```
                     10        20        30        40        50
Glyma.01G165400  MALF................................SNHRHSSEA..LLGFLLFL....VFRGVSV.SGATFTFVNKCDYTVWPGIL...GTPELGST  56
Glyma.01G165600  M..................................ASSTQFSTTLVTLCL....FQFLAGS.YSTTFTIVNKCSYTVWPGILSGAGTSPLPTT  54
Glyma.01G165800  MSAGNSV..FHLISIYRMAFVVTMATTCNVRMGNSTKMASIV...TMASLFF....FQFLSGS.CSTRLTITNKCSYTVWPAILSATGSSPLSTS  85
Glyma.01G217600  ..........................................MAVTK.SLSIFLFIA....MSCVAAA.QAANFNITNNCTYTVWAAAVP........GG  44
Glyma.01G217700  MVY.....................................LALCS.....LLTL....ALSLATT.HAANFEIVNNCPYTVWAAASP........GG  42
Glyma.02G047400  MSPFF..............................SHHPLSPQR..FFIFLLIL....AFRGVRV.SATTFTFVNKCDHTVWPGIL...GKPDIGTT  57
Glyma.02G220900  MPIV.................................MTSWK.FPSFLAIL....FTLLSYS.FSSIFTITNNCSHTIWPGTLSGAGSPPLPTT  55
Glyma.02G249500  ...................................MPTSM.YPFIFLSI....LISIPLT.GGTQLILVNNCQESVWPGILGSGGHPTPKDG  51
Glyma.04G023700  MDQ......................................LTL....AFPFLLTL....HLLVSGVVATTSFTLVNKCDYTVWPGILSNAGIATLPTT  53
Glyma.04G034300  MPYR...........................................................................................  4
Glyma.04G176200  ..........................................MA......FTTVVFF....LGFLSGS.YGATLMVTNKCSYTVWPAILSAARSLPVHTP  47
Glyma.04G225800  .............................................................................................M  1
Glyma.05G169700  MASPH.................................IALLK.LTSIFIVI....ASAPELCG.SSKTFTLVNYCKETIWPGITRSDNH...SGD  54
Glyma.05G204600  M..................................AALRK...AVFFVIA....QCFTFSA.YAARFEITNRCTYTVWAASVP.......VGG  44
Glyma.05G204800  ..........................................MTLTK..ALFFVTA....LCCTSAA.YAARFDITNRCSYPVWAAAVP........GG  42
Glyma.05G245800  M..................................PTLRP.ILTTIFFL....FTVLKVS.ASSSVIFYNKCPHPVWPGIQPSAGKPVLARG  52
Glyma.06G023900  MDH......................................LTL....AFPFLLTL....HLLASGVLATTTFTLVNKCDYTVWPGILSNAGIATLPTT  53
Glyma.06G139000  .........................................................MFIVKAMWYLI..GTLSGSGSPPLATT  25
Glyma.06G189100  ...................................MAMPR.SLFITLAIF....LGFLSGS.YAAKFRISNECISTVWPAIVANS....TSTT  48
Glyma.07G135100  ...................................MARTS..SILFYLVA....FCSIIII.DGAQLILVNNCGESVWPGILGGAGQQTPKDG  51
Glyma.08G053600  MAMM..............................GSMLLSLRP..FLTTIFFL...TLTVLKVS.ASSSVIFYNKCQHPVWPGIQPSAGKPVLARG  60
Glyma.08G128000  MANPH.................................IALLK.LTSIFIVIF...ASAPELCG.SNKTFTLVNYCKETIWPGITRSDNH...SGD  55
Glyma.08G172700  MSQLHG..................................................................................LADS  10
Glyma.09G003600  MV............................................................................................  2
Glyma.10G060300  ...................................MMSN...IFSLCLSF....SLLFYVA.QGATVTFTNNCQYTVWPGTLTGDQNPQLSTT  50
Glyma.10G060800  MTSNMQNSPLHLQNENY.................TYPTMTTT...RVALCLLF....AFLFYAA.EGAKVSFNNKCTYTVWPGTLTGDQKPQLSTT  71
Glyma.10G061000  ...........................MTTT...RVALCLLF....AFLFYAA.EGAKVSFNNKCTYTVWPGTLTGDQKPQLSTT  50
Glyma.10G061700  ...................................MMSN...IFSLCLSF....SLLFYVA.QGATVTFTNNCQYTVWPGTLTGDQNPQLSTT  50
Glyma.10G061800  MAPTMQNSPLHLQNE.................KYPTMTTT...RVAICLCF....AFLYYAA.EGAKVSFNNKCSYTVWPGTLTGDQKPQLSTT  69
Glyma.10G062100  ...................................MAKNV.SLNLFLPML....LLCAGVQ.SDVTFTFENLCSDTLWRA.....SNPSIGDL  47
Glyma.11G025600  ...................................MAVTK.SLSIFLFIA....ISCVAVA.QAANFNITNNCTYTVWAAAVP........GG  44
Glyma.11G077700  M..................................ASSAQFSTTLVVLCL....FQFLAGS.YSTTFTIVNKCSYTVWPGILTGAGTSPLSTT  54
Glyma.11G077800  MALF.......................SHHRHSYET..LLGFLLFL....VFR..EV.SGATFTFVNKCDHTVWPGIL...GAPQLGST  54
Glyma.11G106100  MGRLLLF.................................LIILSLVA....FSFLSDV.QSASFKIVNKCRHTIWPGLLSGATSPPLPTT  53
Glyma.11G106200  ..............................................................................................  0
Glyma.11G140800  ...................................MARSL..FLCSLLIFA..VTTFSSPT.GALILTLVNNCNYTVWPAIQPNAGHPVLAGG  53
Glyma.11G220700  ...................................MATSS..HYFIFFSI....LVSISLT.DGTQLIIVNNCKESVWPGILGNGGHPSPKHG  51
Glyma.12G031000  MGRLLLF.................................LIIPSLVA....LSFLSEV.QSASFKIVNKCRHTIWPGLLSGATSPPLPTT  53
Glyma.12G031200  MGL.....................................LASS...CFILIALL....LLTPKGV.MGATFTFFNKCDYTVWPGILANAGSPPLDST  53
Glyma.12G064300  ...................................MARSL..FLCSLLILA..VTTFSSPT.GALILTLVNYCNYTVWPGIQPNAGHPVLAGG  53
Glyma.12G238900  MA.......................................LKQLSLLV....MLFSLGV.DATVLTLQNKCRDIVWPGILTGAGRPELIDD  48
Glyma.13G082700  MA.......................................LHLQT.ILPFILVLAIILSGQRTCD.SARVFTIVNYCKETLWPAVTPGES...FNGG  54
Glyma.14G077267  MALI................................PNSKT..SALFHLLL....FILGNVA.YATVFTLENHCSYTVWPGTLSGNGAATIGDG  55
Glyma.14G077333  MALI................................PNSKT..SALFHLLL....FILGNIA.YATVFTLENHCSYTVWPGTLSGNGVATLGDG  55
Glyma.14G077400  MALI................................PNSKT..PPLFHLLL....FLLGNVA.NATVFTLENHCSYTVWPGTLSGNSAAILGGG  55
Glyma.14G163700  MA.......................................LHLQT.ILPFTLVLAIILSGQRTCE.CARVFTIVNYCKETLWPAVTPGEN...FNGG  54
Glyma.14G188400  MPIV.................................MTSWK.FPSFLAIL....FTLLSYS.FSSIFTITNNCPHTIWPGTLSGAGSPPLPTT  55
Glyma.14G219600  MDR......................................PTLSS.LFSFLLTL....HLSLSGV.ISTTFTLVNKCDYTVWPGILSNAGVPPLSTT  54
Glyma.15G254700  ...................................MEASS..IFALTLS.....TFLLSGA.YSATFTVTNNCAFTIWPATLTGGGNSQLPST  50
Glyma.16G126900  MSPY....................................HGHSSQR..FFIFLLIL....AFRGVRV.TATTFTFVNKCDHTVWPGVL...GKPDIGTT  54
Glyma.16G127100  MSA.................................STHDQFAATLIFLFF....SHFLRGS.NSATFSIVNKCSYPVWPGILSGAGTAQLATT  56
Glyma.17G248300  MALI................................PNSKT..SALFHLLL....FLLGNVA.YATVFTLENHCSYTVWPGTLSGNGAALLGEG  55
Glyma.17G258500  MDR......................................PTL.S..LFSFLLTL....HLSLSGV.ISTTFTLVNKCEYTVWPGILSNAGVPPLSTT  53
Glyma.17G258600  MDS......................................MAPHC.FSIHIALIW....VLLCQGA.LGATFTLINKCDYTVWPGILANAGSSGLDST  55
Glyma.19G018400  MQ.......................................LPKYI.AASFFCLICSSIIYYGKAEA.HQVNFYVHNKCPFPIWPATAPNSGQPVIADG  58
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                           60        70        80        90        100       110             120            130       140
Glyma.01G165400  GFELAKGGSRSFQAPTG.WSGRFWGRTGCQFD.GL.GKGTCATADCGSGEVNCNGAGA..SPPATLAEFTLGTG.....SMDYYDVSLVDGYNLP  141
Glyma.01G165600  GFVLQPGESNVIAVPAA.WSGRLWGRTFCTQD.AT.GKFSCVTGDCGSSAVECNGGGA..APPATLAEFTLNGA.....G.GLDFFDVSLVDGYNLP  140
Glyma.01G165800  GFVLQPGDFKIVPVPPA.WSGRLWGRTLCSLDITS.TKFSCVTGDCGSTTIECVGGNA..TPPVTLVKFTLNGT.....G.GLDFYEVSLVDGFNLP  172
Glyma.01G217600  GARLNPGESWNISVTNGTTRGRIWGRTNCTFD.NA.GRGKCLTGDCE.GVLECNKTG...TPPNTVVDFALNQY...N.NLDFYDISLVDGFNVP  129
Glyma.01G217700  GRRLDRGQTWNLWVNPGTAMARIWGRTGCNFD.GS.GRGRCQTGDCT.GGLNCQGWG...VPPNTLAEFALNQF...G.NQDFYDISLVDGFNIP  127
Glyma.02G047400  GFELKRGSTRTFDGPPG.WSGRFWGRTGCQFD.QS.GQGTCATGDCGSGQVTCNGAGA..TPPATLAEFTLGEG.....APDYYDVSLVDGYNLP  142
Glyma.02G220900  GFRLDSGQMMKLTSVPG.WSGRIWARTGCTFD.AT.GIGKCQTGDCG.GRLECDGNGA..APPTSLFEITLGKG...N.DQDYYDVSMVDGYNLP  140
Glyma.02G249500  GFHLCSGDEVVLEVPEG.WSGRIWGRQGCCFDTKT.GKGTCETGDCG.GLLKCGGMGG..VPPATLVEMTLGTP..QSALHFYDVSLVDGFNLP  138
Glyma.04G023700  GFVLQTGESKTVTAPTS.WGGRFWGRTLCTQD.SA.GKFSCLSGDCGSGKLECAGNAA..TPPATLAEFTLDGA...G.GLDFYDVSLVDGYNVP  139
Glyma.04G034300  ...................................SCA.GGMKCTG.GG.VPPVTLAEFTIGTG...S.AQDFYDVSLVDGYNVA  47
Glyma.04G176200  GLVLQPGDTNTIQVPPT.WSGRLWGRTLCSYN.IT.GSFTCVTGDCISSTVECGG...A..TAPVTLAEFTLNGT...G.GLDFYFDVSLVDGYNLP  131
Glyma.04G225800  QQELENAKQV.......................TG.GRLECEGNGS..APPTSLFEITLGAG...N.GQDYYDVSMVDGNNLP  54
Glyma.05G169700  GFALKSGQSTVYTAPDG.WSGRIWARTGCNFD.NN.GNGKCQTGDCG.TSINCTVPG...SPPATSADFTLGE.......PDFYDVSLVDGFNLP  135
Glyma.05G204600  GVQLNPGQSWSVDVPAGTKGARVWARTGCNFD.GS.GRGGCQTGDCG.GVLDCKAYG...APPNTLAEYGLNGF...N.NLDFFDISLVDGFNVP  129
Glyma.05G204800  GRRLNSGQSWALDVPAGTKGARVWARTGCNFD.GS.GRGGCQTGDCG.GVLDCKAYG...TPPNTLAEYALNQF...S.NLDFFDISLVDGFNVP  127
Glyma.05G245800  GFKLAPNRAYSLQLPAL.WSGRFWGRHGCAFD.VG.GRGRCATGDCG.GSLFCNGIGG..SPPATLAELTLGNE......QDFYDVSLVDGYNLP  135
Glyma.06G023900  GFVLQTAESKTVTAPTS.WGGRFWGRTLCTQD.SA.GKFSCITGDCGSGKLECAGSGA..TPPATLAEFTLDGA...G.GLDFFDVSLVDGYNVA  139
Glyma.06G139000  GFRLDTGQSIKLTTVPG.WSGRIWARTGCTFD.AT.GVGKCQTGDCG.GRLECQGNGA..APPTSLFEITLGAG...N.GQDFYDVSMVDGYNLP  110
Glyma.06G189100  GFSLQPGKSYMVTMPTG..EVKVWARTFCSYS.IA.GNFSCFTGDCSSSNIDCRGGNANPKPPVTLAEFTLNGS...Y.GLDYYKVSLREGFNLP  135
Glyma.07G135100  GMHLGSGEEVVLDVPEK.WSGRIWGRQGCSFD.ND.GHGHCLTGDCN.GMLHCRGQGG..VPPATVVEMTLGSS...SSPLHFYDVSLVDGFNLP  137
Glyma.08G053600  GFKLAPNRAYSLQLPAL.WSGRFWGRHGCSFD.AG.GRGRCATGDCG.GSLFCNGIGG..SPPATLAEFTLGNE......QDFYDVSLVDGYNLP  143
Glyma.08G128000  GFALKSGQTTVYTAPDG.WSGRIWARTGCDFD.NN.GNGKCKTGGCG.TSINCTGPG...SPPATSADFTLGE.......PDFYDVSLVDGFNLP  136
Glyma.08G172700  GQGLNAQQTHM.......................GNSLVPLVTVDQVKCHASWW..NPPVSLVEFTLASN...K.GQDFYVVSLVDGFNLP  72
Glyma.09G003600  ........................RHGCIFD.SS.GSGTCITGDCG.GKLKCDGVGG..APPASLAEFTLDSQ......EGDFYDVSLVDGYNLP  62
Glyma.10G060300  GFELAPGGTNSVNIPSP.WSGRFWARTGCSNN....GGFTCDTGDCASGQVECNGAGA..IPPATLVEITVAPN..G.GQDFYDVSNVDGFNVP  134
Glyma.10G060800  GFELGPGASNSVDLPSP.WSGRFWARTGCSNN..N.GRFSCATADCASGQVACNGAGA..IPPATLVEITVAAN..G.GQDFYDVSNVDGFNVP  156
Glyma.10G061000  GFELGPGASNSVDLPSP.WSGRFWARTGCSNN..N.GRFSCATADCASGQVACNGAGA..IPPATLVEITVAAN..G.GQDFYDVSNVDGFNVP  135
Glyma.10G061700  GFELAPGGTNSVNIPSP.WSGRFWARTGCSNN....GGFTCDTGDCASGQVECNGAGA..IPPATLVEITVAPN..G.GQDFYDVSNVDGFNVP  134
Glyma.10G061800  GFELGPGASNSVDLPSP.WSGRFWARTGCSNN..N.GRFSCATADCASGQVACNGAGA..IPPATLVEITVAAN..G.GQDFYDVSNVDGFNVP  154
Glyma.10G062100  EPDLPRDTYEIFNMDDH.YSGSIWVRTGCSTN.AS.NYFSCETGDCGNGIMECAGLNP..SFPITQLNFVVNN......PIVSYEVSLKHGQNML  131
Glyma.11G025600  GSRLNPGESWNISVTNGTTGGRIWGRTNCTFD.NA.GRGKCLTGDCD.GVLECNKTG...TPPNTLVEFALNQY...N.NLDFYDISLVDGFNIP  129
Glyma.11G077700  GFVLQPGESNVITVPAA.WSGRLWGRTVCTQD.AT.GKFSCVTGDCGSSAVECNGAGA..APPATLAEFTLNGA...G.GLDFFDVSLVDGYNLP  140
Glyma.11G077800  GFELVKGGSKSFQAPTG.WSGRFWGRTGCQFD.GS.GKGTCATADCGSGEVNCNGAGA..SPPATLAEFTLGNG.....SMDYYDVSLVDGYNLP  139
Glyma.11G106100  GFTLESGKSRIVKIPKS.WSGRIWARTLCGQD.SD.GKFSCATADCGSGKVQCVG.GA..KPPATLAEFTLNGA...D.GLDFYDVSLVDGYNLP  138
Glyma.11G106200  .......................................................................................  0
Glyma.11G140800  GLTLRTLTHQSIPVPDAHWSGRVWARTGCAYS.GT.A.FSCASGDCG.GRLQCNGAGG..APPATLAQFEVHHG...SNDYASYGVSLVDGFNVP  139
Glyma.11G220700  GFHLGSGEEIVIHVPKV.WSGRIWGRQGCCFDQNT.AKGSCQTGDCG.GLLQCNGIGG..VPPATLVEMTLGTS...QSPLHFYDVSLVDGFNLP  138
Glyma.12G031000  GFTLESGKSRTIKIPKS.WSGRIWARTLCGQD.SD.GKFSCATADCGSGKVECVG.GA..KPPATLAEFTLNGA...D.GLDFYDVSLVDGYNLP  138
Glyma.12G031200  GFELPKDTSRAFQAPTG.WSGRFWGRTGCTFD.GS.GAGSCLTGDCGSGQVECNGAGA..APPATLAEFTLGTG...GQDFYDVSLVDGYNLP  138
Glyma.12G064300  GLTLRSLTHQSIPVPDAHWSGRVWARTGCAYS.GT.A.FSCASGDCG.GRLQCNGAGA..AAPATLAQLEVHHG...SNDYASYGVSLVDGFNVP  139
Glyma.12G238900  GAELTPGKAINITAPKG.WSGRIWGRRGCTFH.SY.GSGTCITGDCG.GKLKCDGVGG..APPASLAEFTLDSQ....EGGFYDVSLVNGYNLP  132
Glyma.13G082700  GFVLKPGESAVFTAPVS.WSGRIWARTGCKFD.QN.GNGNCQTGSCG.TTLKCSASG...KTPASLAEFTLAQ......PDFYDVSLVDGFNVP  135
Glyma.14G077267  GFPMAPGSSVQLTAPSG.WSGRLWPRTGCNFD.AS.GNGKCLTGYCA.GGMRCTG.GG..VPPATLAEFTIGS...G.GKDFYDVSLVDGYNVG  138
Glyma.14G077333  GFPMAPGSSAQLTAPSG.WSGRLWARTGCSFD.AS.GNGKCLTGDCA.GGMRCTG.AG..VPPATLAEFTVGSAGKGG.GKDFYDVSLVDGYNVG  142
Glyma.14G077400  GFALAPGSAVRLIAPAG.WSGRFWARTGCRFD.GS.GAGKCTTGDCA.GGLRCTG.SG..VPPVTLAEFTIGSASN.G.NKDFYDVSLVDGYNVG  141
Glyma.14G163700  GFVLKPGQSTVFTAPVS.WSGRIWARTGCKFN.QN.GNGNCQTGSCG.TTLKCSASG...KTPASLAEFTLAQ......VDYYDVSLVDGFNVP  135
Glyma.14G188400  GFRLDSGQMIKLTSVPG.WSGRIWARTGCTFD.AT.GIGKCQTGDCG.GKLECDGNGA..APPTSLFEITLGKG...N.DQDYYDVSMVDGYNLP  140
Glyma.14G219600  GLVLQTGASTTIAAPAS.WGGRFWGRTLCSED.ST.GKFSCVTGDCGSGKLECSGNGA..APPATLAEFTLDGA...G.GLDFFDVSLVDGYNVP  140
Glyma.15G254700  GFELTSKASSTIDVTAP.WSGRFWAKSQCSTD.TY.GKFTCATGDCGSGQVPCNGNGG..TPPVSLVEFTLASN...K.GQDFYDVSLVDGFNLP  136
Glyma.16G126900  GFELKRGSTRSFDAPPG.WSGRFWGRTGCEFD.DS.GHATCATGDCGSGQVNCNGAGA..TPPATLAEFTLGEG.....APDYYDVSLVDGYNLP  139
Glyma.16G127100  GFALQPGQSNAVAVPTA.WSGRLWGRTLCSTD.SA.GKFSCVTGDCGSSAVECGGGGA..VPPATLAEFTLNGA...G.GLDFYDVSVVDGYNLP  142
Glyma.17G248300  GFALAPGSAVQLTAPAG.WSGRFWARTGCSFD.AS.GSGKCTTGDCG.SGLKCSG.GG..VPPATLAEFTLGSASN.QSNKDFYDVSLVDGYNVG  141
Glyma.17G258500  GFVLQTGASTTIAAPAS.WGGRFWGRTLCSQD.STSGKFSCVTGDCGSGKLECSGNGA..APPATLAEFTLDGA...G.GLDFFDVSLVDGYNVP  140
Glyma.17G258600  GFELRPGGSQSFHAPPS.WSGRFWGRTGCNFDPNT.QQGSCTTGDCGSNQIQCNGGGA..SPPATLVEFTIGSG.....TQDFYDVSLVDGYNLP  141
Glyma.19G018400  GFYLAPGQTQRVIAPWT.WNGRIWARTGCNFA.SN.WKPACETGDCD.GRLACNGLIG..TPPATLVEVSLQGR.....NPNFYDVSLVDGYNIP  142
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                              150        160        170                180        190        200        210
Glyma.01G165400   MMVVAR....GGS.....GSCGATGCGEDLN..RRCPSELR..VEGGD.......ACQSACGAFGKPEYCCNGAFSNPS.TCKPSMYSQMFKSTC   215
Glyma.01G165600   MIVEPQ....GGTG...AGNCTATGCVVDLN..TPCPAELM..VMSSGE.....GVACKSACEAFDDPQYCCSGAYATPD.TCKPSSYSQFFKSAC   219
Glyma.01G165800   VRVEPR....GG.....RNRRATGCEMDLN..LSCPTELK..VI.RDGD..AVACKSSCQA...................EPCLTSQFFKTAC   230
Glyma.01G217600   LQLTPT.........YNCSSVKCAADII..GECPTQLQ..VPG........GCNNPCTVFNTTQYCCSTGAA....GCGPTDYSKFFKERC   195
Glyma.01G217700   MDFYPL....N.......GGCHKISCSADIN..GQCPGPLR..APG........GCNNPCTVFKTNEYCCTNGQG....SCGPTNYSRFFKDRC   194
Glyma.02G047400   MMVDAS....GGS....GACAATGCGADLN..RRCPAELR..VDGGD.......ACQSACRAFGKPEFCCSGAFNSPA.ACAPSMYSQIFKAAC   216
Glyma.02G220900   LLVQPR....GVYG..TGVCNATGCVTDIN..RGCPKELQ..VVGGDAYQDGVVGCKSACEAFGSDQYCCSGEFANPT.TCQPSYYSTLFKQAC   223
Glyma.02G249500   VSMKPV....GGG...IGCGVAACEANLN..VCCPFALV..MK.RQGK...VVGCKSACLAAKSDRYCCTGEFATPK.SCKPSAFSRLFKTIC   215
Glyma.04G023700   MLVAPQ....GGSG..DNCTSTGCVGDLN..GACPSELR..VTSVDGKQ.SVACKSACEAFGSPQYCCSGAYGSPT.TCKPSPYSQIFKNAC   219
Glyma.04G034300   MGVRAT....GGT...GNCQYAGCVTDLN..GKCPTELQ..VTAEGGS..IVACKSACAAFNAAEFCCTGEYSTPQ.TCKPTQYSEIFKSAC   125
Glyma.04G176200   LVVEPR....SAIG..AENCRATGCRRNLN..KKCPVELQ..VIKEGEG..VVGCKSSCEVHE.............PC.SNNSNLFSHFLKTRC   199
Glyma.04G225800   LLALPR....GVYG..GVCNATGCITDIN..RGCPRELQ..LLGGHQNQQ.VVGCRSACEAFKTDKYCCR.........N.TCKPSYYSTIFKKAC   129
Glyma.05G169700   IVVKAI....NGT...GNCSTVGCDGDLR..QNCPSELA.SK.DNDK...VIACKSACDVFNTDEYCCRGTYGNPA.TCLASNYSKIFKQVC   212
Glyma.05G204600   MDFSPT....SN.....GCTRGISCTADIN..GQCPSELK..TQG........GCNNPCTVFKTDQYCCNSG.......SCGPTDYSRFFKQRC   195
Glyma.05G204800   MDFSPT....SN.....GCTRGIRCTADIN..GQCPSQLK..TQG........GCNNPCTVFKTDQYCCNSG.......SCVPTDYSRFFKQRC   193
Glyma.05G245800   ISITPF....KGS...GKCSYAGCVSDLN..TMCPVGLQ..VRSRDNKR.VVACKSACSAFNSPKYCCTGSYGSPQ.ACKPTVYSKIFKTAC   214
Glyma.06G023900   MLVAPQ....GGSG..DNCTSTGCAGDLN..GACPSELR..VTSEDGKQ.SVACKSACEAFGSPQYCCSGAYGSPN.TCKPSPYSQIFKNAC   219
Glyma.06G139000   LLALPR....GVYG..DACNSTGCITDIN..RGCPKELQ..LLGGDQNQR.VVGCRSACEAFKTDKYCCSGAFANPN.TCQPSYYSTIFKKAC   191
Glyma.06G189100   MSIEPG.........GSCRSTGCGRDLN..QKCPTKLK..VIIDGGD..VVGCQSLCQAHE...............TCKSTLFSEFSKTKC   196
Glyma.07G135100   VSMKPV....GGG...VGCGVASCEVDLN..VCCPSALE..VK.RNGK...VVGCKSACLAMQSAKYCCTGSYSDPK.TCKPTLFAHLFKAIC   214
Glyma.08G053600   ISITPF....KGS...GKCSYAGCVSDLN..TMCPVGLQ..VRSRDNKR.VVACKSACSAFNSPRYCCTGSYGSPQ.ACKPTVYSKIFKTAC   222
Glyma.08G128000   IVVKAI....NGT...GNCSTVGCDGDLR..QNCPSELA.SK.DNDK...VIACRSACDVFNTDDYCCRGTYGNPA.TCLASNYSKIFKQVC   213
Glyma.08G172700   VLVTPQ....GGL...RGCNTTSSPSDVN..KVYPPSFS..VKGSDGS..VIACKSACLALNQPEYCCTGPFASAD.KCPPTPYSIIFKNMC   150
Glyma.09G003600   VSIFPT....GGS...RQCKAVTCRSDLN..RNCPSRLE..VRNQSH...IVGCKSACMAFNKPEYCCTGYFNSPK.KCQPTSYSKVFKASC   139
Glyma.10G060300   VSITPQ....GGS...GECKTSSCPNNINDVNVCPSELQ..VKGSDGN..VIACNSACVAFNEDQYCCRGDYDTEE.TCPPTNYSQIFEEQC   214
Glyma.10G060800   MSVTPQ....GGS...GDCKTSSCPKNIN..SVCPAELQ..VKGSDGN..VIACKSACEAFKEDRYCCTGPNNTAE.TCPPTNYSQIFEEQC   234
Glyma.10G061000   MSVTPQ....GGS...GDCKTSSCPKNIN..SVCPAELQ..VKGSDGN..VIACKSACEAFKEDRYCCTGPNNTAE.TCPPTNYSQIFEEQC   213
Glyma.10G061700   VSITPQ....GGS...GECKTSSCPNNINDVNVCPSELQ..VKGSDGN..VIACNSACVAFNEDQYCCRGDYDTEE.TCPPTNYSQIFEEQC   214
Glyma.10G061800   MSVTPQ....GGS...GDCKTSSCPKNIN..SVCPAELQ..VKGSDGN..VIACKSACEAFKEDRYCCTGPNNTAE.TCPPTNYSQIFEEQC   232
Glyma.10G062100   VRIKPN....GGTLVDGSGPCPMVDCNKELS..SVCPLDLI..AGNKNDQ.YVGCNSPCDGYKDPKYCCNGN......GCQPDEISVKYKGLC   209
Glyma.11G025600   LQVSPT.........YNCSSVKCAADII..GECPTQLQ..VPG........GCNNPCTVFNTTQYCCSTGAA....GCGPTDYSKFFKERC   195
Glyma.11G077700   MIVEPQ....GGSG..AGNCSATGCVVDLN..TPCPTELK..VMSSGD.....GVACKSACEAFDDPQYCCSGAYATPD.TCKPSSYSQFFKSAC   219
Glyma.11G077800   MMVVAR....GGS....GSCAATGCGEDLN..QRCPSELR..VEGGD.......ACQSACGAFGKPEYCCNGAFSNPS.TCKPSMYSQMFKSVC   213
Glyma.11G106100   MLIVAK....DGTR...GGCSATGCLVDLN..GGCPAELR..VARSNGSRG.SVACRSACEAFGDPRFCCSEAYSTPD.MCGPSPYSLFFKHAC   219
Glyma.11G106200   ...............................................................................MFKAAC   6
Glyma.11G140800   MTVTPH....EGK...GVCPVVGCRDDLL..ATCPHVLQHRVPAVHGP...VVACKSGCEAFHTDELCCRNHFNNPS.TCKGSIYSSFFKHAY   219
Glyma.11G220700   VSVKPVEGGGGGG...AGCGVAACEANLN..VYCPSSLV..VE.RNGK...VVGCKSACLAAKSDRYCCTGEFAGGRYYCKPTVFARLFKTVC   220
Glyma.12G031000   MLIVAK....DGIR...GGCSATGCLVDLN..GGCPAELR..VARSNGSRG.SVACRSACEAFGDPRFCCSEAYSTPD.TCGPSPYSLFFKHAC   219
Glyma.12G031200   MIVEGT....GGS...GLCASTGCTSDLN..QQCPAELR..ASEGS.......ACKSACEAFGSPEYCCSGAYGSPA.TCRPSIYSEMFKAAC   212
Glyma.12G064300   MTFTPH....EGK...GVCPVVGCRNDLL..ATCPRVLQHRVPAGHGP...VVACKSGCEAFHTDELCCRNHFNNPN.TCKGSIYSSFFKHAC   219
Glyma.12G238900   VSIFPT....GGS...GQCKAVTCQSDLN..RNCPNGLE..VRNQSH...IVGCKSACMAFNKPEYCCTGDFSNPR.KCQPTSYSKVFKASC   209
Glyma.13G082700   MAVKPI....NGK...GNCSTAGCDSDLR..NSCPKELS..LR.ANGK..TVGCRSACDVFNTDEYCCKGNYGNPS.TCKPTFYSKKFKEAC   212
Glyma.14G077267   VGVRAT....GGT...GDCKYAGCSEDLN..PACPAELQ..VKDGGGA..VVACKSACAAFNTAEFCCTGDHSSPQ.TCSPTRYSKIFKNAC   216
Glyma.14G077333   VGVRAT....GGT...GDCKYAGCSEDLN..AACPAELQ..VKDGGGE..VVACKSACAAFNTAEFCCTGDHSSPQ.TCSPTLYSKIFKNAC   220
Glyma.14G077400   MGVRAA....GGT...GDCQYAGCVADVN..GVCPAELR..VRDGAGS..VVACKSACAAFNTAEFCCTGDHSTPQ.TCSPTHHSEIFKKAC   219
Glyma.14G163700   LFVKPI....NGK...GNCTTAGCDSDLR..ATCPNELA..VK.VNGK..TVGCRSACDVYNTDEYCCRGNYGNPS.TCNPTFYSKKFKEAC   212
Glyma.14G188400   LLAQPR....GVYG...TGVCNATGCVTDIN..RGCPKELQ..VVGGDGYQGGVVGCKSACEAFGSDQYCCSGEFANPT.TCQPSYYSTLFKQAC   223
Glyma.14G219600   MLVVPQ....GGSG..EKCTATGCVGDLN..GACPSELK..VMGADGREG.VVACKSACEAFNSPQYCCSGAYGTPD.TCKPSAYSAIFKSAC   221
Glyma.15G254700   VLVIAQ....GGL...RGCNTTSCPSDVN..KVCPPNFA..VKGSDGS..VIACKSARLALDQPEYCCTGPFASAD.KCPPTPYSVIFKNQC   214
Glyma.16G126900   MMVDAS....GGS...GSCAATGCGADLN..RRCPEELR..VDGGD.......ACQSACRAFGKPEFCCSDAFNSPA.ACAPSMYSQIFKAAC   213
Glyma.16G127100   MLVEAR....GG....GNCTATGCAADLN..GGCPAELK..VKTVASGE.GVACKSACEAFGDPRYCCSGRYATPE.TCKASSYSQLFKSAC   220
Glyma.17G248300   MGVRAT....GGT...GDCQYAGCVADVN..GVCPAELQ..VRDGSGA..VVACKSACLALNTAEYCCTGDHNTPQ.TCPPTHYSEIFKNAC   219
Glyma.17G258500   MLVVPQ....GGSG..GKCSATGCVGDLN..GACPSELK..VMSGDGREG.VVACKSACEAFNSPQYCCSGAYGTPD.TCKSSSYSEIFKSAC   221
Glyma.17G258600   LIVDPN....GGS...GTCGSTGCLADLN..QGCPNELR..VADRS.......ACRSACEAFGSPEYCCSGAYASPA.TCKPSVYSQIFKSAC   215
Glyma.19G018400   VSVTPK....ITN....PKCNIPGCLKDLK..GLCPPELE..VLNSKGE...IVACKSACLAFDNDKFCCRNQYGSPG.KCKPSVYSKIFKDAC   220
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                   220       230         240
Glyma.01G165400    PKAYSYAYDDATSTF.TCSG.AD.YTITFCP    243
Glyma.01G165600    PRAYSYAYDDGSSTF.TCAT.AD.YTITFCP    247
Glyma.01G165800    PGAHVH.........TCSS.HD.YTITFCP    249
Glyma.01G217600    PDAYSYPMDDATSMF.TCMG.SD.YRVVFCP    223
Glyma.01G217700    HDSYSYPQDDPTSTF.TCPAGSN.YKVVFCP    223
Glyma.02G047400    PKSYSYAFDDATSTF.TCTA.AD.YTVTFCP    244
Glyma.02G220900    PKAYSYAFDDATSTF.ICKA.FE.YDIIFCP    251
Glyma.02G249500    PKAYSYAYDDSTGLK.ICKA.HR.YVITFCP    243
Glyma.04G023700    PRAYSYAYDDKTSTF.TCASAAA.YTITFCP    248
Glyma.04G034300    PSAYSYAYDDATSTC.TCSA.SD.YVITFCP    153
Glyma.04G176200    PDAYHNA......SF.TCVS.AD.FTITFCP    221
Glyma.04G225800    PRSYSYAFDDGTSTF.TCKA.YE.YDIVFCP    157
Glyma.05G169700    PAAYSFALDDPTSLI.TCSK.AN.FVVIFCG    240
Glyma.05G204600    PDAYSYPKDDPTSTF.TCNGGTD.YRVVFCP    224
Glyma.05G204800    PDAYSYPKDDPTSTF.TCKGGTN.YRVVFCP    222
Glyma.05G245800    PKAYSYAYDDPTSIA.TCTK.AN.YFLTFCP    242
Glyma.06G023900    PRAYSYAYDDKTSTF.TCASAAA.YTITFCP    248
Glyma.06G139000    PRAYSYAFDDGTSTF.TCKA.NE.YDIVFCP    219
Glyma.06G189100    PEAYQH......GSF.TCAS.AQYYTVTFCP    219
Glyma.07G135100    PKAYSYAYDDSSLN.RCRA.PR.YVITFCP    242
Glyma.08G053600    PKAYSYAYDDPTSIA.TCTK.AN.YLVTFCP    250
Glyma.08G128000    PAAYSFALDDPTSLI.TCSK.AD.FVVIFCG    241
Glyma.08G172700    PQAYSYAYDDRTSTF.TCSGGAN.YSITFCP    179
Glyma.09G003600    PQAYSYAYDDATSTF.TCQG.AN.YLIRFC.    166
Glyma.10G060300    PDAYSYAYDDKSSTF.TCFNGPD.YAIIFCP    243
Glyma.10G060800    PDAYSYAYDDKSSTF.TCSNRPD.YAITFCP    263
Glyma.10G061000    PDAYSYAYDDKSSTF.TCSNRPD.YAITFCP    242
Glyma.10G061700    PDAYSYAYDDKSSTF.TCFNGPD.YAIIFCP    243
Glyma.10G061800    PDAYSYAYDDKSSTF.TCSNRPD.YAITFCP    261
Glyma.10G062100    PFAHTYPGDNQPPIY.QCKG.ADSYDITFCP    238
Glyma.11G025600    PDAFSYPMDDASSMF.TCMGGSD.YRLVFCP    224
Glyma.11G077700    PRAYSYAYDDGSSTF.TCAS.AD.YTITFCP    247
Glyma.11G077800    PKAYSYAYDDATSTF.TCSG.AD.YTITFCP    241
Glyma.11G106100    PRAYSYAYDDKTSTY.TCAN.AN.YLIIFCP    247
Glyma.11G106200    PRSYSYAYDDATSTF.TCSG.VD.YTVTFCP     34
Glyma.11G140800    PATFTFAHDTPSLMH.QCSSPRE.LKVIFCH    248
Glyma.11G220700    PNAYSYAYDDDSAVLKTCVA.PR.YVITFCP    249
Glyma.12G031000    PRAYSYAYDDKTSTY.TCAN.AN.YLIIFCP    247
Glyma.12G031200    PRSYSYAYDDATSTF.TCSG.AD.YTVTFCP    240
Glyma.12G064300    PATFTFAHDTPSLMH.QCSSPRE.LKVIFCH    248
Glyma.12G238900    PQAYSYAYDDATSTF.TCQG.AN.YLIRFC.    236
Glyma.13G082700    PTSYSYAYDDPTSIF.TCTG.TD.YVIAFCS    240
Glyma.14G077267    PAAYSYAYDDPSSIC.TCSG.SD.YVITFCP    244
Glyma.14G077333    PAAYSYAYDDPSSIC.TCSG.SD.YVITFCP    248
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Glyma.14G163700    PTSYSYAYDDPTSIF.TCSG.TD.YVVAFCA    240
Glyma.14G188400    PKAYSYAFDDATSTF.ICKA.FE.YDIVFCP    251
Glyma.14G219600    PRAYSYAYDDKTSTF.TCAS.AD.YTITFCP    249
Glyma.15G254700    PQAYSYAYDDRTSTF.TCSGEQT.IPSHFAP    243
Glyma.16G126900    PKSYSYAYDDATSTF.TCTA.AD.YTVTFCP    241
Glyma.16G127100    PRAYSYAYDDATSTY.TCAS.AD.YRITFCP    248
Glyma.17G248300    PTAYSYAYDDASSTC.TCSG.SD.YRITFCS    247
Glyma.17G258500    PRAYSYAYDDKTSTF.TCAS.AD.YTITFCP    249
Glyma.17G258600    PKSYSYAYDDATSTF.TCTG.AD.YTITFCP    243
Glyma.19G018400    PNYFSYAFDTPTPLV.SCAS.SE.FIITFCP    248
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