

AtAG01 739 VLVDALSRRIPLV--SDRPTIIFGADVTHPHPGED--SSPSIAAVVA---SQDWPEITKYAG-LVCAQAHRQELIQDLFKWKDPQ---KGVVTGGMIKELLIAFRRS-
 MtAG01 733 VLVDALSRRIPLV--SDRPTIIFGADVTHPHPGED--SSPSIAAVVA---SQDWPEITKYAG-LVCAQAHRQELIQDLFKWQDPV---RGLTGGMIKELLISFRRA-
 AtAG010 686 VLVDATISCRIPLV--SDIPTIIFGADVTHPENGE--SSPSIAAVVA---SQDWPEVTKYAG-LVCAQAHRQELIQDLKYTWQDPV---RGTVSGGMIRDLISFRKA-
 MtAG012a 580 VLVDATISCRIPLV--SDVPTIIFGADVSHPESGED--VCPISIAAVVA---SQDWPEVTKYAG-LVCAQPPREEIIKDLKFCWMDPR---RGIVYGGMIRELLLSFQKA-
 MtAG012b 298 VLVDALSWRIPLV--SDIPTIIFGADVTHAESGDD--SGPSIAAVVA---SQDWPEVTKYAG-LVCAQPPREELIQDLFKSWKDPQ---RGVVYGGMIRELLLSFKRA-
 MtAG012c 513
 AtAG05 698 VLNDATRNRIPLI--TDRPTIIMGADVTHPGPGED--SSPSIAAVVA---SMDWPEINKYRG-LVSAQAHRREEIIQDLKYLQDPQ---RGLVHSGLIREFHIAFRRA-
 AtAG07 709 ELVNSIPSHIRLLRDEPVIIFMGADVTHPHFPDD--CSPSIAAVVA---SNNWPEANRYVS-RMRSQTHRQEIQLDL---LMVKELLDDFYKA-
 MtAG07 724 ALVNSLPQSLPRLFNIDEVPMFMGAADVTHPHPLDD--SSPSIAAVVGG---SNNWPTANKYIS-RIRSQTHRQEIADLG---AMVGELLEDIFYQE-
 AtAG02 726 ELMDTFS---FF-KKEDEVMIIGADVNHHPAARDK--MSPSIAVAVG---TLNWPEANRYAA-RVIAQPPRKEEIQGFG---DACLELVKAHVQA-
 AtAG03 834 ELVDNIFS---FF-KKEDEVMIIGADVNHHPAARDK--MSPSIAVAVG---TLNWPEANRYAA-RVIAQPPRKEEIQGFG---ETCWELTEAHSQA-
 MtAG02a 627 ELINRLP---HF-EDESHVMFIIGADVNHHPGSRDT--NSPSIAVAVVA---TTNWPAANRYAA-RVCAQPPRKEEIKLNFQ---EICDLVRHYEKL-
 MtAG02b 598 ELINRLP---YF-EDESHVMFIIGADVNHHPGSRDT--NSPSIAVAVVA---TTNWPAANRYAA-RVCAQPPRKEEIKLNFQ---EICDELVSCYQWK-
 AtAG06 600 LLGIEYSYNIPLI--NKIPTLILGMADVSHGPPGRA--DVPSIAAVVGG---SKCWPLISRYRA-AVRTQSKVEMIDSLFQPIENTE---KGDNGIMNELFVEFYRTS-
 MtAG06 642 LLAEIHSGLHPLI--KDTPTMILGMADVSHGSPGRS--DIPSIAAVVGG---SRCWPLISRYRA-SVRSQSKVEMIDSLFKLVDMKNDGILEKKDDGIIRELLDDFYSSS-
 MtAG011 602 FLITFEKHSIPLF--SKIPTLVIGMADVSHGSGQGS--EALSIAAVVS---SRCWPLISRYRA-VVRTQSKVEMIVQSLFKPVSDT---KDDGIISSELLKDFQTT-
 AtAG08 681 VLDMELSGTMLPV--MRVPTIIVGMADVSHGSPGQSDHIPSIAAVVS---SREWPLISKYRA-CVRTQSKVEMIDSLFKPVSDK---DDQGIIMRELLDDFHSS-
 AtAG09 609 LLAMERSPAMPKV--TQVPTIIVGMADVSHGSPGQS--DIPSIAAVVS---SRQWPLISKYRA-CVRTQSKMEMIDNLFKPVNG---KDEGMIRELLDDFYSSS-
 AtAG04 637 MLSVERTPAFTVI--SKVPTIILGMADVSHGSPGQS--DVPSIAAVVS---SREWPLISKYRA-SVRTQSKMEMIESLVKKNG--GT---EDDGIIRELLDDFYSSS-
 MtAG04a 536 LLGVESSPSLPIV--SKAPTILILGMADVSHGSPGQT--DIPSIAAVVS---SRQWPLISKYRA-CVRTQSKVEMIDNLFKKVSOT---EDEGIIMRELLDDFYSSS-
 MtAG04b 653 LLGVESHSPSIPV--SKAPTILILGMADVSHGSPGQT--EIPSIAAVVS---SRQWPLISKYRA-CVRTQSKVEMIDNLFKPVSDT---EDEGIIRELLDDFYSSS-
 MtAG04c 627 WLGVESHRSIPV--SKVPTIILGMADVSHGSPGQP--DIPSIAAVVS---SRQWPLISKYRA-CVRTQSKVEMIDNLFKPVSDK---EDEGIIRELLDDFHSS-
 TLAG0 464 ALSG---AY---PAELAVGFIAGGRESF--R-FGGAACAVGGDGHLLWTL--PEAQA---GERTPQEVVD---LLEETLWAFRRK-
 PfAG0 544 VLDYRNF---YDYIIGIIVAPMKRSEG--YIGGSAMVDF--SGGY--IRKI--V-PKIGERGESV--DM---NEFFKEMVDKFKEFN-
 AaAG0 487 KL---KEI---EGKVDAFVGI--ISRITRDGK--TVNAAVFTKI--FNSKGLVRYLYTSYPAFGK---LTKAIGDVFSLLEK--L-
 HSP1WI 731 GVDI---PL---KQLMVGIMVYHDPSSR--G-MRSVVGVA--SINLTL--TKWYS--RVVFQMPHQEIVDSLK---LCLVGSLLKFFYEV-
 HSAAG01 575 ILLVPH---QRSAV--FQQPVIFLGAIVTHPPAGDG--KKPSITAVVG--SMDA--HPSRYCA--TVRVQRPRQEIIDLS---YMVRELLIQFYKS-
 HSAAG02 577 ILLPQ---GRPPV--FQQPVIFLGAIVTHPPAGDG--KKPSIAAVVGG---SMDA--HPSRYCA--TVRVQRPRQEIIDLS---AMVRELLIQFYKS-

 AtAG01 TGHKPLRIIFYRDS--VSEGGFYQVLLYELDAIRKACASLEAGYQPPVTVVVQKRHHHTLFAQNHDRHS---VDRSGNILPGTVVDSKICHPTFDFDY--LCS--HAGIQ
 MtAG01 TGQKQRIIFYRDS--VSEGGFYQVLLYELDAIRKACASLEPNYQPPVTVVVQKRHHHTLFAQNHDRHS---VDRSGNILPGTVVDSKICHPTFDFDY--LCS--HAGIQ
 AtAG010 TGQKPLRIIFYRDS--VSEGGFYQVLLYELDAIRKACASLEPNYQPPVTVVVQKRHHHTLFAQNHDRHS---VDRSGNILPGTVVDSKICHPTFDFDY--LCS--HAGIQ
 MtAG012a TGKKPCRIIFYRDS--VSEGGFYQVLLYELDAIRKACASLEPGYQPPVTVVVQKRHHHTLFSNDHNRHS---MDRSGNILPGTVVDTKICHPTFDFDY--LCS--HAGVQ
 MtAG012b TGQKPLRIIFYRDS--VSEGGFYQVLLYELDAIRKACASLEPGYQPPVTVVVQKRHHHTLFPNNHNRHS---TDTSGNILPGTVVDSKICHPTFDFDY--LCS--HAGIQ
 MtAG012c
 AtAG05 TGQIPQRIIFYRDS--VSEGGFSQVLLHEMTAIRKACNSLQENYPRVTVFVQKRHHHTLFPQHGNDM---TDKSGNIQPGTVVDTKICHPTFDFDY--LNS--HAGIQ
 AtAG07 VKKLPNRIIFYRDS--VSETQFKKVLQELQSIKTACSKF--QDYNPSITFAVQKRHHHTLFRCDPD---HENIPPGTVVDTVITHPKEFDFY--LCS--HAGVVK
 MtAG07 VEKLPNRIIFYRDS--VSETQFYKVLQELQSIKTACSKF--QDYNPSITFAVQKRHHHTLFPADTDQSSMHNHNFHQYENIPPGTVVDSVITHPKEFDFY--LCS--HAGVVK
 AtAG02 TPKRPKNKIVIFRDS--VSDAQFDMVLNVELLDVLTFFK---NGYNPKITVIVAQKRHHHTLFPADTDQSSMHNHNFHQYENIPPGTVVDSVITHPKEFDFY--LCS--HAGVVK
 AtAG03 TPKRPKNKIVIFRDS--VSDAQFDMVLNVELLDVLTFFK---NGYNPKITVIVAQKRHHHTLFPADTDQSSMHNHNFHQYENIPPGTVVDSVITHPKEFDFY--LCS--HAGVVK
 MtAG02a NKVRPQKIVIFRDS--VSESGFHMVLGEEKLDLKTVOFH---SNYPFTITLIVAQKRHHHTLFPAGVRE---GAPSGNVFPGTVVDTKVHHPFDFDY--LCS--HYGSL
 MtAG02b NGVRPEKIVIFRDS--VSEFQFDMVLNEELLDLKRAFOR--LNYFPTITLIVAQKRHHHTLFPADTDQSSMHNHNFHQYENIPPGTVVDSVITHPKEFDFY--LCS--HYGSL
 AtAG06 RARKPKQIIFYRDS--VSESGFEQVLKIEVDQIIKAYQRLGESDPKFTVIVAQKRHHHTLFPAGVRE---GAPSGNVFPGTVVDTKVHHPFDFDY--LCS--HYGSL
 MtAG06 GNRPTQIIFYRDS--VSESGFQHVLDIELNQIIKAYKHID--GDVPKFTVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 MtAG011 SGVKPQIIFYRDS--VSESGFNQVLNIELNIEIKACKCYDESWCPKFTVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 AtAG08 GSKKPNKIVIFRDS--VSESGFNQVLNIELDQMMQACKFLDDTHWPKFTVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 AtAG09 ENRKPHEIIFYRDS--VSESGFNQVLNIELDQMMQACKFLDDTHWPKFTVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 AtAG04 NKRPKNKIVIFRDS--VSESGFNQVLNIELDQIIIEACKFLDENWTPKFVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 MtAG04a KNRKPNKIVIFRDS--VSESGFNQVLNIELDQIIIEACKFLDENWTPKFVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 MtAG04b GNRKPNKIVIFRDS--VSESGFNQVLNIELDQIIIEACKFLDENWTPKFVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 MtAG04c EERRPENIIFYRDS--VSESGFNEVLNVELSQIIIEACKFLDENWTPKFVIVAQKRHHHTLFPANALE---KNVPPGTVVDTNIVHPRNYDFY--MCA--HAGMI
 TLAG0 AGRLPSPVLLRDS--GRVPQDEFALALEALAREG---IAYDLVSVRKSGGGRYVYV---QGRLADGLYVLPDEKTFLLTL--HRDRF
 PfAG0 IKLDNKKILLRDS--GRITNNEEEGLK---YISEMGDIEVMTDVIKNHPVRAFANMKMYF---NLGGAITY--LIP--HKLKQ
 AaAG0 GFKKGSIVVHRS--GRLYR---DEVA---AFKKYGEIYGYSELELEIKRNNRPFSSNEKFIKY---FYKLEDSVIL--ATYNQYVE
 HSP1WI NHCLPEKIVYRDS--VSDGQLKTVANYEIPQLQKCFEA--FENYQPKMVVVFQKKISTNLVLAAPQNF---VTPTPGTVVDTITSCWEDVDFY--LLA--HHVRQ
 HSAAG01 TRFKPTRIIFYRDS--VPEGQLPQILHYELLAIREDACKLEKDYQPGITFIVVQKRHHHTLFCADKNER---TGKSGNIPAGTIVDTNITHPKEFDFY--LCS--HAGIQ
 HSAAG02 TRFKPTRIIFYRDS--VSEGGFQVLLHHELLAIREDACKLEKDYQPGITFIVVQKRHHHTLFCADKNER---VGKSGNIPAGTIVDTNITHPKEFDFY--LCS--HAGIQ

 AtAG01 GTSRPAHYHVLW-----DENNFSA--DGLQSLTNNLCTYARCTRSV--SIVPPAYYAA--LAAFRARFY-M 998
 MtAG01 GTSRPAHYHVLW-----DENNFSA--DGLQSLTNNLCTYARCTRSV--SIVPPAYYAA--LAAFRARFY-M 992
 AtAG010 GTSRPAHYHVLW-----DENNFSA--DGLQSLTNNLCTYARCTRSV--SIVPPAYYAA--LAAFRARFY-M 945
 MtAG012a GTSKPAHYHVLW-----DENNFSA--DEIQSLTNNLCTYARCTRSV--SLVPPAYYAA--LAAFRARFY-M 839
 MtAG012b GTSRPAHYHVLW-----DENNFSA--DEIQSLTNNLCTYARCTRSV--SIVPPAYYAA--LAAFRARFY-M 557
 MtAG012c
 AtAG05 GTSRPAHYHVLW-----DENGFTA--DQLQMLTNNLCTYARCTKSV--SIVPPAYYAA--LAAFRARFY-M 957
 AtAG07 GTSRPTHYHVLW-----DENEFTS--DELQRLVYNLCYTFVRCTKPT--SIVPPAYYAA--LAAFRARFY-M 949
 MtAG07 GTSRPTHYHVLW-----DENKFTS--DELQKL VYNLCYTFVRCTKPT--SLVPPAYYAA--LAAFRARFY-M 976
 AtAG02 GTSKPTHYHVLW-----DELGFTS--DQVQKLIIFEMCFTFTRCTKPV--SLVPPAYYAA--LAAFRARFY-M 964
 AtAG03 GTSKPTHYHVLW-----DEIGFMS--NQIQKLIIFDLCTFTRCTKPV--ALVPPAYYAA--LAAFRARFY-M 1074
 MtAG02a GTSKPTHYHVLW-----DEHRFTS--DNLQKLIIFEMCFTFTRCTKPV--SLVPPAYYAA--LAAFRARFY-M 865
 MtAG02b GTSKPTHYHVLW-----DEHFTS--DELQKLIIFEMCFTFTRCTKPV--SLVPPAYYAA--LAAFRARFY-M 836
 AtAG06 GTSRPAHYHVLW-----DEIGFSP--DDLQNLINSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 850
 MtAG06 GTSRPTHYHVLW-----DEIGFSS--DGLQNLINSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 898
 MtAG011 GTSRPTHYHVLW-----DEIGFSA--DNLQEFVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 850
 AtAG08 GTSRPTHYHVLW-----DEIGFDT--DQLQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 856
 AtAG09 GTSRPTHYHVLW-----DEIGFAT--DDLQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 884
 AtAG04 GTSRPTHYHVLW-----DEIGFSA--DELQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 784
 MtAG04a GTSRPTHYHVLW-----DEIGFSP--DELQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 901
 MtAG04b GTSRPTHYHVLW-----DEIGFSP--DDLQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 875
 MtAG04c GTSRPTHYHVLW-----DEIGFSP--DDLQELVHSLSYVQQRSTTAT--SIVAPICYAA--LAAFRARFY-M 671
 TLAG0 GTPRPLK---V---HEAGDTPLEALAHQIFHLTRLYPASGFAPRLPAPHLA--RLVKEVGRGLGI 671
 PfAG0 AKGTPPIKLAKKRIKNGKVEKQSIIR--QDVLDFILTRLNYGSIADML--RLPAPVHYA--KFAAIRNE-W 755
 AaAG0 GTHQPIKVRKYV-----GELPVE---VLCQSILSLTLNMYSSFADM--RLPATVHYA--KFAAIRNE-W 693
 HSP1WI GCGIPTHYVCLV-----NTANLSP--DHMQRLTFKLCHMYWNPPTI--RVAPACKYAA--KLAFSGHT-L 958
 HSAAG01 GTSRPSHYVCLV-----DDNRFTA--DELQILTYQLCHTYVCTRSV--SIPAPAYYAA--LAAFRARFY-L 815
 HSAAG02 GTSRPSHYVCLV-----DDNRFTA--DELQILTYQLCHTYVCTRSV--SIPAPAYYAA--LAAFRARFY-L 817