDK  MKLKRLKEMS  KGKEGVDAVK  QRQSSEQARR  KKMSRAQDGI
LKYMLKMMEV  CKAQGFVYGI  IPEKGKPVGT  ASDNLREWWK  DKVRFDNRNGP
AAIAKYQADN  AIPGKNEGSN  PIGTPHTLQ   ELQDCTLGSL  LSALMQHCDP
PQRRFPLEKG  VSPPWWPNQG  EDWWPQLGLP  NDQGPPPYKK  PHDLKKAWKV
GVLTAVIKHI SPDIKIRKL VRQSKCLQDK MTAKESATWL AIINQEEVLA RELYPDRCP
LSSGGGSGTF  TMNDSSEYDV  EGAIDDPFD  IQEQKPNHLS  LLNVSVEMFK
EKLPLLQSQS  PMKGDIFANL  DFTRKRKPAD  DLTFMLDPKI  YTCECLQCPH
SELRNGFPDR  SSRDNHQLTC  LFRNTSQFGV  PNFHVEEVKP  VVFPQQYAQP
KQASLPVNPA  PPSFDTSGLG  VPADGQRVIN  ELMSFYESNV  QGNKSSMAGN
VVMSEKQPLQ  QPSIQNNYL  QSQGNVLEGS  IFGDTNISAN  NSMFVQGDRF
DQSKVLTSPF  NAGSNDDFNF  MFGSPFNLQS  TDLSECLSGI  SHDDMTKQDT  SVWY*
```

> *Nicotiana glauca* (XP_009798829.1)

```
MMMFEEGMFC  GDLDFPAPL  KEVEVAAPHT  EPKPELVVDD  DYSDEEIDMD
ELERRMWRDK  MKLKRLKEMT  KSKEGVDPK  HRQSSEQARR  KKMSRAQDGI
LKYMLKMMEV  CKAQGFVYGI  IPEKGKPVGG  ASDNLREWWK  DKVRFDNRNGP
AAIAKYQADH  AIPGMNEGSN  PVGTPHTLQ   ELQDCTLGSL  LSALMQHCDP
PQRRFPLEKG  VSPPWWPTGQ  EDWWPQLGLQ  KEQGPPPYKK  PHDLKKAWKV
GVLTAVIKHI FPDIAKIRKL VRQSKCLQDK MTAKESATWL AIISQEEALA RELYPDRCPA
LSSAGASGTF  ILDDSSEYDV  EGAQDEPNFD  VHEQKPNHLS  LLNIGVERFK
ETLPLQQQSH  PNKDEFITNL  DFTRKRKQAN  ELTVMMMDQKI  YTCEFQQCPH
SELRNGFQGK  SARDNHQFAC  PFRNSSQFGV  SNFNFNEVKP  VVFPQQYVQP
KSASLPVNQG  PPTFDLSGVG  VPEDGQRMIT  ELMSFYDSNI  QGNKSQNTGN
VALTKEQPHQ  QPRVNQDNYL  HSQGIMEGNI  FKDANISTSH  SMLPQASPFN
AGPNDNFHFM FGSPFNLQSA NYTGNLPGIG YDTPKQNL  TWY
```

> *Arabidopsis thaliana* (AT2G27050.1)

```
MMMFNEMGMY  GNMDFFSSST  SLDVCPLPQA  EQEPVVEDVD  YTDDMDVDE
LEKRMWRDKM  RLKRLKEQQS  KCKEGVDGSK  QRQSSEQARR  KKMSRAQDGI
LKYMLKMMEV  CKAQGFVYGI  IPEKGKPVGT  ASDNLREWWK  DKVRFDNRNGP
```

AAIAKYQSEN NISGGSNDCN SLVGPTPHTL QELQDTTLGS LLSALMQHCD
PPQRRFPLEK GVSPWWPNG NEEWWPQLGL PNEQGPPPYK KPHDLKKAWK
VGVLTAVIKH MSPDIKIRK LVRQSKCLQD KMTAKESATW LAIINQEEVV ARELYPESCP
PLSSSSSLGS GSELLINDCSE YDVEGFEKEQ HGFDVEERKP EIVMMHPLAS
FGVAKMQHFP IKEEVATTVN LEFTRKRKQN NDMNVMVMMDR SAGYTCENGQ
CPHSKMNLGF QDRSSRDNHQ MVCOPYRDNRL AYGASKFHMG GMKLVVPQQP
VQPIDLSGVG VPENGQKMIT ELMAMYDRNV QSNQTPPTLM ENQSMVIDAK
AAQNQQLNFN SGNQMFMQQG TNNGVNNRFQ MVFDSTPFDM AAFDYRDDWQ
TGAMEGMGKQ QQQQQQQQDV SIWF

>Unigene0012139

MGMFDEMGCGLSLEFLYPPQEAVGTEPEQDANVDEDYSDEEMDVDELERRMWRDKMR
LKRLKDQKNKGKDGISLDATKQRSSEQARRKKMSRAQDGILKYMLKMMEVCKAQGF
VYGIPEKGKPVSGASDNLRAWWKEKVRFRDRNGPAAISKYQSEHLILGKNEDFGPVGPTP
HTLHELQDTTLGSLLSALMQHCDPPQRRFPLEKGIAPPWWPTGEDGTPPYKKPHDLKKA
WKVGVLTAVIKHMSPDIDKIRKLVRQSKCLQDKMTAKESATWLAIINQEEAEIRKLYPDSC
PPLAFGSGSYVISDSSDYDVEGVDDGAEDFKPKFNLGNELFMGPVKGEIIEISSSDVAQKR
KIPVDEHNSLMMDQKIYTCEYPKCPFSNQVGLDRMSRNNHQMTCPYRVNGNTNSSQG
FEITNCQSNKKTPVFPIPAYMQPKLTPPQLNHGFLSPFNGSNVALTEDTHKPIPDLSFYD
ANLQHNKGLNSCGQSYIANQAPDQQSFQVYDSLYGQNMGLNNHLLPTNEFHIDRCKTYS
STAFDNMENVNAGSPFNFG

> Arabidopsis thaliana (AT2G27050.1)

MMMFNEMGMY GNMDFFSSST SLDVCPLPQA EQEPVVEDVD YTDDEMVDVE
LEKRMWRDKM RLKRLKEQQS KCKEGVDGSK QRSSEQARR KKMSRAQDGI
LKMYMLKMMEV CKAQGFVYGI IPEKGKPVGT ASDNLREWWK DKVRFRDRNGP
AAIAKYQSEN NISGGSNDCN SLVGPTPHTL QELQDTTLGS LLSALMQHCD
PPQRRFPLEK GVSPWWPNG NEEWWPQLGL PNEQGPPPYK KPHDLKKAWK
VGVLTAVIKH MSPDIKIRK LVRQSKCLQD KMTAKESATW LAIINQEEVV
ARELYPESCP PLSSSSSLGS GSELLINDCSE YDVEGFEKEQ HGFDVEERKP EIVMMHPLAS
FGVAKMQHFP IKEEVATTVN LEFTRKRKQN NDMNVMVMMDR SAGYTCENGQ
CPHSKMNLGF QDRSSRDNHQ MVCOPYRDNRL AYGASKFHMG GMKLVVPQQP
VQPIDLSGVG VPENGQKMIT ELMAMYDRNV QSNQTPPTLM ENQSMVIDAK
AAQNQQLNFN SGNQMFMQQG TNNGVNNRFQ MVFDSTPFDM AAFDYRDDWQ
TGAMEGMGKQ QQQQQQQQDV SIWF

> Citrus clementina (Ciclev10000606m)

MGIFEEMGFC GNLEFFSSPH GEGEAFLEHE QETAAEEDYS DEEMDVDELE
RRMWRDRMLL KKLKEQSKSK ECVDSAKQRQ SEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVSGASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIL GKNEDCGSVV STPHSLQELQ DTTLGSLLSA LMQHCDPPQR
RFPLEKGVAP PWWPNGNEEW WPQLGLPKDL GPPPYKKPHD LKKAWKVSVL
TAVIKHMFDP IAKIRKLVRQ SKCLQDKMTA KESATWLAVI NQEEALSRLK
YPDSCPPVSA GSGSFIISD SSDYDVEGVE DDRNVEVEEI KPRDVNLFNM
GAMGRDRLMM TPPMVPQIKG ELVETNSDFI QKRKQPADQS HLMMDQKIYT
CEFPQCPYGD YRLGFLERSS RNNHQLNCPY RHNSSQGFGM PNFQVNNDQT
VAFSRPFAQP TQPKPATPPK NQTQSQFNIS GLELPDDGQK MITDLMSFYD

TNHQQNKSLN SGNLNAIGDQ NQQQEQRKFQ LQMDDSFYSQ GAVMGRNMPG
QSNMPMNNSV FSSAEIRFDQ CKAFDSPYDA NPSDSIADFR FNSPFNMAV
DYAMDSIPKQ DVSLWYL*

> Citrus clementina (Ciclev10000608m)

MGIFEEMGFC GNLEFFSSPH GEGEAFLEHE QETAAEEDYS DEEMDVDELE
RRMWRDRMLL KKLKEQSKSK ECVDSAKQRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVSGASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIL GKNEDCGSVV STPHSLQELQ DTTLGSLLSA LMQHCDPPQR
RFPLEKGVAP PWWPNGNEEW WPQLGLPKDL GPPPYKKPHD LKKAWKVSVL
TAVIKHMFPD IAKIRKLVRQ SKCLQDKMTA KESATWLAVI NQEEALSRLK
YPDSCPPVSA GGSGSFIISD SSDYDVEGVE DDRNVEVEEI KPRDVNLFNM
GAMGRDRLMM TPPMVPQIKG ELVETNSDFI QKRKQPADQS HLMMDQKIYT
CEFPQCPYGD YRLGFLERSS RNNHQLNCPY RHNSSQGFGM PNFQVNNDQT
VAFSRPFAQP TQPKPATPPK NQTQSQFNIS GLELPDDGQK MITDLMSFYD
TNHQQNKSLN SGNLNAIGDQ NQQQEQRKFQ LQMDDSFYSQ GAVMGRNMPG
QSNMPMNNSV FSSAEIRFDQ CKAFDSPYDA NPSDSIADFR FNSPFNMAV
DYAMDSIPKQ DVSLWYL*

> Citrus clementina (Ciclev10000607m)

MGIFEEMGFC GNLEFFSSPH GEGEAFLEHE QETAAEEDYS DEEMDVDELE
RRMWRDRMLL KKLKEQSKSK ECVDSAKQRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVSGASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIL GKNEDCGSVV STPHSLQELQ DTTLGSLLSA LMQHCDPPQR
RFPLEKGVAP PWWPNGNEEW WPQLGLPKDL GPPPYKKPHD LKKAWKVSVL
TAVIKHMFPD IAKIRKLVRQ SKCLQDKMTA KESATWLAVI NQEEALSRLK YPDSCPPVSA
GGSGSFIISD SSDYDVEGVE DDRNVEVEEI KPRDVNLFNM GAMGRDRLMM
TPPMVPQIKG ELVETNSDFI QKRKQPADQS HLMMDQKIYT CEFPQCPYGD
YRLGFLERSS RNNHQLNCPY RHNSSQGFGM PNFQVNNDQT VAFSRPFAQP
TQPKPATPPK NQTQSQFNIS GLELPDDGQK MITDLMSFYD TNHQQNKSLN
SGNLNAIGDQ NQQQEQRKFQ LQMDDSFYSQ GAVMGRNMPG QSNMPMNNSV
FSSAEIRFDQ CKAFDSPYDA NPSDSIADFR FNSPFNMAV DYAMDSIPKQ DVSLWYL*

> Citrus clementina (Ciclev10000609m)

MGIFEEMGFC GNLEFFSSPH GEGEAFLEHE QETAAEEDYS DEEMDVDELE
RRMWRDRMLL KKLKEQSKSK ECVDSAKQRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVSGASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIL GKNEDCGSVV STPHSLQELQ DTTLGSLLSA LMQHCDPPQR
RFPLEKGVAP PWWPNGNEEW WPQLGLPKDL GPPPYKKPHD LKKAWKVSVL
TAVIKHMFPD IAKIRKLVRQ SKCLQDKMTA KESATWLAVI NQEEALSRLK
YPDSCPPVSA GGSGSFIISD SSDYDVEGVE DDRNVEVEEI KPRDVNLFNM
GAMGRDRLMM TPPMVPQIKG ELVETNSDFI QKRKQPADQS HLMMDQKIYT
CEFPQCPYGD YRLGFLERSS RNNHQLNCPY RHNSSQGFGM PNFQVNNDQT
VAFSRPFAQP TQPKPATPPK NQTQSQFNIS GLELPDDGQK MITDLMSFYD
TNHQQNKSLN SGNLNAIGDQ NQQQEQRKFQ LQMDDSFYSQ GAVMGRNMPG
QSNMPMNNSV FSSAEIRFDQ CKAFDSPYDA NPSDSIADFR FNSPFNMAV
DYAMDSIPKQ DVSLWYL*

> *Populus trichocarpa* (Potri.008G011300.3)

MGIFEEMGFC	NNLDFFSAPP	GEMDVVPECE	PEATIEEDYS	DEEMDVDELE
RRMWRDRMLL	RRLKEQSKNT	EVVDNAKQRQ	SSEQARRKKM	SRAQDGILKY
MLKMMEVCKA	QGFVYGIPE	KGKPVSGASD	NLRGWWKEKV	RFDRNGPAAI
SKYQADHAIP	GKSEDCGPAA	STPHTLQELQ	DTTLGSLLSA	LMQHCDPPQR
RFPLEKGVAP	PWWPTGNEEW	WPQQGLPKDQ	GPPPYKKPHD	LKKAWKVSVL
TAVIKHLSPD	IAKIRKLVRQ	SKCLQDKMTA	KESATWLAI	NQEEALSRL
YPDSCLPMSA	GGSGSLIISD	SSDYDVEGVD	DEPNVEVEDC	KPLDVNLFNM
ATAAGPRDRF	MMPPVAPQIK	GEHVETNMSF	IQKRKQPAGE	PHMMVDQKMY
RCEYPQCPYN	DSRFGFLDVT	ARNNHQMNC	YRTNTSQGFG	MSNFQINSDK
PAVFSLPFPQ	TKAAAPNQTP	SFNVSGGLP	EDGKKSISDL	MSFYDTNLQR
DKNMNPGSAN	QQQKFQFQLD	DSFYGQGAIM	GNNITEVTSM	PVNSSAFPST
EMQFDHCKAF	DSAFDANVND	NVADFRFGSP	FTMPPVDYSM	DPMPKQDAGM WYV*

> *Populus trichocarpa* (Potri.008G011300.2)

MGIFEEMGFC	NNLDFFSAPP	GEMDVVPECE	PEATIEEDYS	DEEMDVDELE
RRMWRDRMLL	RRLKEQSKNT	EVVDNAKQRQ	SSEQARRKKM	SRAQDGILKY
MLKMMEVCKA	QGFVYGIPE	KGKPVSGASD	NLRGWWKEKV	RFDRNGPAAI
SKYQADHAIP	GKSEDCGPAA	STPHTLQELQ	DTTLGSLLSA	LMQHCDPPQR
RFPLEKGVAP	PWWPTGNEEW	WPQQGLPKDQ	GPPPYKKPHD	LKKAWKVSVL
TAVIKHLSPD	IAKIRKLVRQ	SKCLQDKMTA	KESATWLAI	NQEEALSRL
YPDSCLPMSA	GGSGSLIISD	SSDYDVEGVD	DEPNVEVEDC	KPLDVNLFNM
ATAAGPRDRF	MMPPVAPQIK	GEHVETNMSF	IQKRKQPAGE	PHMMVDQKMY
RCEYPQCPYN	DSRFGFLDVT	ARNNHQMNC	YRTNTSQGFG	MSNFQINSDK
PAVFSLPFPQ	TKAAAPNQTP	SFNVSGGLP	EDGKKSISDL	MSFYDTNLQR
DKNMNPGSAN	QQQKFQFQLD	DSFYGQGAIM	GNNITEVTSM	PVNSSAFPST
EMQFDHCKAF	DSAFDANVND	NVADFRFGSP	FTMPPVDYSM	DPMPKQDAGM WYV*

> *Populus trichocarpa* (Potri.010G247500.8)

MGIFEEMGFC	NNLDFFSAPP	GEMDAVPERE	PGATIEEDYS	DEEMDVDELE
RRMWRDRMLL	RRLKEQGKNT	EVVDHAKHRQ	SSEQARRKKM	SRAQDGILKY
MLKMMEVCKA	QGFVYGIPE	KGKPVSGASD	NLRGWWKEKV	RFDRNGPAAI
SKYQADHSIP	GKSEDCGPAA	STPHTLQELQ	DTTLGSLLSA	LMQHCDPPQR
RFPLEKGVAP	PWWPTANEWW	WPQLGLPKDQ	GPPPYKKPHD	LKKAWKVSVL
TAVIKHISPD	IAKIRKLVRQ	SKCLQDKMTA	KESATWLAI	NQEETLSRL
YPDSCLPMSA	GGSGSCLISD	SSDYDVEGVD	DEPNVEVEDC	KPLDVNLFNM
ATAAGPSDRF	MMPPVAPQIK	GEHVETNMSF	IQKRKQPAGE	PHMMVDQKMY
RCEYPQCPYN	DSRFGFLDVT	ARNNHQMNC	YRTNTSQGFG	MSNFQINSDK
PAVFSLPFPQ	TKAAAPNQTP	SFNVSGGLP	EDGKKSISDL	MSFYDTNLQR
DKNMNPGSAN	QQQKFQFQLD	DSFYGQGAIM	GNNITEVTSM	PVNSSAFPST
EMQFDHCKAF	DSAFDANVND	NVADFRFGSP	FTMPPVDYSM	DPMPKQDAGM WYV*

> *Morus notabilis* (XP_010106127.1)

MGIFEELGFS	GNFEFLSAPP	REAEAELEHE	PEATTEVEDY	SDDMDVDEL
ERRMWRDRML	LRRLKEQNK	KQGADNARQR	QSSEQARRKK	MSRAQDGILK
YMLKMMEVCK	AQGFVYGIIP	EKGKPVSGAS	DNLRAWWKEK	VRFDNRGPAA
IAKYQSDHSI	PGQNEDCSTV	ASTPHTLQEL	QDTTLGSLLS	ALMQHCDPPQ

RRFPLEKGVA PPWWPNGSEE WWPQLGLPKD QGPPPYKKPH DLKKAWKVG
 LTAVIKHMSP DIAKIRKLVR QSKCLQDKMT AKESATWLAI INQEEALARK
 LYPDRCPPVS AASSGSFVIN DTSYDVEGV NFEPNIEVEE CKPRNVNLFN IGSVAPRDL
 MMQPVPVPPKI KGEILETNLD FVQKRKTLAE EPQVTLDQKI YNCEHPQCPY
 HDYRLGFLDR TSRNNHQMNC PYRCNSSQAF GMSGFQVNND KPAVLSMPFS
 QPKPPAPVT QTAQVGIAGL GLPEDGQKMI SDLLSFYDIN MPQRRKSLNP
 GNFTATEHHD PQQQNYQFQM DDGFYSQSG VMGGNTNAPL QTNIPSHHAV
 FPSSDVQFDQ CKAFFDSSLN NPTDNISDIR FGSPFNLAPA EYTVDSLPKQ DVSLWYI

> Citrus clementina (Ciclev10000619m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
 RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
 MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
 AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
 RFPLEKGVAP PWWPTGTEEW WPGLGLPKDQ GPPPYKKPHD LKKAWKVGVL
 TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI INQEEALSRKL YPDSCIPAST
 GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
 MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
 SRNNHQLNCP YRNNSQGC V MPNFQINNDQ PAVFSLPFAQ STHPKPITPV
 KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
 RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
 FDSFPDNNPG DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus clementina (Ciclev10000617m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
 RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
 MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
 AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
 RFPLEKGVAP PWWPTGTEEW WPGLGLPKDQ GPPPYKKPHD LKKAWKVGVL
 TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI INQEEALSRKL YPDSCIPAST
 GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
 MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
 SRNNHQLNCP YRNNSQGC V MPNFQINNDQ PAVFSLPFAQ STHPKPITPV
 KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
 RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
 FDSFPDNNPG DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus sinensis (orange1.1g007174m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
 RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
 MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
 AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
 RFPLEKGVAP PWWPTGTEEW WPGLGLPKDQ GPPPYKKPHD LKKAWKVGVL
 TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI INQEEALSRKL YPDSCIPAST
 GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
 MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
 SRNNHQLNCP YRNNGSQGC V MPNFQINNDQ PAVFSLPFAQ STHPKPITSV

KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
FDSPFDNPNP DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus sinensis (orange1.1g007186m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
RFPLEKGVAP PWWPTGTEEW WPELGLPKDQ GPPPYKKPHD LKKAWKVGVL
TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI NQEEALSRLK YPDSCIPAST
GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
SRNNHQLNCP YRNNGSQGCV MPNFQINNDQ PAVFSLPFAQ STHPKPITSV
KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
FDSPFDNPNP DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus sinensis (orange1.1g007173m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
RFPLEKGVAP PWWPTGTEEW WPELGLPKDQ GPPPYKKPHD LKKAWKVGVL
TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI NQEEALSRLK YPDSCIPAST
GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
SRNNHQLNCP YRNNGSQGCV MPNFQINNDQ PAVFSLPFAQ STHPKPITSV
KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
FDSPFDNPNP DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus sinensis (orange1.1g007180m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE
RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SQEQARRKKM SRAQDGILKY
MLKMMEVCKA QGFVYGIPE KGKPVGTASD NLRAWWKEKV RFDRNGPAAI
AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
RFPLEKGVAP PWWPTGTEEW WPELGLPKDQ GPPPYKKPHD LKKAWKVGVL
TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAI NQEEALSRLK YPDSCIPAST
GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRML
MPPSLVPRIK GEVFETHSES IQKRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
SRNNHQLNCP YRNNGSQGCV MPNFQINNDQ PAVFSLPFAQ STHPKPITSV
KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
FDSPFDNPNP DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> Citrus sinensis (orange1.1g007187m)

MGIFEEMGFC GNLEFFSALP GEGEAVMGHE METAVEEDCS DEEVDVDELE

RRMWRDRLLL KRLKEQNKSK EGVDSAKHRQ SEQARRKKM SRAQDGILKY
 MLKMMEVCKA QGFVYGIIPE KGKPVGTGASD NLRAWWKEKV RFDRNGPAAI
 AKYQADHAIP GKNEDFGTVV STPHTLQELQ DTTLGSLLSA LMQHCNPPQR
 RFPLEKGVAP PWWPTGTEEW WPGLPKDQ GPPYKPPHD LKKAWKVGVL
 TAVIKHMSPD IAKIRKLVRQ SKCLQDKMTA KESATWLAIINQEEALSRL YPDSCIPAST
 GGSGSFIISD ISDYDVEGVD NERNVEVEEI KPLEANLFNM GAMGSRDRLM
 MPPSLVPRIK GEVFETHSES IQRRQSADE PHMTIDQKIY TCEFTQCPYN DYHHGFLDRT
 SRNNHQLNCP YRNNGSQGCV MPNFQINNDQ PAVFSLPFAQ STHPKPITSV
 KNQTQPQYNV SGLGLPDDGQ KMISDLMSFY DTNLQPNKSM SQGCLNVTED
 RNQQPEQQKF QLQLDDSFYN QGVGVMKGGN MPVNNPVFSS TEVHFDQCKA
 FDSPFDNPNP DNIAEFRFNS PFNIASVDYP MDPIPKQDVS MWYL*

> *Cannabis sativa* (PK01239.1)

MGFSGNFEFV SAPPREADEA LEHETEPVGE EDYSDEEMDV DELERRMWRD
 RMLLRRLKEQ NKGKQGVDNA KQRQSSEQAR RKKMSRAQDG ILKYMLKMME
 VCKAQGFVYG IIPEKGKPV GTGASDNLRAWW KEKVRFDRNG PAAIARYQAE
 HSI PGQNE DC STMASTPHTL QELQDTTLGS LLSALMQHCD PPQRRFPLEK
 GIAPPWWPTG SEEWWPQLGM PKDQGPPPYK KPHDLKKAWK VSVLTAVIKH
 MSPDI AKIRK LVRQSKCLQD KMTAKESATW LAIINQEEAL ARKLYPDKCP
 PMSATGNGSL VISETSYDV DGVDDEPNFE VEECKPRDIG RFNIGTIVPS RDRILMPQVA
 SRIKGEIET NPDFVQKRKQ VGDEPQMMMD QKIFTCEYSQ CPYHDYRLGF
 LDRTSRNNHQ MNCAYRPNSS QASQQTFGMP SFQINNDKPA VFSLPFSQPK
 PPLAPQQINQ SSPFTGLDIP EDGQKMISDL MSLYDTNAQQ RNKGLNPGNH
 SVPTNMENHT QPQQKYQFQM DDSFFSQGVM GGNMSEQANN ISSQQVVFPS
 AEVQFDQCKA FDSPFDNPNP DNIADLRFSS PFNMAPVEFA VDSL PKQDVS LWYL

> *Azadirachta indica* (Neem_3355_f_3)

MGFCGNVEFF SAPPGEAEV LGHETETAVE EDCSDDEV DV DELERRMWRD
 RMLLRRLKEQ NKSREGVDSS KQRQSSEQAR RKKMSRAQDG ILKYMLKMME
 VCKAQGFVYG IIPEKGKPV GTGASDNLRAWW KEKVRFDRNG PAAIAKYQAD
 HAIPGKNEDF GTVVSTPHTL QELQDTTLGS LLSALMQHCD PPQRRFPLEK
 GVAPPWWPSG KEEWWPQLGL PKDQGPPPYK KPHDLKKAWK VGVLTAVIKH
 MSPDI AKIRK LVRQSKCLQD KMTAKESATW LAIINQEEAL SRKLYPDSCP
 PASAGGSGSF IISDTSYDV EGV DNERNVE VEEYKPRDVN LFGLGAVGSR
 DRQMMTPSLV PQIKGEVVET NADFIQKRKQ LNDEPHMMMD QKIYTCEFPQ
 CPYND FRLGF LDRTSRNNHQ LNC PYHNNSP QGFGMADFQI NNDQPGVFSL
 PFAQPTQSKP ATPAKNQTQP QFNVSGLGLP DDGQKMISDL MSFYDTNLQP
 NKSMNPGGLN VMEEQNHQQE QKFQLQLDD SFYNQGVMMG GNMHGQSNMS
 MNNSVFSSAE IRFDQCKAFD SPFDTNPGDN IADFRFNSPI NMASVDYAMD
 PIPKQDVSMW YL

> *Humulus lupulus* (HL.SW.v1.0.G044476.1)

MGFCGNFDFI SCPPREGEET LEHEPEATVE EDYSDEEMDV DELERRMWRD
 RMLLRRLKEQ SKGKQGV DNA KQRQSSEQAR RKKMSRAQDG ILKYMLKMME
 VCKAQGFVYG IIPEKGKPV GTGASDNLRAWW KEKVRFDRNG PAAIAKYQAE
 HSI PGQNE DC SSMAS TPHTL QELQDTTLGS LLSALMQHCD PPQRRFPLEK
 GVAPPWWPTG SEEWWPQLGM PKDQGPPPYK KPHDLKKAWK VSVLTAVIKH

MSPDIAKIRK	LVRQSKCLQD	KMTAKESATW	LAIINQEEAL	ARKLYPDRC
PMSASGNGSL	VISETSDYDV	DGVDDEPNFE	VEECKPRDVG	RFNMGTIVPS
RDRMLMPQVA	PRIKGEIET	SPDFVQKRKQ	LGDEPQMMMD	QKIYTCEYSQ
CPYHDYRLGF	LDRTSRNNHQ	MNCAYRPNPS	QASQQTAFAMP	SFQISNDKPA
VFSLPFSQPK	PAAASQQMNQ	TSHFTGLDIP	EDGQKMISDL	MSLYDSNAQQ
RNKALNPGNH	PAPTNMENHH	QPQQKYQFQM	DDSFFGQGVM	GGNMSEQANI
SSQQAVYSSA	EVQFDQCKAF	DSPFDNNPND	NIADLRFASP	FNMAPVEFSV

DSLPGQDVSL WYL*

>Unigene0042139

MFTFEDMEFCGDLDFFCAPPGEINELTPKTEPEAVAEDDYSDDEVVDDELERRLWRDKIRL
KRLKELNKGKESVDVAKQRQSSEQARRKKMSRAQDGILKYMLKMMEVCKAQGFVYGII
PENGKPVGTGASDNLREWWKDKVRFDRNGPAAIAKYKLENSSPGENRDICLAGLNTLQEL
QDTTLGSLSSLMQHCPNPPQRRFPLEKGVPPWPNNGNEEWWTQLGLQKEQGPPPYKKP
HDLKKAWKVGVLTAIVKHMSPDIKIRKLVRQSKCLQDKMTAKESATWLAIINREEVLVR
ELYPDRCPLSANNTGCGPFVADDCWEYDVEGADNEPSFNNLQDLKPSNQNERFIGHQPL
HLTKDDIITNSDYSRKRKPTRELTNTMPPKVYTCEFCQCPYSNIHHGFSERSMRDNHQMSC
SYRRNSTEFLQNFNKIEVTPDVFSQQFVQPISEPSFNLSGLGVPEDGQNMINDLFSFYD
GNVGKGPSACHIFEETDLAVSGSVFPQSEDQFEHEKLFSTPFEVNPSTDFNYMLGSSFNPS
VEYSGEFSGLVKETYGKQDVSIWF

MYC protein sequence information

>Unigene0027167

MTDYRLPTMNLWAEDTASMMMDSTASFWPPQNSSSSSTSALESQQRLQAVIDGSSHNWT
YAIFWQSGASGSLGWGDGFYKGDENKDNRKATSSPTEQHRKRVLRELNSMISGGLAQV
DDNSAQADEEVTDTWFFLVSMQTQSFENGAGLPGQAFFSSTPIWLGSANRLAGSACERAR
QAATFGLCTMACIPSPNGVVELGSTPEVPQTDLMAKIHVLFSSPRPDPEPSPAQNPTLAH
NLMNFAEFKNSVYQQAFLNFNGDKRNILQIPEDDNDVKTRSPPSRGSNDEGMLSFTSG
VVLPSISDNDSDIEASVVKETVPEPEKKPRKRGRKPANGREEPLNHVEAERQRREKLNQRF
YALRAVVPNVSKMDKASLLGDAISYINELKAKVQTSEGKRNMERCHIEGLKRELANTDV
TTHQISRLADVVDVKIIGWDAMIRVQSRKGNHPAAKLMVALRELDLELTHASVSVVNDL
MIQQSTVRMGSRYYSQEQLRLALLAKIGDGR

> Nicotiana tabacum(XP_016500373.1)

MTDYSLPTMN	LWNTSGTTDD	NVTMMEAFMS	SDLTSFWATS	NSTAVAAVTS
NSNHIPVNT	TVLLPSSCAS	TVTAVAVDAS	KSMSFFNQET	LQQRLQTLID
GARETWYAI	FWQSSAVDLT	SPFVLGWGDG	YKGEEDKAN	RKLAVSSPAY
IAEQEHRKKV	LRELNSLISG	TQTGTDDAVD	EEVTDTEWFF	LISMTQSFDN
GSGLPQGALY	NSSPIWVAGA	EKLAASHCER	ARQAQGFGLQ	TMVCIPSANG
VVELGSTELI	IQSSDLMNKV	RVLNFNNDL	GSGSWAVQPE	SDPSALWLTD
PSSAAVQVKD	LNTVEANSVP	SSNSSKQVVF	DNENNGHSCD	NQQQHHSRQQ
TQGGFTRELN	FSEFGFDGSS	NNRNGNSSLS	CKPESGEILN	FGDSTKKSAN
GNLFSGQSHF	GAGEENKKKK	RSPASRGSE	EGMLSFVSGT	ILPAASGAMK

SSGCVGEDSD	HSDLEASVVK	EAESSRVVEP	EKRPKKRGRK	PANGREEPLN
HVEAERQRRE	KLNQRFYALR	AVVPNVSKMD	KASLLGDAIS	YINELKLKLQ
TTETDREDLK	SQIEDLKKEL	DSKDSRRPGP	PPPNQDHKMS	SHTGSKIVDV
DIDVKIIGWD	AMIRIQCNKK	NHPAARLMVA	LKELDLDVHH	ASVSVVNDLM
IQQATVKMGS	RLYTEEQLRI	ALTSRVAETR		

> *Nicotiana tabacum*(XP_016502760.1)

MTDYSLPTMN	LWNTSGTTDD	NVSMMEFMS	SDLTSFWATS	NSTTAAVTSN
SNLIPVNTLT	VLLPSSCAST	VTAVAVDASK	SMSFFNQETL	QQRLQTLIDG
ARETWTYAIF	WQSSVVDLSS	PFVLGWGDGY	YKGEEDKANR	KLAVSSPAYI
AEQEHKKVL	RELNSLISGT	QTGTDDAVDE	EVTDTTEWFFL	ISMTQSFVNG
SGLPGQALYN	SSPIWVAGAE	KLAASHCERA	RQAQGFGLQT	MVCIPSANGV
VELGSTELII	QSCDLMNKVR	VLFNFNNDLG	SGSWAVQPES	DPSALWLTD
SSAAVEVQDL	NTVKANSVPS	SNSSKQVVD	NENNGHSSDN	QQQHSKHET
QGFFTRELFN	SEFGFDGSSN	NRNGNSSLSC	KPESGEILNF	GDSTKKSANG
NLFSGQSHFG	AGEENKNKKR	SPASRGSENE	GMLSFVSGTI	LPAASGAMKS
SGGVGEDSDH	SDLEASVVEKE	AESSRVVEPE	KRPKKRGRKP	ANGREEPLNH
VEAERQRREK	LNQRFYALRA	VVPNVSKMDK	ASLLGDAISY	INELKLKLQN
TETDREELKS	QIEDLKKELV	SKDSRRPGPP	PSNHDHKMSS	HTGSKIVDVD
IDVKIIGWDA	MIRIQCNKKN	HPAARLMVAL	KELDLDVHHA	SVSVVNDLMI
QQATVKMGSR	LYTEEQLRIA	LTSRVAETR		

> *Nicotiana tabacum*(XP_016441449.1)

MTDYRIPTMT	NIWSNTTSDD	NMMEAFLSSD	PSSFWAGTNT	PTPRSSVSPA
PAPVTGIAGD	PLKSMPYFNQ	ESLQQRLQTL	IDGAREAWTY	AIFWQSSVVD
FVSPSVLGWG	DGYKGEEDK	NKRKTAAFSP	DFITEQEHRK	KVLRELNSLI
SGTQTGGEND	AVDEEVTDT	WFFLISMTQS	FVNGSGLPGL	AMYSSSPIWV
TGRERLAASH	CERARQAQGF	GLQTMVCIPS	ANGVVELGST	ELIFQSADLM
NKVKILDFDN	IDMGATTGSG	SGSCAIQAEP	DPSTLWLTD	PSSVVEVKDS
SNTVPSSNSS	KQLVFGNENS	ENVNQNSQQT	QGFFTRELFN	SEYGFDSNT
RSGNGNVNSS	RSCKPESGEI	LNFGDSTKRN	ASSANGSLFS	GQSQFGPGA
EENKNKNKKR	SPASRGSENE	GMLSFVSGVI	LPSSNTGKSG	GGGDSDHSDL
EASVVKEADS	SRVVDPEKRP	RKRGRKPANG	REEPLNHVEA	ERQRREKLNQ
RFYALRAVVP	NVSKMDKASL	LGDAIAFINE	LKSKVQNSDS	DKDELNRNIE
SLRNELANKG	SNYTGPPPPN	QDLKIVMDI	DVKVIGWDAM	IRIQSNKKNH
PAARLMAALM	ELDLVDVHHA	VSVVNELMIQ	QATVKMGSR	YTQEQLRISL
TSRIAESR				

> *Nicotiana tabacum*(XP_016499262.1)

MTDYRIPTMT	NIWSNTTSDD	NMMEAFLSSD	PSSFWPGTTT	TPTPRSSVSP
APAPVTGIAG	DPLKSMPYFN	QESLQQRLQT	LIDGARKGWT	YAIFWQSSVV
DFASPSVLGW	GDGYKGEED	KNKRKTASFS	PDFITEQAHR	KKVLRELNSL
ISGTQTGGEN	DAVDEEVTDT	EWFFLISMTQ	SFVNGSGLPG	LAMYSSSPIW
VTGTERLAVS	HCERARQAQG	FGLQTIVCIP	SANGVVELGS	TELIQTADL
MNKVKVLFNF	NIDMGATTGS	GSGSCAIQAE	PDPSALWLTD	PASSVVEVKD
SSNTVPSRNT	SKQLVFGNEN	SENGNQNSQQ	TQGFFTRELN	FSEYGFDSN
TRYGNNGNANS	SRCKPESGEI	LNFGDSTKR	SACSANGSLF	SGQSQFGPGA
AEENKNKNKK	RSPASRGSD	EGILSFVSGV	ILPSSNTGKS	GGGDSDQSD
LEASVVKEAD	SSRVVDPEKK			

PRKRGRKPAN GREEPLNHVE AERQRREKLN QRFYALRAVV PNVSKMDKAS
 LLGDAIAFIN ELKSKVQNSD SDKEDLRNQI ESLRNELANK GSNYTGPPPS
 NQELKIVDMD IDVKVIGWDA MIRIQSNKKN HPAARLMTAL MELDLDVHHA
 SVSVVNELMI QQATVKMGSR LYTQEQLRIS LTSRIAESR

> *Arabidopsis thaliana*(AT4G17880.1)

MSPTNVQVTD YHLNQSKTDT TNLWSTDDDA SVMEAFIGGG SDHSSLFPPL
 PPPPLPQVNE DNLQQRLQAL IEGANENWTY AVFWQSSHGF AGEDNNNNNT
 VLLGWGDGYG KGEEEKSRKK KSNPASAAEQ EHRKRVIREL NSLISGGVGG
 GDEAGDEEVT DTEWFFLVSM TQSFVKGTGL PGQAFSNSDT IWLSGSNALA
 GSSCERARQG QIYGLQTMVC VATENGVEL GSSEIIHQSS DLVDKVDTFE
 NFNNGGGEFG SWAFNLNPDQ GENDPGLWIS EPNGVDSGLV AAPVMNNGGN
 DSTSNSDSQP ISKLCNGSSV ENPNPKVLKS CEMVNFKNGI ENGQEESSN
 KKRSPVSNNE EGMLSFTSVL PCDSNHSDLE ASVAKEAESN RVVVEPEKKP
 RKRGRKPANG REEPLNHVEA ERQRREKLNQ RFYSLRAVVP NVSKMDKASL
 LGDAISYISE LKSKLQKAES DKEELQKQID VMNKEAGNAK SSVKDRKCLN
 QESSVLIEME VDVKIIGWDA MIRIQCSKRN HPGAKFMEAL KELDLEVNHA
 SLSVVDLMI QQATVKMGNG FFTQDQLKVA LTEKVGECF

> *Arabidopsis thaliana*(AT1G32640.1)

MTDYRLQPTM NLWTTDDNAS MMEAFMSSSD ISTLWPPAST TTTTATTETT
 PTPAMEIPAQ AGFNQETLQQ RLQALIEGTH EGWTYAIFWQ PSYDFSGASV
 LGWGDGYKYG EEDKANPRRR SSSPPFSTPA DQEYRKKVLR ELNSLISGGV
 APSDDAVDEE VTDTEWFFLV SMTQSFACGA GLAGKAFATG NAVWVSGSDQ
 LSGSGCERAK QGGVFGMHTI ACIPSANGVV EVGSTEPIRQ SSDLINKVRI
 LFNFDGGAGD LSGLNWNLDL DQGENDPSMW INDPIGTPGS NEPGNGAPSS
 SSQLFKSIQ FENGSSSTIT ENPNLDPTPS PVHSQTQNPV FNNTFSRELN FSTSSSTLVK
 PRSGEILNFG DEGKRSSGNP DPSSYSQGTQ FENKRKRSMV LNEKDVLSFG
 DKTAGESDHS DLEASVVKEV AVEKRPPKRG RKPANGREEP LNHVEAERQR
 REKLNQRFYA LRAVVPNVSK MDKASLLGDA IAYINELKSK VVKTESEKLQ
 IKNQLEEVKL ELAGRKASAS GGDMSSSCSS IKPVGMEIEV KIIGWDAMIR
 VESSKRNHPA ARLMSALMDL ELEVNHASMS VVNDLMIQQA TVKMGFRIYT
 QEQLRASLIS KIG

> *Nelumbo nucifera*(NNU_019107-RA)

MTEYRLPVMN LWTDDNASMM EAFMASDLSQ FSWAPTASAS TTTTATDPSR
 TTNQSQTSMF FNQDTLQQRL QTLIEGARES WTYAIFWQSS VDMSGASLLG
 WGDGYKYGEE DKMKRRVTVS PAEQEHRKKV LRELNSLISG VPASADEPVD
 EEVTDTEWFF LVSMTQSFIN GSGLPGQAFF ASSPVWLAGG ERLASSSCER
 ARQGQIFGLR TMVCIPSANG VVELGSTELI FHSSDLMNKV RVLNFNNNNN
 SDMGPWSTTI SVQTQHQNH HQQTQSFFT RELNFSEFGY EGSSARNGSA
 QSCKPESGEI LNYGERKKNS CSANGNLFSN NSQQFVADDK KKRSASSKGG
 NNEGMLSFTS GVVLPSSCVV KSSGGTADSD QSDLDASVRE AESSRVGEPE
 KRPRKRGRKP ANGREEPLNH VEAERQRREK LNQRFYALRA VVPNVSKMDK
 ASLLGDAIAY INELRTKLQA AESNKEGLQS QVDSLKKELA ASRYSGSPQ
 ADQDLKISNH QVSKLLDMEI EVKILGWEAM IRIQCNKKNH PAARLMTALK
 ELDLDVHYAS VSVVKDLMIQ QATVKMSSRV YTQEQLRIAL SSKVGDAR

> *Actinidia chinensis*(Achn084621)

MDYRLQPMNL WTDDNTSMME AFMTSDLTTL WPPPPSTAA AAPLPPLPPF
NQDSLQQHLQ ALIEGDRESW TYAIFWQSSV VDFNGGSM LG WGDGYK GEE
DKGKRKTASA SAVEQEHRKK VLRELNSMIS GAVSPADDAV DEEVTDT EWF
FLVSMTQSFV NGSGLPQAL FSSTPIWVAG AERLAGSNCE RARQQQVFGL
QTIVCIPSTN GVVELGSTEL IFQSSDLMNR VRVLF SFNGG EMGSWPAPAD
QGENDPSAFY LTDPSPVVE IRDSINTISA TTAIPNSNQK LTKQTT FESS STLTENPSAS
HVHNYNPHQQ NQQQQQEANA QSGD DNKKR SPTS RGSNEE GMLSFTSGVI
LPASRAVKSS GGGGSDHSD LEASVVREAE SSRVVDPEKR PRKRGRKPAN
GREEPLNHVE AERQRREKLN QRFYALRAVV PNVSKMDKAS LLGDAISYIN
ELKSKLQGA E SDKEEMRNQM ETMKKDLACK ESRHQPPPNQ DLKMLNHHGS
KLIDIDIDVK IIEWDAMIRI QCSKKNHPAA RLMLALKELD LDVHHASVSV
VNDLMSQQAT VKMGSRLYTQ EQLRIALMAK VADAR*

> *Gossypium arboreum*(Cotton_A_07316_BGI-A2_v1.0)

MKDYRLAPTM NLWTDDNAPV MEAFMSSDLS SLWPPPLSSA STSTPAASAA
GGGGGGGGHD LSISFLAQSQ PSVSLNQET LQRLQALIE GGRDCW TYAI
FWQSSYDYS G ATVLGWGDGY YKGEEDKKG KSKAYSSSVA EQEHRKKVLR
ELNSLISGST ATADDAVDEE VTDTEWFFLV SMTQSFVTGS GLPGQALYNS
SPVWVAGSGR LASSMCERAR QGQLFGLQTI VCIPSANGVV ELGSTELITQ
SSDLMNKVRI LFNFNNGIEA GSWSVSNNTA DQGENDPSSL WISEPNNGVE
PKDNNNNGNH NPSIQDPSTS SLTENPSSIH GGNQQQQPQG QSFR LNFSDY
GFDGNSSVKN GKFS AHLLKP ES GEILNFGE SKKSGNGNLF SANSQLVVEE
NKKKRSPTSR GSNEDGMISF TSGAVLPCSG VAKPGGCARD SDNSDIEASI VKEADSSRVV
EPEKRPRKRG RKPANGREEP LNHVEAERQR REKLNQKFYA LRAVVPNVSK
MDKASLLGDA ISYINELRTK VQDADSEKEE LLKQLDEMKK QLASKESCSM
APPPPDQDRN MSNKLIELDI DVKIIGLDAM IRIQCSKKNH PAARLMTALK
ELDL DVHHAS VSVVNDLMIQ QASVKMGSRF YTQEQLRIAL ASKVG DAR

> *Solanum pennellii*(Sopen08g001070.1)

MTDYRLWSNS NTTNTCDDNM MMDSFLSSDP SSFWPASTPN RPTPVNGVGE
TMPFFNQESL QQRLQALIDG ARESWAY AIF WQSSVVD FAS QTVLGWGDGY
YKGEEDKNKR RGSSSSAANF VAEQEHRKKV LRELNSLISG VQASAGNGTD
DAVDEEVTDT EWFFLISMTQ SFVNGNGLPG LAMYSSSPIW VTGTEKLAAS
QCERARQAQG FGLQTIVCIP SANGVVELGS TELIFQSSDL MNKV KYLFNF
NIDMGSVTGS GSGSGSCAVH PEPDPSALWL TDPSSSVVEP KDSLINSSSR
DVQLVYG NEN SENQQQQHCQ GFFTKE LNFS GYGFDGSSNR NKNGISCKPE
SREILNFGDS SKRFSGQSQL GPGPGLMEEN KNKKRSLGSR GNNEEGMLSF
VSGVILPTST MGKSGSDHS DLEASVVKEA VVEPEKKPRK RGRKPANGRE
EPLNHVEAER QRREKLNQRF YALRAVVPNV SKMDKASLLG DAIAYINELK
SKVQNSDL DK EELRSQIECL RKELTNKGSS NYSASPPLSQ DVKIVDMDID
VKVIGWDAMI RIQCSKKNHP AARLMAALKD LDL DVHHASV SVVNDLMIQQ
ATVKMGSRLY AQEQLRIALT SKIAESR

> *Solanum melongena*(Sme2.5_02104.1_g00004.1)

MELTEYRLWS SNTNTINSSD DNMMDAFLSS DPPSFWPGGN TTAPSNRTSI
SPAPENGGGD TMPFFSQESL QQRLQTLIDG AHESWAY AIF WQSSSVVDF

ASPSVLGWGD	GYKGEEDKN	KRKTNSSSPD	FLAEQEHRKK	VLRELNSLIS
GVQTAVGGAD	DSVDEEVTDT	EWFFLISMTQ	SFVNGNGLPG	LAMYSSSPIW
VTGAEGLAAS	QCERARQAQG	FGLQTIVCIP	SANGVVELGS	TELIQSSDL
MNKVKYLFNF	NIDMGSVTGS	GSGSGVVHPE	PDPSALWLTD	PSSSVVEANV
SKQLVFGNEN	SENGAKHSQQ	TQGFFTRELN	FSSYGFDGSS	TRNKNGKTSV
SCKPESGEIL	NFGDGNKRS	SLFSGQSKFG	PRPGLVEENK	NKKRGNNEEG
ILSFVSGVIL	PTSTTEKSGG	GGSDHSDLE	ASVVKETVVE	PEKKPRKRGR
KPANGREEPL	NHVEAERQRR	EKLNQRFYAL	RAVVPNVSKM	DKASLLGDAI
AYINDLKLKV	QNSESDKEDL	RSQIECLRKE	LANKGSSNYP	GPLPSNQDLK
IVDMDIDVKV	IGWDAMIRIQ	CSKKNHPAAR	LMAALKDLDL	DVHHASVSVV
NDIMIQQATV	KMGSRLYAQE	QLRIALTSKI	AESR	

> *Linum usitatissimum*(Lus10030970)

MTDYRLQSPA	TMNLWTDDNA	SVMEAFMNSD	LTSLWPPPPL	PPPPPPPHS
SASTSAGGGG	ATVNQDSLQQ	RLQALIDGAR	ENWTYAIFWQ	SSYDFSGASS
SSSSSTVLAW	GDGYKGDQ	KGNTTTSST	RNYTPAEQQH	RKKVLRELNS
LISGPNSASD	DAVDEEVTDT	EWFFLVSMQ	SFVNGVGLPG	QAFFNGFPAW
LVGSDRMAAA	SCERAKQGQV	FGLQTMVCIP	SQNGVVELGS	SELIPQSSDL
MNKVRVLFNF	STVDVSTVWP	QSNPDQGEN	PSSLWIADPT	RLDPPQNGAS
YPSSSSLTET	PAGIQNTQS	FFTRELNFGN	GSFGGNQPKP	ESGEILNFGD
NNSKRSSSNP	NLNHHNPNPQ	LEDSTNKNK	KKKPSPTSRG	SNNDEGMLS
TSGLVPSSGS	VKSNGGGMVD	SDVDQSDLEP	SVIKEVVVAE	PEKRPRKRGR
KPANGREEPL	NHVEAERQRR	EKLNQRFYAL	RAVVPNVSKM	DKASLLGDAI
SYIKELRSKL	QSTESSKEEL	ERQVESIRKQ	QPEHQEYNKK	AGSNEFGGGR
GGKTKAIEMD	IDVKIIGWDA	MIRIQCSKEN	HPAARLMAGL	KELDLDVHHA
SVSVVNDLMI	QQATVKMGS	FYTQEELRLA	LSNKVGGDTR	*

> *Camelina sativa*(Csa17g053090.1)

MTDYRLQPTM	NLWTTDDNAS	MMEAFMSSSD	ISTLWPPAAT	TTTTTTTTTT
TTTAPATAMD	IPAPAGFNQE	TLQQLRLQALI	EGTHEGWTYA	IFWQPSYDFS
GASVLGWGDG	YKGEEDKAK	PRQRSSSPF	STPADQEYRK	KVLRELNSLI
SGGVAPSDDA	VDEEVTDEW	FFLVSMQSF	ACGAGLAGRA	FSTGNAVWVS
GSDQLSGSGC	ERAKQGGVFG	MQTIACIPSA	NGVVEVGSTE	QIRQSSDLIN
KVRVLFNFDG	GAGDLSGVSI	GTLTRIAKT	TRLCGLMTRL	EHLGLTNRFE
NGSSSTITEN	PNPDPTSPV	HSQTQNP	KFSNNFSREL	NFSTSSSTLVKPR
SGEILSFGDD	GKRGSGNPD	SSYSQTQFE	NKRKKSPNED	KVLSFGDKTT
GSDHSDLEA	SVVKEVAVEK	RPKKRGRKPA	NGREEPLNHV	EAERQRREKL
NQRFYALRAV	VPNVSKMDKA	SLLGDAIAYI	NELKSKVVK	ESEKLQIKNQ
LEEVLKLELAG	RKASAGCGDM	SSSTCSSIKP	VGMEIEVKII	GWDAMIRVES
SKRNHPAARL	MAALMDLELE	VNHASMSV	VNDLMIQQATVK	MGFRIYTQEQ
LRASLISKIG	*			

> *Tarenaya hassleriana*(XP_010538366.1)

MTDYRLPATM	NLLTTDDNAS	MMEAFINSSD	LSDLWPPPPA	APASQPQNAP
AIVPPGLCQE	TLQQLRLHALI	EGAHEGWTYA	IFWQLSYDFS	GAAVLGWGDG
YYKGEEDKAC	PRPRATTSFS	SSADQEHRKK	VLRELNSLIS	GGALPSDDAV
DEEVTDEWF	FLVSMTQSFA	SGSGLAGKAF	STSNPVWVAG	SDQLSGSDCE
RAGQGGVFGL	QTIACIPSAN	GVVELGSTEI	IRQSSDLMNK	VRILFNLDGG
QWSGDPDQGE				

NHPSMWISDP ICGEPGTNEP GHGAPSSNSQ LFSKSLLMEN GSSSPITENP NPTLVHSLTQ
NLKYNDFSRE INFSTLNSNL ARPRSGEILN FGEDAKRCPG NPNPGLYSQG
SQFLTSDIKR KTKSIGITED TVLSFGVAGD KSGDSDHSDL EASVVKEAVP
EKPRKRGRK PANGREEPLN HVEAERQRRE KLNQRFYALR AVVPNVSKMD
KASLLGDAIA YINELKSKLQ KVESEKTQVE CQVESLKGEL AGQNANAGVV
GDVGDSYSSV SKRTGVEIEV KIIGWDAMIR IESSKRNYPA ARLMSALRDL
ELEVNHASMS VVNDLMVQQA TVKMGFRIYT QDQLRAGLIS KFG

> Tarenaya hassleriana(XP_010540785.1)

MAENRIPATM NLWTTDDNAS MMEAFMSSSD FSALWPPAVQ PQNPAASAGF
NQETLQQRQLQ ALIEGAPKSW TYAIFWQLSY DFSGAAVLGW GDGYKGEED
KAQPSRRSPR TFFSSPAEQE HRKRILSELN SLISGGAVPS DDAVNEEVTDTWFFLVSM
TSFSPSGSLA GKAYSTSNPV WVGSDQLSS SGCERARQGG VFGLQTIACI
PSANGVVELG STEIRQSSG LVNKVRTLK FDGGDLSEHH WSHDPDQGEN
DPSTWISDPT DLGPGTNEG HGAPSSSSQL FSSTITENLN PNPVYSQTQN PKYNNFSREI
NCWTTNSILA MPRSGEILSF GEDAKRSGP KPGPYSCQTQ FLSSDSKRKT
TKSIRINEDG VLSFGFTGEK FGSDHSDLE ASVVKEAAPE KRPRKRGRKP
ANGREEPLNH VEAERQRREK LNQRFYALRA VVPNVSKMDK ASLLGDAISY
INELKSKLQR AESDKTQFQC QLENLKRELA GRHANANAGI LDASDSSAV
SKPIGMEIEV KIIWDAMIR IESSKRNHPA ARLMTALKEL ELEVNHASVS
VVNDLMIQQA TVKLGFRPYT QEQLKAALIS KIG

> Tarenaya hassleriana(XP_010540787.1)

MAENRIPATM NLWTTDDNAS MMEAFMSSSD FSALWPPAVQ PQNPAASAGF
NQETLQQRQLQ ALIEGAPKSW TYAIFWQLSY DFSGAAVLGW GDGYKGEED
KAQPSRRSPR TFFSSPAEQE HRKRILSELN SLISGGAVPS DDAVNEEVTDTWFFLVSM
TSFSPSGSLA GKAYSTSNPV WVGSDQLSS SGCERARQGG VFGLQTIACI
PSANGVVELG STEIRQSSG LVNKVRTLK FDGGDLSEHH WSHDPDQGEN
DPSTWISDPT DLGPGTNEG HGAPSSSSQL FSSTITENLN PNPVYSQTQN PKYNNFSREI
NCWTTNSILA MPRSGEILSF GEDAKRSGP KPGPYSCQTQ FLSSDSKRKT
TKSIRINEDG VLSFGFTGEK FGSDHSDLE ASVVKEAAPE KRPRKRGRKP
ANGREEPLNH VEAERQRREK LNQRFYALRA VVPNVSKMDK ASLLGDAISY
INELKSKLQR AESDKTQFQC QLENLKRELA GRHANANAGI LDASDSSAV
SKPIGMEIEV KIIWDAMIR IESSKRNHPA ARLMTALKEL ELEVNHASVS
VVNDLMIQQA TVKLGFRPYT QEQLKAALIS KIG

> Capsella grandiflora(Cagra.3356s0080.1.p)

MSPTSVQITD YHLNQSTNGT TNLWSNDDDA SVMEAFIGGS DQSSLFPPSP PPPAQSQFNE
DTLQQLQAL IEGANESWTY AVFWQSSYDF AGEDDGGGES RNTAVLWGD
GYKGEENS RKKKSNPASA AEQEHRRVI RELNALISGG GGVVNNGGGS
DEAGDEEVD TEFVFLVSM TSFVSGTGLP GQAFNSNTI WLSGSNALAG
SSCERARQGG IYGLQTMVCV PCENGVELG SSEIHHQSSD LVDKVDTFN
FNNGGGESGS WAFNLNPDQG ENDPGLWIGE PDSVGVELGL VAPVMNNTGN
NSASNSDSQP ISKLCNGSSV EDPKPQVTKS SEMVSFKNGT DENGFSGQSR
FMEEDSNKKR SPVSNNDGEM LSFTSVLPRP AKSGDSNHSD LEASVVKEAE
SNRTVVEPEK KPRKRGRKPA NGREEPLNHV EAERQRREKL NQRFYSLRAV
VPNVSKMDKA SLLGDAISYI NELKSKLQKV ESDKEELQKV IEGMSKEAAN

EKSSVKERKC ANQESGVSIE MEVDVKIIGW DAMIRVQCSK RNHPGAKFME
ALKELDLEVN HASLSVVNDL MIQQATVKMG REFFTQDQLK VALMEKVGEC L*

>Arabidopsis lyrata(493087)

MSPTNVQLTD YHLNQSTNGT TNLWSTDDDA SVMEAFIGGS DHSSLFPPLP PVPVPPVND
NLQQRLQALI EGANESWTYA VFWQSSHDFG GEDDGVRTNN NNTTLLGWGD
GYYKGEEEEKS RKKKSNPASA AEQEHRKRVI RELNSLISGG GGGGGDEAGD
EEVTDTEWFF LVSMQTQSFVN GIGLPGQAFS NSNTIWLSGS NALAGSSCER
ARQGQIYGLQ TMVCVATGNG VVELGSSEII HQSSDLVDKV DTFNNGGGES
GSWAFNLNPD QGENDPGLWI SEPNNNGDES GLVAAPVMMN NGGNDSTSNS
DSQPISKLCN GSSVENQVLK SGEMVRVKNG MENGFSGQSR FMEEDKRSPV
SNNEEGMLSF TSVLPRPAKS GDSNHSDLEA SVAKEAESNR FVVEPEKKPR
KRGRKPANGR EEPLNHVEAE RQRREKLNQR FYSLRAVVPN VSKMDKASLL
GDAISYINEL KSKLQKAESD KEELQKQFDG MIKEAGNSKS SVKDRRCLNQ
ESSVLIEMEV DVKIIGWDAM IRIQCSKRNH PGAKFMEALK ELDLEVNHAS
LSVVNDLMIQ QATVKMGNGF FTQDQLKVAL MEKVGEC*

> Brassica napus (GSBRNA2T00131278001)

MSSTNVQLTD HHLNQSTNGT NLWSTTEDNA SVMEPLIGSE HSSLWPQPPL
TPPPPHVTEG TLQQRLQALI EGARESWTYA VFWQLSHDFA GEDISNTAAL
LSWGDGYYKG EEERKSRKRK PNPVSAAEQE HRKRVIRELN SLISGGGGGG
GTAGDEDVSD TEWFFLVSMQ QSFANGSGLP GRAFSSSRTI WLSGSNALAG
SSCERARQGQ VYGLETMVC I PTQNGVVELG SLEIIHQSS E LVDKVN SFFS
FNGGGGGGGES GSWAFNLNPD QGENDPATWI NEPNVTGIEP VLGAPATSNS
DSQTASKLCN GSSVEHPKQQ QNPQISSSGF VEGDSNKKKR CLVSDKEEEM LSFTSVLPLP
TKSNDNSRSD LEASVVKEAE SGRIAAEPEK KPRKRGRKPA NGREEPLNHV
EAERQRREKL NQRFYSLRAV VPNVSKMDKA SLLGDAISYI NELKAKLQKA
EADKEELQKQ IDGMSKEVGD GNVKSSVKDQ KCLEQDSGVS VEVEIDVKII
GWDAMIRIQG GKKDHPGAKF MEALKELELE VNHASLSVVN EFMIQQATVK
MGNQFFTQDQ LKAALMERV*

> Brassica oleracea(XP_013605597.1)

MSSTNVQLTD HHLNQSTNGT NLWSTIEDNA SVMEPLIGSE HSSLWPQPPL TTPPPPHVTEG
TLQQRLQALI EGARESWTYA VFWQLSHDFA GEDISNTAAL LTWGDGYYKG
EEERKSRKRK PNPVSAAEQE HRKRVIRELN SLISGGGGTV SSSGGSSDEA
GDEDVSDTEW FFLVSMTQSF VNGSGLPGRA FSSSRTIWL S GSNALAGSSC
ERARQGQVYG LETMVC IPTQ NGVVELGSLE IIHQSSDLVE KVNSFFSFNG
GGGGGESGSW EFNLNPDQGE NDSATWINEP IVTGIEPVLG APATSNSDSQ
TASKLCNGSS VEHPKQQQNP QISSSGFVEG DSNKKKRCLV SDKEEEMLSF
TSVLPLPTKS NDSNRSDLEA SVVKEAESGR IVAETEKKPR KRGRKPANGR
EEPLNHVEAE RQRREKLNQR FYSLRAVVPN VSKMDKASLL GDAISYINEL
KAKLQKAEAD KEELQKQIDG MSKEVGDGNV KSLVKDQKCL DQDSGVSIEV
EIDVKIIGWD AMIRIQCAKK NHPGAKFMEA LKELELEVNH ASLSVVNEFM
IQQATVKMGNG QFFTQDQLKA ALMERV

> Brassica napus(GSBRNA2T00080269001)

MSSTNVQLTD HHLNQSTNGT NLWSTTEDNA SVMEPLIGSE HSSLWHQPPL
TLPPPHVTEG TLQQRLQALI EGARESWTYA VFWQLSHDFA GEDISNTAAL

LSWGDGYK EEERKSRKRK PNPVSAAEQE HRKRVIRELN SLISGGGGTV
SSSGSSDEA GDEDVSDTEW FFLVSMTQSF VNGSGLPGRA FSSSRTIWL
GSNALAGSSC ERARQGQVYG LETMVCIPTQ NGVVELGSLE IIHQSSDLVE
KVNSFFSFNG GGGGGESGSW EFNLNPDQGE NDPATWINEP NVTGIEPVLG
APATSNDSQ TASKLCNGSS VEHPKQQQNP QISSSGFVEG DSNKKKRCLV SDKEEEMLSF
TSVLPLPTKS NDSNRSDLEA SVVKEAESGR IVAEPEKKPR KRGRKPANGR
EEPLNHVEAE RQRREKLNQR FYSLRAVVPN VSKMDKASLL GDAISYINEL
KAKLQKAEAD KEELQKQIGG MSKEVGDGNV KSSVKDQKCL DQDSGVSIEV
EIDVKIIGWD AMIRIQCGKN NHPGAKFMEA LKELELEVNH ASLSVVNEFM
IQQATVKMGN QFFTQDQLKA ALMERV*

> *Gossypium hirsutum*(Gh_D12G2074)

MTDYRFASTM NLWTDDNASV MEAFMSSDLS ALWQPPPQSS ASTSTPAVVA
SSAAAAASGA PDLLKSSVAP QSHPSVALFN QETLQQRLLQ LIEGAHECWT
YAIFWQSSYD YSGSAVLGWG DGYKGEEDK GKRKLKTSSV VAEQEHRKKV
LRELNSLISG STAPTDDAVD EEVTDTEWFF LVSMQTQSFVN GGGLPGQALF
NSTPVWVVG ERLASSTCER VRQGQVFLQ TMVCIPSANG VVELGSTELI
TQSSGLMNKV RVLNFNNSI EAGYLSMCNN IADEGENDPS SLWISDPNSG
VEYKESHNNN QNQIEKSIQ FHDNPSSSSL TENPSSIQQQ HSQNFGLNFS DYGFDRSNSV
RNGNSSHLFK PESEETLNF ESKRSGNVVE ENKKKTSPTS RGSHEGMLS FSSAVFLPSS
GMMKSSGGAG DSDNSDIEAS VVKEAECVKP LEPEKKPRKR GRKPANGREE
PLNHVEAERQ RREKLNQRFY ALRAVVPNV KMDKASLLGD AISYINELST
KVQNADLEKQ ELQKQLEAMK KELAKKDSCP QNPKTSNHLG NRLIELETEV
KVIGWDAMIR IQCKRKNHPA ARLMAALKEL NLDVQHASVT VVNDLMIQQA
TVKMGNPFYT QEQLRLALIS KIGSEI

> *Populus trichocarpa*(Potri.003G092200.2)

MTDYRLPPTM NLWTDDNGSV MEAFMNSSDL SSLWAPPQT SASFSTPAAA
AAAQPSDKTM LNQETLQQR QALIEGARES WTYAIFWQSS YDCSGASVLG
WGDGYIIGEE DKGKGRMKNS ASSAAEQEHR KKVLRRELNSL IAGPSSVTDD
AVDEEVDTE WFFLVSMQTS FVNGSGLPGQ ALFNGSPVWV AGSERLGTSP
CERARQGQVF GLQTLVCIPS ANGVVELGST ELIFQSSDLM NKVKVLFNFN
SLEVGSWPIG TTNTDQGEND PSSWLTDPE TKDGNAGIPS TTPAHQTANN
NNHHSSSKSS QPSTAAAAAD SYSESFHSRV EFWGAQHPES GEILNFGESK RSPSSANGNF
YSGLVTEESN KKKKSPASRG GNEEGMLSFT SGVILSSSGL VKSSGGTGGD
SDHSDLEASV VKEADSSRVV EPEKRPRKRG RKPANGREEP LNHVEAERQR
REKLNQRFYA LRRAVVPNVSK MDKASLLGDA ISYINELKTK LQSAESSKEE
LENQVESMKR ELVSKDSSSP PNQELKMSND HGGRLIDMDI DVKISGWDAM
IRIQCKMNH PAARLMSALK DLDLDVQYAN VTMNDLMIQ QATVKMGNRY
YTQEELKVAI STKVGDA*

> *Cajanus cajan*(C.cajan_40694)

MTEYRSPPTM NLWTDDNSSV MEAFMSSTD SSLWLAPPQS AASTTTPGPD
TTRAPPPPPP SQSQSLLNQE TLQQRLLQTL EGARESWTYA IFWQSSYDYS
SGASLLGWGD GYKGEEDKG KGKAPKTTSL AEQDHRKKVL RELNSLISGP
SASPDDLDEE VTDTEWFFLV SMTQSFVNGT GLPGQAFFNS SPVWVAGADR
LSESACERAR QGQVFLQTL VCIPSANGVV ELASTEVIQ NPDLMNKVRD

LFNFSNPDAG SWPLNCVATD QGENDPSSLW LNPSSSVEIR DSAVAPASAN
 ATVNKALQFE TPGSSTLTEA PSVVHVPHGN AQHPSQNNKG FFPRELNFSS SLKPESGEIL
 SFGESKKSFL PAVTVEEKNK RSSTVSRSTI DDGMLSFTSG VILPASNMKS AATGGDS DHS
 DLEASVVKEP DGGRVVEPEK RPRKRGRKPA NGREEPLNHV EAERQRREKL
 NQRFYALRAV VPNVSKMDKA SLLGDAISYI NELKSKLNGL ESEKGDLEKQ
 LDSAKKELEL TVTTKNPPP PPENEADKT TAMLVDLDID VKIIGWDAMI
 RIQCSKKNHP AARLMAALKE LDLEVHHASV SVVNELMIQQ ATVNMGNRFY
 TQEQLLVALS SKVG DAR

> Solanum pimpinellifolium(Sopim08g005050.0.1)

MTDYRLWSNT NTTNTCDDTM MMDSFLSSDP SSFWPASTPN RPTPVNGVGE
 TMPFFNQESL QQRLQALIDG ARESWAYAIF WQSSVVD FAS QTVLGWGDGY
 YKGEEDKNKR RGSSSSAANF VAEQEHRKKV LRELNSLISG VQASAGNGTD
 DAVDEEVTDT EWFFLISMTQ SFVNGNGLPG LAMYSSSPIW VTGTEKLAAS
 QCERARQAQG FGLQTIVCIP SPESREILNF GDSSKRFSGQ SQLGPGPGLM
 EENKNKNKNK KRSLGSRGNN EEGMLSFVSG VILPTSTMKG SGDS DSHSLE
 ASVVKEAVVE PEKKPRKRGR KPANGREEPL NHVEAERQRR EKL NQRFYEL
 RSQIECLRKE LTNGGSSNYS ASPPLNQDVK IVDMDIDVKV IGWDAMIRIQ
 CSKKNHPAAR LMAALKDLDL DVHHASVSVV NDLMIQQATV KMGSRLYAQE
 QLRIALTSKI AESR*

> Solanum lycopersicum(Solyc08g005050.2.1)

MTDYRLWSNT NTTNTCDDTM MMDSFLSSDP SSFWPASTPN RPTPVNGVGE
 TMPFFNQESL QQRLQALIDG ARESWAYAIF WQSSVVD FAS QTVLGWGDGY
 YKGEEDKNKR RGSSSSAANF VAEQEHRKKV LRELNSLISG VQASAGNGTD
 DAVDEEVTDT EWFFLISMTQ SFVNGNGLPG LAMYSSSPIW VTGTEKLAAS
 QCERARQAQG FGLQTIVCIP SPESREILNF GDSSKRFSGQ SQLGPGPGLM
 EENKNKNKNK KRSLGSRGNN EEGMLSFVSG VILPTSTMKG SGDS DSHSLE
 ASVVKEAVVE PEKKPRKRGR KPANGREEPL NHVEAERQRR EKL NQRFYEL
 RSQIECLRKE LTNGGSSNYS ASPPLNQDVK IVDMDIDVKV IGWDAMIRIQ
 CSKKNHPAAR LMAALKDLDL DVHHASVSVV NDLMIQQATV KMGSRLYAQE
 QLRIALTSKI AESR*

>Unigene0009899

MDEFIISPSSSSSFVSSLSQEISTSLEQKLQLIIQS QPDTWSYAIFWQALNEESGHFSLVWGD
 GHFEGSKSAPLKQHTDPESPLLLERRKLIRGLHLQALIREVRSDMDMTEGVDEDVSDAEW
 FYIMSLAKTFSSRDGVVGKAFSSGSLVWLN GESQLQFYKCERAKEAHTHGIVTMVCPTS
 NGVLELGSTVLIKENWGLVQQA KSLFDSEPALPNNESILFDQDISFADTGIVSEPAVLNTVV
 PVQSQQLRSDYPDPGCGGSVRIVKKRGRKPGMGRET PNVNHVEAERQRREKL NHRFYALR
 AVVPTVSKMDKASLLSDAVSYINSLNAKIEEMERQLHG HESKRKVKVEMSSDTATDNHSTT
 TTATTTTLTTTVPPSSIDQIESSSYQVPLEVEIKFVGTDAMIRIQSDNNNYP SARL MYALREL
 ELSVQHASISCVNGLMIQDVVVKVPNGLISSGDELKASLKEKM

> Populus trichocarpa(Potri.002G176900.1)

MEELIISPSS PSSPVLSQE TPPTLQQLRQ FIVQNQPDWW SYAIFWQTSN DDSGRIFLGW
 GDGHFQGSKD TSPKPNTFSN SRMTISNSER KRVMMKGIQS LIGECHDLDM
 SLMDGNDATD SEWFYVMSLT RSFSPGDGIL GKAYTTGSLI WLTGGHELQF
 YNCERVKEAQ MHGIETLVC I PTSCGVLELG SSSVIRENWG LVQQA KSLFG

SDLSAYLVPK GPNNSSEPT QFLDRSISFA DMGIIAGLQE DCAVDREQKN
 ARETEEANKR NANKPGLSYL NSEHSDSDFP LLAMHMEKRI PKKRGRKPGL
 GRDAPLNHVE AERQRREKLN HRFYALRAVV PNVSRMDKAS LLSDAVSYIN
 ELKAKVDELE SQLERESKKV KLEVADNLDN QSTTTSDVQS ACRPNSAGGA
 GLALEVEIKF VGNDAMIRVQ SENVNYPASR LMCALRELEF QVHHASMSCV
 NELMLQDVVV RVPDGLRTEE ALKSALLGRL E*

> *Azadirachta indica*(Neem_11684_f_1)

MEDLIISPSS SSSLVSLTPE TPPPTLQQL QFIVQSQPDC WAYAIFWQTS NDDHGHLFLA
 WGDGHYQGTK DTSPKISNVG NLPMPALNLE RKRVIKGIQQ SFIGDHQTHE
 IDMSMMNGSD VTDPEWFYVM SVARSFSAGD GIPGRALSTG SLVWLTGSHE
 MQFYNCERAK EAQMHGIETF VCIPTSCGVLELGSCDVIRE NWGLVQQVKS
 LFSSDLTALV TKQLNPTPGP IQFLDRNISF ADIGIIAGIQ EEDTTPEEKK NKQQKEAKES
 TVKPGQPSYV DSEHSDSDCP LLTVSNIEKR TPKKRGRKPG LGRETPLNHV
 EAERQRREKL NHRFYALRAV VPNVSRMDKA SLLSDAVSYI NELKGKIDEL
 ESQIQRESKK VKLEISDNMD NQSTTTSDVQ TRASSGSGSG SGGGSNLEVE
 VKIVGKDAMI RVQSENVNYP AARVMSALRD LEFPVHHASM SCVNDLMLQD
 FVVRVPDGLR TEDGLKSALL RLEQ

> *Juglans regia*(WALNUT_00017075-RA)

MEDLIISPSS SSSLVSNLPQ EAPPTLQQL QFIVQSQPEW WAYAIFWQTA NDDNGHVFLA
 WGDGHFHHGNK DTSRKLSHSN NTHPIVLHS ERKNFMRDIQ SMIGESNQDI
 DNMSINADVS DAEWFYIMSL TRSFSAGEGV PGRAYSTNSL VWLTGGRDQL
 FYNCERAKEA QMHGIETLIC IPTSSGVLEM GSPNIIRENW GLAQQAKSLF
 GTDLVGMLPR QQSPSSGPIQ FLERNISFAD IGIIAGVPGD DNSGEEKKKG AIGGKKQSIK
 GGQSPYVDSE HSDSDCPLIA LNVEKRTPKK RGRKPGLGRD TPLNHVEAER
 QRREKLNHRF YALRAVVPNV SRMDKASLLS DAVSYINELK TKIDELESQLE
 QRDSKKVKLE LADTMDNQST TTSVNQTRPN SSGFALEVEV KIVGVDAMIR
 VQSENVNYP ARLMCALRDL EFQVHHASMS CVNELMLQDA VVKVPDGLRS
 EEGLKTALLR RLEQ

> *Salix purpurea*(SapurV1A.0003s0670.1.p)

MEELIISPSS SSPLVSLSQE TPSTLHQRLQ LVVQNQPDWW SYAIFWRTLN DDSGRLFLGW
 GDGHFQGSKD TSPKLNTVSN SRMTISNTER KRGMMKGIQS LIGECHDLDM
 SLMDGTDATD SEWFYVMSLT RSFPPGDGIL GKAYTTGSLI WLTGGHELQF
 YNCERAKEAK MHGIETLVC I PTSCGVLELG SSCAIRENW LVQQAKSLFG
 SDLNAFLVPK GPSNPSEPT QFLERNISFA DIGIVAGLQE DGASDRGQKS
 AHETEAAKHH GANKAGQSYL SSEHSDSDFP LLAMHVEKRV PKKRGRKPVL
 GRDAPLNHVE AERQRREKLN HRFYALRAVV PNVSRMDKAS LLSDAVSYIN
 ELKAKVDELE SQLERDSESK KVKLEVADNT DNQSTTTSDV QSACRPNSSP
 GGAAHEVEVK FVGSDAMIRV QSENVNYPAS RLMCALRELE FQVHHASMSC
 VNELMLQDVV VRVPDGLRAE EALKSALLGR LE*

> *Sesamum indicum*(XP_011094312.1)

MDDLIVSPSS SSSILSSVSP HQQLPPTLQK RLQYILQHQP DWWAYAILWQ TSKDDNGRIS
 LSWADGHFQG TKEKNPKSGS QPERKKVMRG IQALIGENPD ITGPVDGDVT
 DAEWFYVMSL AQSFSLGDGV VGKAFNSGSL IWLSGGNQLR FYNCQRAKEA
 QIHGMQTMVC IPTLNGVLEL GSDVMITENW SLVQQVKSLEF ESSSDPINNG

STHALKFPEK	TISFADTCLL	PNLPDEAAKT	TPVLGKKQEQ	PNSKAQKAQI
FSYLDSEHSD	SDCQFFLPET	VETKRTPKKR	GRKPNLGRDA	PLNHVEAERQ
RREKLNHRFY	ALRSVVPNV	RMDKASLLSD	AVSYIKELKS	KVEELETQLQ
RESKKVKTET	TAETLDNQST	TTSVDQVGPI	TSLLEVEVKI	VGVDGMIRVQ
SDNGNYPAA	LMDAIRELEL	QVHHASMSCV	NDLMLQDVVI	RVPDGLRCEK

ALKAALIRRL EAQ

> *Populus trichocarpa*(Potri.014G103700.2)

MEGLIISPSS	SSSLVLSHE	TPPTLQQLRQ	FIVQSQPDRW	SYSIFWQASK	DDSGQIFLAW
GDGHFQGSKD	TSPKLSTNN	SRMSTSNER	KRVMKGIHSL	LDECHDLMS	
LMDDTDSTDT	EWFYVMSLTR	SFSPGDGILG	KAYTTGSLIW	LTGGHELQFY	
NCERVKEAQM	HGIETLICIP	TSCGVLELGS	SCVIRENWGI	VQQAQSLFVS	
DLNSCLVPKG	PNNPCQEQI	FLDRNISLAD	GGIAGLQED	DHTIEHGEKR	
TQERAETKKD	NVNKLQSYV	DSEHSDSDFH	FVAVNIERRI	PKKRGRKPGL	
GRGAPLNHVE	AERQRREKLN	HRFYALRAV	PNVSRMDKAS	LLSDAVSYIN	
EMKAKVDKLE	SKLQRESKKV	KLEVADTMDN	QSTTTSVDQA	ACRPNSNSGG	
AGLALEVEVK	FVGNDAMIRV	QSDNVNYPGS	RLMSALRDLE	FQVHHASMSS	

VNELMLQDVV VRVPDGLRTE EALKSALLGR LEQ*

> *Populus trichocarpa*(Potri.014G103700.1)

MEGLIISPSS	SSSLVLSHE	TPPTLQQLRQ	FIVQSQPDRW	SYSIFWQASK	DDSGQIFLAW
GDGHFQGSKD	TSPKLSTNN	SRMSTSNER	KRVMKGIHSL	LDECHDLMS	
LMDDTDSTDT	EWFYVMSLTR	SFSPGDGILG	KAYTTGSLIW	LTGGHELQFY	
NCERVKEAQM	HGIETLICIP	TSCGVLELGS	SCVIRENWGI	VQQAQSLFVS	
DLNSCLVPKG	PNNPCQEQI	FLDRNISLAD	GGIAGLQED	DHTIEHGEKR	
TQERAETKKD	NVNKLQSYV	DSEHSDSDFH	FVAVNIERRI	PKKRGRKPGL	
GRGAPLNHVE	AERQRREKLN	HRFYALRAV	PNVSRMDKAS	LLSDAVSYIN	
EMKAKVDKLE	SKLQRESKKV	KLEVADTMDN	QSTTTSVDQA	ACRPNSNSGG	
AGLALEVEVK	FVGNDAMIRV	QSDNVNYPGS	RLMSALRDLE	FQVHHASMSS	

VNELMLQDVV VRVPDGLRTE EALKSALLGR LEQ*

> *Theobroma cacao*(Thecc1EG005064t1)

MEELIISPSS	SSSLVSFSQE	TPPSTLQQLRQ	QFVIQSQQDW	WAYAIFWQTS	NDEHGRLFLT
WGDGHFQGTK	DTSPKLGANI	SNIPGLNNER	RKVMKGIQAL	IGDNHDIDMS	
MIDGTDITDA	EWFYVMSLTR	SFSAGDGIPG	KALSTGSLVW	LTGAHELQFY	
NCERAREAQM	HAIETLVCIP	TSCGVLELGS	SEMIRENWGL	VQQVKSVEFS	
DLIGLVPKQS	NPNNLTGP	IQFLDRNISF	ADIGIAGVQ	EEDASPDNRT	KQENHNNQTK
KDSTKPGQSS	YVDSEHSDSD	CPLLAMNIE	KRTPKKRGRK	PGLGRETPLN	
HVEAERQRRE	KLNHRFYALR	AVVPNVSRMD	KASLLSDAVS	YINELKAKIE	
ELESQQLREC	KKVKVEMVDA	MDNQSTTTSV	DQAARPSNSS	SGTAGSGGLE	
FDIKIMGDA	MIRVQSENVN	YPSARLMIAL	RDLEFQVHHA	SMSCVNELML	

QDIVVRVPDG LRTEGLKSA LLRRLEQ*

> *Ricinus communis*(27964.m000352)

MDELIISPSS	SSSLVSFSQG	TPPTLQQLRQ	FILQSQPDWW	AYAIFWQTLN	ADNGRIFLAW
GDGHFQGTRD	TSPNQATINN	KHIQSHRISS	LNSEKRGMK	GIQALIGSDN	HDIDVSIMDG
SNATDAEFY	VMSLTRSFSA	GDGVPGKALS	TGSLVWLTGR	QDLQFYNCER	
AKAQMKGIE	TLVCIPTCDG	VLELGSSDLI	RENWGVVQQA	KSLFGSDMMP	

NNPSPPIHLL	DMNISFADIG	IIAGVQEGDT	TTHANQKPQE	NDAKKESNNA
ESEHSDSDSS	LLAAASLDKK	TPKKRGRKPA	LGRDTPLNHV	EAERLRREKL
NHRFYALRAV	VPNVSRMDKA	SLLSDAVCYI	NELKAKIEEL	ESQLHRKSSK
RVKLEVADNT	DNQSTTTSED	QAASKPISTV	CTTTGFPPEI	EVKILANDAM
IRVQSENVNY	PAARLMTALR	DLEFQVHHVS	MSTVNELMLQ	DVVVRVPDGL
RTEEDLKTAI	FRRLEQ			

> *Prunus persica*(Prupe.2G195300.2.p)

MEELIISPSS	SSSLVSLPQE	TSPSLQQRLQ	FIVQSQPDWW	SYAIFWQPSN	DHQDNGRLFL
TWGDGHFQGS	KDPSAKHHNN	PYGILSERRK	ILKGIQSLIN	DNNPDHHQDS	
IMDHMGLDAD	VSDGEWIFYVM	SLARSFSIGE	TTISASVPGK	AFSSGSVVWL	
TGSHELQFYN	CDRAKEAQM	GFQTLVCIPT	PTGVLEMGGSS	DSIRENWSLV	
QQAQSLFGSD	LICSVADQPD	PETRSPIDFI	NRNFSFADIG	IIAGVEEEEED	DKKEVALDLT
MMKRKGGNPG	TGLYPDSNAN	PKPDYSDSDG	PKRTPKKRGR	KPGLGRDTPL	
NHVEAERQRR	EKLNHRFYAL	RAVVPNVSRM	DKASLLSDAV	SYINELKTKV	
DELESQVQRE	SKKVKVETGD	NLDIQSTTTS	VEQIAKPPSS	SANGSGLEVE	
VKIVGTDAMI	RVQSENVNYP	SARLMAALRD	LELQIHHASL	SCINELMLQD	
IVLKVPENMR	SEDSLKSALL	RILDQN*			

> *Prunus persica*(Prupe.2G195300.1.p)

MEELIISPSS	SSSLVSLPQE	TSPSLQQRLQ	FIVQSQPDWW	SYAIFWQPSN	DHQDNGRLFL
TWGDGHFQGS	KDPSAKHHNN	PYGILSERRK	ILKGIQSLIN	DNNPDHHQDS	
IMDHMGLDAD	VSDGEWIFYVM	SLARSFSIGE	TTISASVPGK	AFSSGSVVWL	
TGSHELQFYN	CDRAKEAQM	GFQTLVCIPT	PTGVLEMGGSS	DSIRENWSLV	
QQAQSLFGSD	LICSVADQPD	PETRSPIDFI	NRNFSFADIG	IIAGVEEEEED	DKKEVALDLT
MMKRKGGNPG	TGLYPDSNAN	PKPDYSDSDG	PKRTPKKRGR	KPGLGRDTPL	
NHVEAERQRR	EKLNHRFYAL	RAVVPNVSRM	DKASLLSDAV	SYINELKTKV	
DELESQVQRE	SKKVKVETGD	NLDIQSTTTS	VEQIAKPPSS	SANGSGLEVE	
VKIVGTDAMI	RVQSENVNYP	SARLMAALRD	LELQIHHASL	SCINELMLQD	
IVLKVPENMR	SEDSLKSALL	RILDQN*			

> *Populus euphratica*(CCG010847.1)

MEGLIISPSS	SSSLVLSLSE	TPPTLQQRLQ	FIVQSQPDRW	SYAIFWQASQ	DDSGQIFLAW
GDGHFQGSKD	TSPKLSTTNN	SRMSTSNER	KRVMKGIHSL	LDECHDLDMS	
LMDGTDSTDI	EWFYVMSLTR	SFSPGDGILG	KAYTTGSLIW	LTGGHELQFY	
NCERVKEAQM	HGIETLICIP	TSCGVLELGS	SCVIRENWGI	VQQVRSFLVS	
DLNPCLVPKG	PNNPCQEPIQ	FLDRNISLAE	GAIHAGLQED	DNTIEHGEKR	
TQERAETKKD	NVNKLQSYV	DSEHSDSDFH	FVAVNIEKRI	PKKRGRKPGL	
GRGAPLNHVE	AERQRREKLN	HRFYALRAVV	PNVSRMDKAS	LLSDAVSYIN	
EMKAKVDKLE	SQLQRESKKV	KMEVADTMDN	QSTTTSVDQA	ACRPNSNSGG	
AGLALEVEVK	FVGNDAMIRV	QSDNVNYPAS	RLMSALRDLE	FQVHHASMSS	
VNELMLQDVV	VRVPDGLRTE	EELKSALLGR	LEQ		

> *Carica papaya*(evm.model.supercontig_141.19)

MDELIISPSS	SSSLVSFSQE	PTTALQQRLQ	FIVQTQPESW	AYAIFWQTLN	DDNGRIYLGW
GDGHFQGAKE	NNTSTNTNHH	LFHTHRRKDV	MKGIQALLGD	THNDMINVSM	
MDGSDVTDVE	WFYVMSLTRS	FPAGDGGPGK	ALTTGSLVWL	TGGHELQLYS	
CDRAKEANMH	GIETLVFVPT	SNGVLELGSS	DLIRENWSLV	QQVKSLFASD	

LITLVSKQPS PNPTPIFLD RNISFADIGI IAGVQEEDAS PKDRDNKEPR KDSSPAKPGQ
SSFVDSNSD SDCPLMNNVG PIVEKKLHKK RGRKPGLGRE TPLNHVEAER
QRREKLNHRF YALRAVVPNV SRMDKASLLS DAVYYINELK GKIEELESQ
QKESKKVKLE MADNLETQST TTSVDQTKSN NSGTGSGGSN IGGGLEIEVK
VVGNDVIRV QSENVNYPAA RLMSALRELE FQVHHASMSC INELMLQDIV
VRVPEASRTD QDALKSALLR RLDHQ*

> Castanea mollissima(augustus-gene-0.8)

MEELIIPSS SSSLVSLPQE TPPTLQQLQ FIVQSQPEWW AYAIFWQTTN ASDNGHHLFL
SWADGHFQGT KDTSPKLSHI NTHYPISMLH SERRKFMRDI QSSILSTTTT TNNDNSLDHM
SINADVTDE WFYVMSLTRS FSVGDGVLGK AFGTNSLVWL TGGHELQFYN
CERAKEAQM HGVETLVCIPT SCGVLELGSQ DIIRENWGLV QQVKSFFGSD
LIGLVPKQAN QSSPSPIQL DRNISFADIG IAGIQEEDD SQEEHRKGGV LEGSAKKECV
KLGGSQSYVD SEHSDSDCPL IAVNNIEKRT PKKRGRKPGL GRDTPLNHVE
AERQRREKLN HRFYALRAVV PNVSRMDKAS LLSDAVSYIN ELKTKIDELE
SQLQRESKKV KLEMTDTMDN QSTTTSVDQT RPNVTNSGSV LEVEVKMVGP
DAMIRVQSEN VNYPGARLMG ALRDLELQVH HASMSCVNEL MLQDVVVKVP
EGLRAEEALK SALLGRLEQ

> Salix purpurea(SapurV1A.0162s0110.1.p)

MEELIIPSI SSSLVSLSHE TPPTLQQLQ FIVQSQPDWW SYAIFWQTSK DDSGQTFLAW
GDGHFQGSKD TCPKPSTVHN SRMSTNSER KSVMKGIQPL IDECHDLDT
LMDDTDATDS EWFYVMSLTR SFSAGDGILG KAYTTGSLIW LTGVHELQFY
SCERVKEAQM HGIETLICIP TSCGVLELGS SNLIRENWGI VQAKSLFGS DLTSLVSKG
PSNPCQEQ FLDGNISVAD GGTVAGLQEE DHTTDHGEKK AQERAEAKKD
SVNKPQGSYV DSEHSDSDIH LAAVNIEKRV PKKRGRKPGL VRDAPLNHVE
AERQRREKLN HRFYALRAVV PNVSRMDKAS LLSDAVSYIN EMKAKVDELE
SQLQRESKKL KLEVSDNTDN QSTTTSVDQA ACRPSSNSGG AGLALEIEVK
FVGNDAMIRV QSETVNYPGS RLMSALRDLE LQVHHASMS LNELMLQDVV
VRVPDHGLRT EEALKSALLG RLEQ*

> Fragaria vesca(mrna18651.1-v1.0-hybrid)

MDDLIIPTS SSSLVSLPHE PATLQQLQF ILQSQPELWS YAIFWLASND VENGRLLLGW
GDGHFQGPED PSPDLNNRLS SSGDGSLLHS DRRKILKGIQ SILNDTNNNN
PELMDNFMAL NGDVSDAEW FYVMSLTRSF AIGDGSVPGK AFGSGSFVWL
SGAHELQFNS CERAKEAQIH GIETLICIPT SNGVLEMGS GLVRENWGLI
QAKSLFGSD QPDPETRPLE FINRNFSAD IGIVAGVQEE DNSSYNDDKK
HVLGYNKKKN NNLQNPTPA DFADSDFQLK RTPKKRGRKP GMGRDTPLNH
VEAERQRREK LNHRFYALRA VVPNVSRMDK ASLLDAVSY INELKAKVDE
LESQLESK KVKVEMADNL DNQSTTTTAS VEQTQTVTPD NNNNNNNGSG
LEIEVKIVGT DAMIRVQSEN VNYP SARLMT AMRDLEFQIH HASLSSINDL
MLQDIVVKVP DNMKNEEGLK AALLGILDQN E

> Morus notabilis(XP_010100678.1)

MEDLMISPSS SSSLISLSTH EASPPTLQQR LQFIVKSQPD WWAYAIFWQT SNDDNGRLFL
AWGDGHFQGV KDTISPINSN SSNNNNHYSA VSAGIHAERR KMLKGIQSLI
NDNNLPIDN IMAINGDVTD AEWFYVMSLT RSFLAGDGPV GKAFSTGSLV
WLTGVHELQF YNCERAKEAQ MHGIETLVC PTSTGVLELG SSEIIRENWC

LVQQVKSLFG SDLYTNQNDT GPIQFLNGNI SFADIGIAG VQEEDKYSPD EIKKKETLDL
MMMKKRKKKE GNSAYVDSEH SDSDCPLITV NNNNNNNIST GEKRAPKKRG
RKPGLGRDTP LNHVEAERQR REKLNHRFYA LRAVVPNVSR MDKASLLSDA
VSYINELKAK IDDESQQLR DQSNKKVKLE AADTMSLDNQ STTTSVDQTK
PPNSNSSSNK SNNINSVTGN INGLEIEVKI IGTDAMIRVQ SENVNYP SAR LMGALRDLEF
QVHHASVSSI NDLMLQDVVV KIPEGIVLMR TQEGLSALL RRLEQ

> Manihot esculenta(XP_010100678.1)

MEELIISSSS SSSSSSSLVP SSQETPTTLH QRLQSMQSQ PDWWAYAIWF QTSNDETART
FLAWGDGHFQ GTRDTSPTLT TINNRLQHRI PTFNFESKRS VKGIQALIGE NLDIDVSMMD
DNDVPDVEWF YVMSLTRSFL AGEKIPGKAL STGSLVWLTG AQELQFYNCE
RAKEARMHGL QTLVCIPTFN GVLELGSSDM IRENWGLVQQ VKSLFGSDLA
DLMPKPNPNT TVPVQLDMN ISFADIGIA GIKGDDDALE ERFAQELEAK
KESAKAGLPY VHSEHSDSDC PFLAPMTINK RAPKKRGRKP GQGRDTPLNH
VEAERQRREK LNHRFYALRA VVPNVSRMDK ASLLSDAVSY IKELKAKIEE
LESQKRENS KRVKLEGTDN TDNQSTTTTV DQAGPNTDGS EFQLEIDVKI
LGNDAMIRVQ SENVNPNGAR LLGALRDLEL HVHHASMSTV NELMLQDVMV
RLASGFTTEE ELKSTLLQIL EE*

> Pyrus bretschneideri(Pbr018411.1)

MEELIISPSS SSSLVSLPQE NHPSLQQLRQ FILQSQPDWW SYAIFWQTSN DRQVDNGCLF
LTWGDGHFQG PKDASPNNHH HNPYGVLSER RKILKGIQSL INDNNPDNH
HQDLILDNMG LNADVTDVEW FYVTSLARSF SVGESISTNV PGKAFSSGSL
VWLTGSHELQ FYNCERAKEA QMHGIQTLVC IPTPTGVLEL GSSDLIRENG
NLVQQTESLF GADVWVGQPD PGTRSPIDLI NRNFSFADIG IAGVEEEDD
KKEVALDITA MKKKCGRACP GLLQLSNLNS LNPEHSDSEF PKRTPKKRGR
KPGLGRDTPN NHVEAERQRR EKLNRHFYAL RAVVPNVSRM DKASLLSDAV
SYINELKSKV DELESQVQRE SKKVKVETGD NLDNQSTTTS VEQTRPPNSS
ASGSTGLEME VKIVGSDAMI RVQSANVNYP SARLMAALRD LEFEIHHASL
SCMNELMLQD VVVKVPDNMR SEESIKAALL KILDQN*

> Actinidia chinensis(Achn310341)

MDEFIISSSS SSSFVSSQES SPTLQKRLEF IVQNQPEWWA YAIFWQSSKD DHGRLLLAWG
DGHFQGTKDA VPKHIATLHE PMDGEVVTDA ECFYVVSLSR SFSAGDGPVW
KSFSSGSLVW LAGTHQLQFY NCERVKEAQI HGIQTLVCIP TSCGVVELGS
CDVITENWGL VQQAQSLFGS DLISVPKPNP PSDGSIQFVE GNVSFADIGI
ITGLEEDPMN SESEHSDSDC AAVKERTEQQ QKIPKKRGRK PGVGRETVPN
HVEAERQRRE KLNHRFYALR AVVPNVSRMD KASLLSDAVS YIQELKAKVE
DLESQVHDPR DSCKKVKMEV ADNQSTTTSV DHSLSMSGVP LEVEVKIVGL
DAMIRVQSDN ANHPTARLMD ALRDLELSVH HGSMSSVNDL MLQDVVIRAP
QGLSGEDELK AALLKRLG*

> Gossypium arboreum(Cotton_A_15640_BGI-A2_v1.0)

MEDLIISPSS SSSLVSFSQE TPSPTLQQLR QFVIQSQQDL WAYAILWQTL NDDLGRFLA
WGDGHLQCTK DASPRLSSSF HSERTKVIKG IQALIGDQHD IDLSMIDGTD
ITDVEWFYMM SMARSFSAGE GIPGKALSTG SLVWLTGAHE LQFYNCERAR
EAQMHGLETLCIPTSCGVL ELGSSEIIRE NWGLVQQVKS LFESDLIGLV PKQSTPPNLT
PASVQFLNRN ISFADIGIA GVQEEDGASQ DIKTKQEHNN NQTKKDSSKL

GQPSYVDSEH SDSDFLLAM NNVEK RTPKK RGRKPGLGRE TPLNHVEAER
QRREKLNHRF YALRAVVPNV SRMDKASLLS DAVSYINDLK AKIDELESQ
QRECKKVKVE MVD TMDNQST TTTT TSEEEQ QAARPSYSSP GTGSGIELEI
KIMVNDAMIR VHSENVNYP ARLMGALRDL EFQVRHASMS SVNDLMLQDI
VVRLPDGLRT EEGLKSALLR RDLQ

> *Gossypium hirsutum*(Gh_D11G1055)

MEVLIMSPSS CSSLV SFSQE TPSSTLQQRL QFVIQSQQDL WAYAIFWQTL NDDLGNLFLA
WGDGHLQCTK DASPRLSSSF HSERTKVMKG IQALIGDHHD VDM SMIDGTD
ITDVEWLYMM SMTRSFSAGE GIPGKALSTG SLVWLTGAHE LQFYNCERAR
EAQMHGLET LVC IPTSCGVL ELGSSEIIRE NWGLVQQVKS LFESDLIGLV PKQSTPPNLT
PASIQFLDRN ISFADIGIIA GVQEEDDASQ DIKTKQEHSN NQTKKDSSKL GQPSYVDSEH
SDSDFLLAM NNVEK RTPKK RGRKPGLGRE TPLNHVEAER QRREKLNHRF
YALRAVVPNV SRMDKASLLS DAVSYINDLK AKIDELESQ QRERKKVKVE
MVD TMDNQST TTTT TSEEEQ QATRPSYSSP GTGSGIELEV KIMVNDAMIR
VHSENVNYP ARLMGALRDL EFQVHHASMS SVNDLMLQDI VVRLPDGLRT
EEGLKSALLR RDLQ

> *Gossypium hirsutum*(Gh_A11G0909)

MEDLIISPSS SSSLV SFSQE TPSPILQQRL QFVIQSQQDL WAYAILWQTL NDDLGRFLA
WGDGHLQCTK DASPRLSSGF HSERTKVIKG IQALIGDQHD IDLSMIDGTD
ITDVEWFYMM SMARSFSAGE GIPGKALSTG SLVWLTGAHE LQFYNCERAR
EAQMHGLET LVC IPTSCGVL ELGSSEIIRE NWGLVQQVKS LFESDLIGLV PKQSTPPNLT
PASVQFLNRN ISFADIGIIA GVQEEDGASQ DIKTKQEHN NQTKKDSSKL
GQPSYVDSEH SDSDFLLAM NNVEK RTPKK RGRKPGLGRE TPLNHVEAER
QRREKLNHRF YALRAVVPNV SRMDKASLLS DAVSYINDLK AKIDELESQ
QRECKKVKVE MVD TMDNQST TTTT TSEEEQ QAARPSYSSP GTGSGIELEV
KIMVNDAMIR VHSENVNYP ARLMGALRDL EFQVRHASMS SVNDLMLQDI
VVRLPDGLRT EEGLKSALLR RDLQ

> *Gossypium raimondii*(Gorai.007G111800.1)

MEVLIMSPSS SSSLV SFSQE TPSSTLQQRL QFVIQSQQDL WAYAIFWQTL NDDLGNLFLA
WGDGHLQCTK DASPRLSSSF HSERTKVMKG IQALIGDHHD VDM SMIDGTD
ITDVEWLYMM SMTRSFSAGE GIPGKALSTG SLVWLTGAHE LQFYNCERAR
EAQMHGLET LVC IPTSCGVL ELGSSEIIRE NWGLVQQVKS LFESDLIGLV PKQSTPPNLT
PASIQFLDRN ISFADIGIIA GVQEEDDASQ DIKTKQEHSN NQTKKDSSKL GQPSYVDSEH
SDSDFLLAM NNVEK RTPKK RGRKPGLGRE TPLNHVEAER QRREKLNHRF
YALRAVVPNV SRMDKASLLS DAVSYITDLK AKIDELESQ QRERKKVKVE
MVD TMDNQST TTTT TSEEEQ QATRPSYSSP GTGSGIELEV KIMVNDAMIR
VHSENVNYP ARLMGALRDL EFQVHHASMS SVNDLMLQDI VVRLPDGLRT
EEGLKSALLR RDLQ*

> *Ipomoea trifida*(Itr_sc010930.1_g00001.1)

MDELIGTSSS SSSITASLSQ PNHSTLQQRL QFILKTQ TDS WAYAIFWQTS NEDDGRFLA
WGDGFFQGTK GGGRGGVQTS HSTQQSERKK VISGIQALIG TQNSENGDLI
TDAEWFYVMS LARSFSAGDG VPGKALSMGS LVWLTGAHRL QMYNCERAKE
AQIHGIQTLV CIPTGAGVVE LGSLEI IKEN WTLVQQVKS LFPFPQETTLS FADIGLVSTH
ELQQGRPGDA EKQEAPKRG A DPESHS DSD CLFLKEHPSV DRQQQQQQNA

PKKRGRKPGA GRDTPVNHVE AERQRREKLN HRFYALRSVV PNVSRMDKAS
LLSDAVSYIN SLKTKVEELE CRQLQLRESK KVKIEAVGDN QSSTSAASSA
ASPVDVEVKI VGPDMIRVQ SENANYPsak LMNGLRELEL AVHHASISSV
NDIMLQDIVV KVPEGLRSED GLRAALLRRL DQH

> Citrus sinensis(orange1.1g046178m)

MEDLIISPSS SSSLVSLTPE TPPPTLQQRL QFIVQSQPEW WAYAIFWQTI SNDDNGQLFL
AWGDGHYQGT KDASPRARMS MPAPAPGAAL DNNMERKRAI SSIRGIQQSF
MGHEMDLSMM DGGDVTDTTEW FYVMSLTRSF GAGVGIPGRA QSSGSLVWLT
GSHELQFYNC ERAKEAQSHG IETFVCIPTS CGVLELGSSD LIRENWGLVH
QVKSFLGSDL ITKPLNPNT PAAPPMHFLD RNISFADIGI IAGVQQEQEE EEEEEELSR
PEEEDQNKVK KPRKDQGCTV KSSTGQSSYT VDSEHSDSDC PLPPPNNIS
AVEKRTPKKR GRKPGLGRET PLNHVEAERQ RREKLNHRFY ALRAVVPNVs
RMDKASLLSD AVSYIRELKV KIDDLESQLL QRESKKVKLE ISDNHSTTTS
VDQARPSSAG SGGGFNLEVE TKIMGSDAMI RVQSENVNHP AAKLMSSLRD
LDLQLHHASM SCVNDLMLQD IVVRVPDGLR TEDALRSALL RRLDQ*

> Citrus clementina(Ciclev10019749m)

MEDLIISPSS SSSLVSLTPE TPPPTLQQRL QFIVQSQPEW WAYAIFWQTI SNDDNGQLFL
AWGDGHYQGT KDASPRARMS MPAPAPGAAL DNNMERKRAI SSIRGIQQSF
MGHEMDLSMM DGGDVTDTTEW FYVMSLTRSF GAGVGIPGRA QSSGSLVWLT
GSHELQFYNC ERAKEAQSHG IETFVCIPTS CGVLELGSSD LIRENWGLVH
QVKSFLGSDL ITKPLNPNT PAAPPMHFLD RNISFADIGI IAGVQQE EEEEEELSR
PEEEDQNKVK KPRKDQGCTV KSSTGQSSYT VDSEHSDSDC PLPPPNNIS
AVEKRTPKKR GRKPGLGRET PLNHVEAERQ RREKLNHRFY ALRAVVPNVs
RMDKASLLSD AVSYIRELKV KIDDLESQLL QRESKKVKLE ISDNHSTTTS
VDQARPSSAG SGGGFNLEVE TKIMGSDAMI RVQSENVNHP AAKLMSSLRD
LDLQLHHASM SCVNDLMLQD IVVRVPDGLR TEDALRSALL RRLDQ*

> Gossypium raimondii(Gorai.001G151700.1)

MEELIISPSS SSSLVYMTQE TSPSTLQQRL QFVVQSQQIW WTYAIFWQTS NDEHGRLYLC
WGDGYFQGT KGTPPKLLSA NNSCLENERR KEMKGAQTLI RDNHEVDVSM
MDGTTGVSDA VWFYVMSLTR SFPAGEGIPG MALSTGSLVW LTGAHALQFY
NCERAIEAQM HGIETMVCIP TSCGVLELGS VEMISENWGL VQQVKSIFGA
DPIDLQKQS STDPTLTPPS IPFLDRNISF ADIGIISGVE EEEEDVGPDN ETKQEHNNHP
TKKYFTKLQ SSSVDSEHSD SDRPSLAMSH LEQKTPQKRG RKPGLGRETP
LNHVEAERQR REKLNHRFYA LRAVVPNVSR MDKASLLSDA VSYINELKAK
IEELESQQR ECKKPKVEMV DVTDNHSTTT SVEQEAAPD NSPSPATAGC
VGLEFDIKIM GNDAMIRVQS ENANYPVTRL MVALRDLEFP IHHASMSCVN
ETMLQDIVVN VPDLELRNEQ GLKSALLRRL DH*

> Gossypium hirsutum(Gh_A07G1232)

MEELIISPSS SSSLVYMTQE TSPSTLQQRL QFVVQSQQIW WTYAIFWQTS NDEHGRFLC
WGDGYFQGT KGTPPKLLSA NISCLNERR KEMKGAQTLI GDNHEVDVSM
MDGTTGVSDA EWFYVMSLSR SFPAGEGIPG MALSTGSLVW LTGAHALQFY
NCERAIEAQM HGIETMVCIP TSCGVLELGS VEMISENWGL VQQVKSIFGA
DPIDLLQKQS STDPTLTRPS IPFLDRNISF ADMGIVSGVE EEEENVGPVN
ETKQEHNNHP TKKYSTKLQ SSSVDSEHSD TDRPSLAMSH LEQKTPQKRG

RKPGLGRETP LNHVEAERQR REKLNHRFYA LRAVVPNVSR MDKASLLSDA
VSYISELKAK VEELESQ LQR ECKKPKVEMV DVTDNQSTTT SVEQEAAKPD
NSPSPATAGC VGLEFDIKIM GNDAMIRVQS ENMNYPVTRL MVALRDLEFP
IHHASMSCVN ETMLQDIVVN VPDLELRNEQ GLKSTLLRRL DH

> Arabidopsis thaliana(AT5G46830.1)

MINTDDNLLM IEALLTSDPS PLLPANLSL ETTLPKRLHA VLNGTHEPWS YAIFWKPSYD
DFSGEAVLKW GDGVYTGGNE EKTRGRLRRK KTILSSPEEK ERRSNVIREL
NLMISGEAFP VVEDDVSDDD DVEVTDMEWF FLVSMTWSFG NGSLAGKAF
ASYNPVLVTG SDLIYGS GCD RAKQGGDVGL QTILCIPSHN GVLELASTEE
IRPNSDLFNR IRFLFGGSKY FSGAPNSNSE LFPFQLESSC SSTVTGNPNP SPVYLQNRYN
LNFSTSSSTL ARAPCGDVLS FGENVKQSFE NRNPNTYSDQ IQNVVPHATV
MLEKKKGKKR GRKPAHGRDK PLNHVEAERM RREKLNHRFY ALRAVVPNVS
KMDKTSLLED AVCYINELKS KAENVELEKH AIEIQFNELK EIAGQRNAIP
SVCKYEEKAS EMMKIEVKIM ESDDAMVRVE SRKDHHPGAR LMNALMDLEL
EVNHASISVM NDLMIQQANV KMGLRIYKQE ELRDLLMSKI S

> Arabidopsis thaliana(AT1G32640.1)

MTDYRLQPTM NLWTTDDNAS MMEAFMSSSD ISTLWPPAST TTTTATTETT
PTPAMEIPAQ AGFNQETLQQ RLQALIEGTH EGWTYAIFWQ PSYDFSGASV
LGWGDGYKYG EEDKANPRRR SSSPPFSTPA DQEYRKKVLR ELNSLISGGV
APSDDAVDEE VTDTEWFFLV SMTQS FACGA GLAGKAFATG NAVVWSGSDQ
LSGSGCERAK QGGVFGMHTI ACIPSANGVV EVGSTPIRQ SSDLINKVRI
LFNFDGGAGD LSGLNWNLDP DQGENDPSMW INDPIGTPGS NEPGNGAPSS
SSQLFSKSIQ FENGSSSTIT ENPNLDPTPS PVHSQTQNP K FNNTFSREL N FSTSSSTLVK
PRSGEILNFG DEGKRSSGNP DPSSYSGQTQ FENKRKRSMV LNEKDVLSFG
DKTAGESDHS DLEASVVKEV AVEKRPKKRG RKPANGREEP LNHVEAERQR
REKLNQRFYA LRAVVPNVSK MDKASLLGDA IAYINELKSK VVKTESEKLQ
IKNQLEEVKL ELAGRKASAS GGDMS SSCSS IKPVGMEIEV KIIGWDAMIR
VESSKRNHPA ARLMSALMDL ELEVNHASMS VVNDLMIQQA TVKMGFRIYT
QEQLRASLIS KIG

> Arabidopsis thaliana(AT5G46760.1)

MNGTTSSINF LTSDDDASAA AMEAFIGTNH HSSLFPPPPQ QPPQPQFNED TLQQR LQALI
ESAGENWTYA IFWQISHDFD SSTGDNTVIL GWGDGYKGE EDKEKKKNNT
NTAEQEHRKR VIRELNSLIS GGIGVSDEN DEEVTDTWTF FLVSMTQSFV
NGVGLPGESF LNSRVIWLSG SGALTGSGCE RAGQGQIYGL KTMVCIATQN
GVVELGSSEV ISQSSDLMHK VNNLFNFNNG GGNNGVEASS WGFNLNPDQG
ENDPALWISE PTNTGIESPA RVNNGNNSNS NSKSDSHQIS KLEKNDISSV ENQNRQSSCL
VEKDLTFQGG LLKSNETLSF CGNESSKKRT SVSKGSNNDE GMLSFSTVVR
SAANDSDHSD LEASVVKEAI VVEPPEKKPR KRGRKPANGR EEPLNHVEAE
RQRREKLNQR FYSLRAVVPN VSKMDKASLL GDAISYINEL KSKLQQAESD
KEEIQKKLDG MSKEGNNGKG CGSRAKERKS SNQDSTASSI EMEIDVKIIG
WDVMIRVQCG KKDHPGARFM EALKELDLEV NHASLSVVND LMIQQATVKM
GSQFFNHDQL KVALMTKVGE NY

> Arabidopsis thaliana(AT4G16430.1)

MGQKFWENQE DRAMVESTIG SEACDFFIST ASASNTALSK LVSPPSDSNL

QQGLRHVVEG SDWDYALFWL ASNVNSSDGC VLIWGDGHCR VKKGASGEDY
SQQDEIKRRV LRKLHLSFVG SDEDHRLVKS GALTDLDMFY LASLYFSFRC
DTNKYGPAGT YVSGKPLWAA DLPSCLSYR VRSFLARSAG FQTVLSVPVN
SGVVELGSLR HIPEDKSVIE MVKSVFGGSD FVQAKEAPKI FGRQLSLGGA
KPRSMSINFS PKTEDDTGFS LESYEVQAIG GSNQVYGYEQ GKDETLYLTD
EQKPRKRGRK PANGREEALN HVEAERQRRE KLNQRFYALR AVVPNISKMD
KASLLADAIT YITDMQKKIR VYETEKQIMK RRESNQITPA EVDYQQRHDD
AVVRLSCPLE THPVSKVIQT LRENEVMPHD SNVAITEEGV VHTFTLRPQG
GCTAEQLKDK LLASLSQ

> *Nicotiana tabacum*(XP_016508165.1)

MDELMVSSSS SSSSFTIPSL FSQTNQPLST LQQMLQYILK NQTDWSYAI FWQTSNEDDG
RLFLAWGDGH FHGTVKKGE VNGVNKASSL ERKNVIKGIQ ALICENGDTV
VEDGGDVTDI EWFYVMSLAQ SFSIGDGIPG KAFSTGSIVW LTGAQQLQFC
SCERAKEAQV HGIETLVCIP TSNVLELGS SDLIKENWSL VQHVKSLSL
DQENGLEKTI SFADVGLVSC LQEDGQILGN NKNNTSKKPK TGEIFSAAGT
TLFQSDHSD SDCQVLVDKP IVEKKTPKKR GRKPGASRET PSNHVEAERQ
RREKLNHRFY ALRSVPHVT KMDKASLLSD AVEYINELKA KVDDLELQLN
NKSESKKKLK VESMDSTTLD NQSTTTTTT SVDQIRPNSN STSSFPGNNL TVEVEVKILG
PDAMIRVQSE NVNYP SARLM RALQDLELHV HHASISSVND LMLQDIVVKV
PQCLGTENDL KSALLSSLEQ

> *Nicotiana tabacum*(XP_016449248.1)

MDELMVSSSSSSSFSIPSL FSQTNQPLST LQQMLQHVLK NQTDWSYAI FWQTSNDDDG
RLFLAWGDGHFHGTVKKGEVNGANKASSLERKNVIKGIQALICENGDTVVEDGGDVT
DIEWFYVMSLAQ SFSIGDGIPG KAFCTGSFVW LNGAQQQLQFC SCERAKEAQV
HGIETLVCIP TSNVLELGS SDLIKENWSL VQVKSLSL DQENGLEKTV SFANIGLVSC
LQENGQILAI NNNHNKNNT SKKPKTEEIS TTATAATTLF QSDHSDSDC
QVLVDKPIVE KKTPKKRGRK PGATRETPLN HVEAERQRRE KLNHRFYALR
SVVPHVTKMD KASLLSDAVE YINELKTKVD ELELQLNKKS ESKKKLKVES
MDSTTLDNQT TTTTTTSVDQ IRPNSNSSS YGPNNLTVEV EVKILGPDAM
IRVQSENVNY PSARLMRALQ DLELHVHHAS ISSVNDLMLQ DIVVKVPKCL
GTENGLKSAL LRSLEQ

> *Nicotiana tabacum*(XP_016435398.1)

MDGLFPLISCLLVLTSPQLLGFHYYYYSINYTVLSSCCFLFSSTYIKFMGSSSPMVDSSLPQG
DNQLPLGLQHMLQYVIK SQPDWAYAI FWQTSTDDEG KPFLAWGDGY FQGAQGGA
NNKGSSSDAAQSERKKVIRGIQALIDGNNNLMDDGNVTDIEWFYVMSLARSFSVDNGS
VPGKAFSSGNFVWFTGAAQFQVYSCERAKEAQIHGIQTLLCIPTSNVLEL GSAHLIKENF
DLVQQVKSLSLSCPIHFLE KSICFADIGL VTGLQQDNED KLEKQQLDSD KKAVAKKRGR
KPKGGDNNINMAALNHVEAERQRREKLNHRFYALRSVNPVSRMDKASLLSDAVSYINQ
LKAKVDELELQLIDHSSSSNKKQKSNESGENQSTNTSVDQELRPNSSLEVE VKIVGPDAMI
RVQSENVNYP SAKLMSALRHLQLQVHHASISSVNNLMLHDVVVKVPQGLRTEDGLRTAL
ITTLESNS

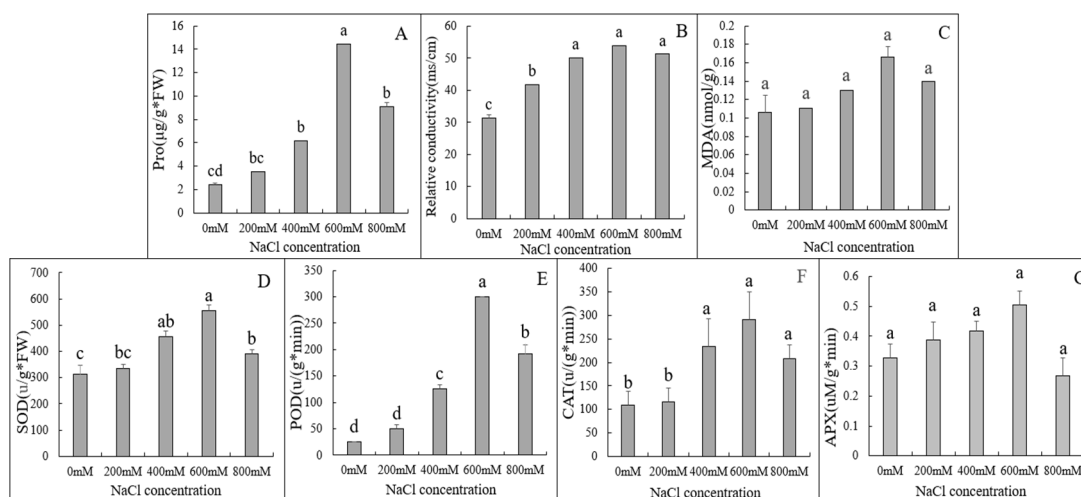
> *Nicotiana tabacum*(XP_016462596.1)

MNEVIFPATSSFSTPALISQENQPSTLQQKLKYILNSQTDSWAYTIFWQTSNEDNNGSLLL
WGDGHFQGTNKDIEWFYVLSLAQSYVNEGVIKVFSTATFVWLTGAQQVQFCSCERAK

EAQNNGVKTLVYVSISNGVLELGSSDIKEDWSLVQQVKSLSFSSDQENGPIYNFLDQNTIYF
ANIDLVTGLQEDGQSENNNSKNQESKLLKFEEVATTSHVSFPDSELSASDCQLLEHPVQK
SRVGSKKRTYKKRGRKPGEDCDKQMNHVEVERQRREKLNHRFYALRSVVPQVTRMDKA
SLLSDAVAYINELKAKVDKLESKLHRNLELKKKLQMESNDAVDNQSSSTNSVDHTLEVEVK
MVGPNAMIRVQSENVNYPSTRLMCALQDLELHVHHASISSVNNILLQNIVIRVPKELKTED
GLRAALLRSLEQIEAC

> *Nicotiana tabacum*(XP_016435399.1a)

MDGLFPLISCLLVLTSPQLLGFHYYYYSINYTVLSSCCFLFSSTYIKFMGSSSPMVDSSLPQG
DNQLPLGLQHMLQYVIKSQPDWWAYAIFWQTSTDDEGKPFLLAWGDGYFQGAKGGA AVN
NKGSSSDAAQSERKKVIRGIQALIDGDNNNLMDDGAAQFQVYSCERAKEAQIHGIQTLLC
IPTSGVLELGSAHLIKENFDLVQQVKSLSFLSCPPIHFLEKSICFADIGLVTGLQQDNEDKLE
KQQLDSDKKAVAKKRGRKPKGGDNNINMAALNHVEAERQRREKLNHRFYALRSAPNV
SRMDKASLLSDAVSYINQLKAKVDELELQLIDHSSSSNKKQKSNESGENQSTNTSVDQEL
RPNSSLEVEVKIVGPDAMIRVQSENVNYPsaklmsalrhLQLQVHHASISSVNNLMLHDV
VVKVPQGLRTEDGLRTALITTLESNS



Supplementary Figure S1. Physiological and biochemical indexes of *G. maritima* leaves under salt stress. A-G: proline content, relative conductivity, MDA, SOD enzyme activity, POD enzyme activity, CAT enzyme activity, and APX enzyme activity under different salt concentrations. When there are significant variations across treatments ($P < 0.05$), the results are denoted by different lowercase letters.

Supplementary Table S1. the quality of the isolated RNA samples

Number	Sample Name	Concentration (ng/ul)	Volume (ul)	Total(ug)
1	N0-1	258	33	8.51
2	N0-2	255	33	8.42
3	N0-3	296	33	9.77

4	N3-1	357	33	11.78
5	N3-2	303	33	10
6	N3-3	284	33	9.37
7	N4-1	228	33	7.52
8	N4-2	387	33	12.77
9	N4-3	173	33	5.71

Note: N0:0mM/L NaCl stress; N3:600mM/L NaCl stress; N4:800mM/L NaCl stress.

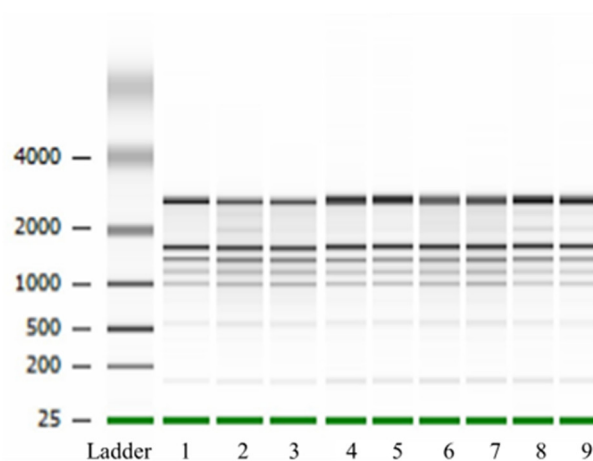


Figure S2. Agilent 2100 RNA 6000 Nano kit detection

Note:1-3: N0:0mM/L NaCl stress;4-6: 600mM/L NaCl stress;7-9: 800mM/L NaCl stress;

Supplementary Table S2. Characteristics of *G. maritima* transcriptome sequencing

Index	Transcripts	Gene
All	176,208	79,986
GC%	38.57	38.22
Max length (bp)	16,681	16,681
Median length (bp)	667	561
Min length (bp)	183	201
Total assembled bases	220,150,171	76,483,799
N50 (bp)	2,078	1,732

Supplementary Table S3. Sequencing data of *G. maritima* leaves under different salt concentrations

Concentrations	Sequencing Data
N0-1	8.48G
N0-2	7.17G
N0-3	8.27G
N3-1	8.36G
N3-2	6.82G

N3-3	7.99G
N4-1	6.31G
N4-2	6.45G
N4-3	6.23G

Supplementary Table S4. Primer sequences used for real-time fluorescence quantitative analysis

Gene	Primer Sequence (5'to3')	Fragment Size (bp)
β -Actin -F	TGGCACTTGATTACGAGCAG	160
β -Actin -R	GGAGCTTCCATTCCAATCAA	
78257-F	TAGCGAGACAATCCTCCGTC	168
78257-R	TCGAGTCTGGGTTAGCTTGG	
12139-F	CTTGGGGTTCGCTTTTATCGG	175
12139-R	CACAGCCGTTAAAACACCCA	
00457-F	GGCTCCTCCTCCTCTTAACC	194
00457-R	TCGACGCGACCATAGAATCA	
42139-F	TTGGGGTTTTAACGGCTGTG	160
42139-R	AGCTCTCTCACCAACACCTC	
27167-F	CTGACTACCGGTTACTCCCC	199
27167-R	CCGGACTGCCAAAAGATAGC	
09899-F	TGCGGTGTCCTACATCAACT	181
09899-R	AATTGAAGAGGGAGGGACGG	