

AT4G11140.1 -----MET~~E~~**KKVSLP**-----R~~I~~**RISVTDPYATDSSSDEE**EVDFDALSTKRRRVKKYVNEVWDS--VVSDKEKPMK-KRKKRVVT-
 VPVVTTAT--- 88
 AT4G23750.1 -----MEA~~E~~**KKMVLPRIKFTEHKNTTTIVSELTNTHQTRI**RISVTDPDATDSSSDEEE-EHQRFVSKRRRVKKFVNEVYDSGAVVTGSCGQMESKQRQKRAVKSE-----
 STVSPVVSATTTTGE 119
 AT4G53290.1 --MDEYIDF~~R~~**PLKYTEHKTSMTKYTKKSS-**-EKLSGGKSLKKV~~S~~T~~C~~YTD~~P~~ATDSSSDEEE----DFLFPRRRVKRFVNEITEPSCNNV-
 VTGVSM~~K~~**DRKRLSSSSDETQSPASSRQRPNNKVSVSGQ-I** 123
 AT4G27950.1 MMMDEFMDL~~R~~**PVKYTEHKTVIRKYTKKSSMERKTSVRDSARLVRUSMTDR**ATDSSSDEEE----FLFP~~R~~RVKR~~L~~INEIR~~E~~PSSSTGDVSASPT~~K~~DRKRINVDS-----TVQKP-----
 SVSGQ~~N~~Q 119
 AT2G46310.1 ----MKS~~R~~V~~K~~SKYT~~V~~H~~R~~KIT---STPF~~D~~----GFP~~K~~~~I~~~~V~~~~K~~~~I~~IV~~T~~~~D~~~~P~~ATDSSSDEE----NDN~~K~~SVAP~~R~~V~~K~~R~~Y~~~~V~~~~E~~~~I~~~~R~~~~C~~CD-EDDEPKPARKAKK~~K~~SP-AAAAEN-
 GGDLV~~K~~SV 101
 AT3G61630.1 ----MERR~~T~~**RVKFTENRTVTNVAA~~T~~PSN**----GSP~~R~~~~L~~~~V~~~~R~~~~I~~~~T~~~~V~~~~D~~~~P~~ATDSSSDD~~D~~----NNN~~V~~~~T~~~~V~~~~V~~**PRV~~K~~R~~Y~~~~V~~~~E~~~~I~~~~R~~**~~C~~QGESSSSTAARKGK~~H~~KEEE~~S~~V~~V~~ED-
 DVSTS~~V~~K~~P~~ 107

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AT4G11140.1 R~~K~~**FGRVQRPWGK**AAEIRDPSRRVRWLGT~~E~~TAEAAAIVYD~~A~~AIQLRG~~P~~AELNF-----PPP~~V~~TENVEEASTEVKG~~V~~SD-----
 FIIG~~G~~CECLRSP~~T~~**SVL**SPFSGESTAVKEEFVG~~V~~ST- 200
 AT4G23750.1 KKFRG~~V~~RQRPWGK~~K~~AAEIRDPLKRVRLWLGT~~T~~NTAEAAAIVYD~~A~~AIQLRG~~P~~~~A~~LTNF~~S~~VTPTTATEKKAPPPS~~V~~KKKKKKNNKSK~~S~~TASSSISR~~S~~SNDCLCSP~~V~~SVLRSPFA-----
 VDEFGSISS 252
 AT4G53290.1 KKFRG~~V~~RQRPWGK~~K~~AAEIRDPEQRRRIWLGT~~E~~TAEAAAIVYD~~A~~AIQLRG~~P~~~~A~~LTNF~~S~~IPPQEEEEEE--EPE~~V~~IEEKPVIMTTPTPT~~T~~SSSE-STEEDLQHLSSP~~T~~SVLNHR-----
 SEE-IQQV 252
 AT4G27950.1 KKYRG~~V~~RQRPWGK~~K~~AAEIRDPEQRRRIWLGT~~E~~TAEAAAIVYD~~A~~AIQLRG~~P~~~~A~~LTNF~~S~~PTVQP-----EPE~~V~~QEQE--QEPESNMSVSIS-ESMD~~D~~SQHLSSP~~T~~SVLN~~Y~~QTY-----
 VSEEPIDL~~S~~ 235
 AT2G46310.1 VKYRG~~V~~RQRPWGK~~K~~AAEIRDPS~~S~~SRTRIWLGT~~E~~TAEAAAIGYD~~A~~AI~~R~~IKGH~~A~~QTNFLTPPP-----SPTTEVLPETPV~~I~~DL~~V~~SGCDSARE~~Q~~ISLCSP~~V~~SVLRFSHN--
 DETEYRTEPETEEQ- 218
 AT3G61630.1 KKYRG~~V~~RQRPWGK~~K~~AAEIRDPS~~S~~SRTRIWLGT~~E~~TAEAAAIVYD~~A~~AIHLK~~G~~~~P~~~~A~~LTNFLTPP-----P-----TPVIDLQ~~T~~VSACDYGRD~~S~~RQSLH~~H~~SP~~I~~SVLRFNVN--
 EETEHEIEAIELSP 216

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AT4G11140.1 --AEIVVKKEPSFNG----SDFSAPLF~~S~~DD~~V~~FGFSTS~~S~~~~E~~FGG~~L~~FGDN~~N~~~~F~~-ADMSFGSGFGF~~G~~SG-----SGFSSW~~H~~V~~E~~DHFQD~~I~~GD~~L~~FGSDPV~~L~~TV 287
 AT4G23750.1 PVA~~AV~~VKEEP~~S~~MTTVSETFSDFSAPLF~~S~~DD~~V~~DFR~~S~~SS~~V~~PDY~~L~~GG~~L~~FG~~G~~ED~~U~~FTADMCTDMNFGF~~G~~FG-----SGLSSW~~H~~MEDHFQD~~I~~GD~~L~~FGSDPLLAV 343
 AT4G53290.1 QQP~~F~~KS~~A~~K~~P~~EPGVSNAPW~~W~~H~~T~~G~~F~~NT~~G~~GESD~~S~~FP~~L~~D~~T~~~~P~~~~L~~D~~N~~Y~~E~~N~~E~~~~S~~PP~~E~~MS~~F~~DQ~~P~~M~~D~~Q~~I~~C~~E~~ND~~I~~F~~N~~MLFLG~~G~~GETMNIE~~E~~LT~~S~~SS~~I~~K~~D~~~~M~~~~G~~~~S~~T~~F~~~~S~~D~~F~~~~D~~~~S~~L~~I~~S~~D~~~~L~~V~~A~~- 354
 AT4G27950.1 IKPVKQEFLEPEQEP~~I~~SWHLGE~~G~~NTND~~S~~FP~~L~~D~~T~~~~P~~~~L~~D~~N~~Y~~E~~N~~E~~~~S~~LP~~D~~IS~~F~~DQ~~P~~M~~S~~P~~I~~Q~~P~~T~~E~~N~~F~~NDLMLFD~~S~~N-----AEEYY~~S~~SE~~I~~K~~E~~~~G~~~~S~~F~~N~~L~~D~~~~D~~~~S~~L~~I~~S~~D~~~~L~~V~~A~~- 335
 AT2G46310.1 -----NPF~~F~~LP~~D~~LF~~R~~~~S~~~~D~~Y~~F~~WD~~S~~TP~~D~~~~P~~~~L~~~~E~~FH~~Q~~~~S~~~~L~~PNINNNNTV~~C~~DK~~T~~N~~L~~-----SDSFPLGVIGDFSS--WDVDEFFQDHLLDK- 294
 AT3G61630.1 ERK~~S~~TVIKEEEESSAGLVFP~~D~~PYLLP~~D~~LSLA~~E~~CF~~W~~D~~T~~~~E~~AP~~D~~~~L~~~~F~~~~L~~~~E~~ET~~K~~~~L~~Q~~S~~TL~~L~~LP~~N~~TE~~V~~SK~~Q~~~~E~~NE-----TEDFEFGLID~~D~~~~E~~~~S~~SP~~W~~D~~V~~HFF~~D~~H~~H~~HSFD 315

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