

1g12620 1 VARTKQYDLVLDLCKOMELKGIHNLTYLTSIMINCCRCRKLISLAFSAMGKI IKLGYEPDVTVFTSTLLINGLCLGCRVSEA  
1g12770 1 IAKTKOYELVLAALCKOMESKGIHNSIYTLTSIMINCFRCRKLISYAFSTMGKIMKLYEPDVTIIFNTLLNGLCLGCRVSEA  
1g12700 1 IARTKQFNVLDFCKOLELNGIAHNLTYLTLNIMINCFRCRCKCTCFAYSVLGKVMKLYGEPDVTITFTNTLLKGLFLEG----  
1g63070 1 IAKMNFDLVLSLGEOMONLGIHNLTYYSIFINYFCRRSOLSALAILGKMMKLYGEPDVTITLNSLLNGFCHGNRISEA  
1g63080 1 IAKMNFDLVLSLGEOMONLGIHNLTYYSIFINYFCRRSOLSALAILGKMMKLYGEPDVTITLNSLLNGFCHGNRISEA  
1g63130 1 IAKMNFDLVLSLGEOMONLGIHNLTYYSIFINYFCRRSOLSALAVLAKMMKLYGEPDVTITLNSLLNGFCHGNRISSDA  
1g63150 1 IAKMNFDLVLSLGEOMOTLGIHNLTYYSIFINYFCRRSOLSALAVLAKMMKLYGEPDVTITLSSLLNGYCHSKRISDA  
Rfo 1 VVRMERFDLVLSLYOKMERKQIRCDIYSPFNILIKCFCSCKSLFPALSTFGKITLGLHPDVTFTLLHGLCEGDRVSEA  
Rf-1petunia 1 LVHMKHYSSVVSIFREIHKLRIPVDAFALSTVVNSCCLMHRDLDGFSVLAIHFKKGIPIYNEVTFITLLRGLFAEN----  
Rf-1rice 1 LCKRAQAMDKAMEVLNTMVKNQVMPDCMVTYNSILHGYSKSSGQPKAIGFLKMKMRSDGVEPDDVTYITLMDYLCKNGRCMEFA  
consensus 1 iaakmkfdlvisl qme lgi hnltytsimincfcr sqlslalsvlgkmmklygpepdvtftntllnglclgcrvsea

1g12620 81 LELVDRMVEMGHKPTLITLNLVNLGLCLNGKVSDAVLLIDRMVET-GFOPNEVTYGPVLKVMCKSGOTALAMELLRKMEE  
1g12770 81 LELVDRMVEMGHKPTLITLNLVNLGLCLNGKVSDAVLLIDRMVET-GFOPNEVTYGPVLNVMCKSGOTALAMELLRKMEE  
1g12700 76 -----KVSEAVLDRMVEN-GCQPDVVTYNSIVNGLCRSGDTSALDALLRKMEE  
1g63070 81 VALVDQVMEMGYQPDVTFTTLLVHGLFQHNKASEAVALVERMVVK-GCQPDVTYGAIVNGLCKRGEPLDALNLLNKMEK  
1g63080 81 VALVDQVMEMGYQPDVTFTTLLVHGLFQHNKASEAVALVERMVVK-GCQPDVTYGAIVNGLCKRGEPLDALNLLNKMEK  
1g63130 81 VSLVQVMEMGYQPDFTFTNLLHGLFRHNRASEAVALVDRMVVK-GCQPDVTYGTIVNGLCKRGDIDLALNLLNKMEQ  
1g63150 81 VALVDQVMEMGYQPDFTFTTLLHGLFRHNKASEAVALVQVMVQR-GCQPDVTYGTIVNGLCKRGDIDLALNLLNKMEA  
Rfo 81 LDFFHQMFETTCRPNVVFTTLLMNLGCREGRIVEAVALDRMVED-GLOPTQITTYGTVDGMCKKGDVTSALNLLRKMEE  
Rf-1petunia 76 -----KVKDAVHLFKKLVRENI-CEPDEVVMYGTVMGLCKKKGHTQKAFDRLRMEQ  
Rf-1rice 81 RKIFDSMTKRCLKPEITTYGTLTQCYATKCALVEMHGLLDRVNRN-GIHPDHYVFSILICAYAKQKVDQAMLVFSKMRQ  
consensus 81 l lvdqvmemg kpd itf tlv gl h kvseavalvdrmv gcqpdvvtyg vnglckrgdtdlAl llrkme

1g12620 160 R-KIKLDAVKYSIIDGLCKDGSIDNAFNLFNEMEI KGFKADIIYTTLLIRGFCYAGRWDGAKLLRDMIKRKITFDVVA  
1g12770 160 R-NIKLDAVKYSIIDGLCKDGSIDNAFNLFNEMEI KGFKADIIYNTLLIGGFCNAGRWDGAKLLRDMIKRKISPNVVT  
1g12700 125 R-NVKADVFYTSIIDSLCRDGCIDAAISLFKEMETKGIKSSVVTYNSLVRGLCKAGKRWDDGALLKDMVSRREIPNVIT  
1g63070 160 G-KIEADVVIYNTIIDGLCKYKHMDDAFDLFNKMETKGIKDPDVTYNEPLISCLCNVGRWSDASRLSDMLERKINPNVVT  
1g63080 160 G-KIEADVVIYNTIIDSLCKYRHVDDALNLFTEMNDKGIKDPDVTYSSLSISCLCNVGRWSDASRLSDMLERKINPNVVT  
1g63130 160 G-KIEPQVVIYNTIIDALCNKYNVDALNLFTEMNDKGIKDPNVTYNSLIRCLCNVGRWSDASRLSDMLERKINPNVVT  
1g63150 160 A-RIKANVVIYNTIIDSLCKYRHEVAVDLFTEMETKGIKDPNVTYNSLINCLCNVGRWSDASRLSDMLERKINPNVVT  
Rfo 160 VSHIIPNVVIYSAIIDSCLCKDRHSDAONLFTEMQEKIIPDPLFTYNSMIVGFCSSGRWSDAEQLLQEMLERKISPDVVT  
Rf-1petunia 126 G-ITKPDTCLYNIVIDAFCKDGMGLDGSATSLNEMKQKNIPDIIYTTSLIDGLGLSQRWSEKVRTLFLMHLNLFVCT  
Rf-1rice 160 Q-GLNPNNAVTVYGAIVGILCKSGRVEDAMLYEOMIDEGLSPGNIVYNSLIHGLCTCNKWERAEELILEMLDRGICLNTIF  
consensus 161 g kik dvviystiidglckdghliddainlf eMe kgikpdvitYnsli glcn grWSDa kLl dMlerKi pnvvt

1g12620 239 FSALIDCFVKEGKLEAEELHKEMIQRGISPDVTYTSIDGFCENOLDKANHMLDLMVSKGCGPNIRTFNILLINGYCK  
1g12770 239 FSVLIDSFVKEGKLEADOLLEKEMQORGIAPNITITYNSLIDGFCENRLEEAIQMVDLMTSKGCDPDIMTFNILLINGYCK  
1g12700 204 FNVLDLDFVKEGKLEAEANELYKEMITRGISPNIIITYNTLMDGFCMONRLESEANMLDLMVRNKCSPDIVTFSLIRGYCM  
1g63070 239 FNALIDAFVKEGKLEAEELKLYDEMVK-----SKHCFPDVVAIYNTLIRGFCCK  
1g63080 239 FNSLIDAFVKEGKLEAEELKLYDEMIDORSIDPNIVTYNSLIDGFCMHDRLDEAQQIFFLMVSKDCLPDVVTYNTLIRGFCCK  
1g63130 239 FSALIDAFVKEGKLEAEELKLYDEMIDORSIDPDIFTYSSLINGFCMHDRLDEAKHMFELMISKDCFPNVVTYNTLIRGFCCK  
1g63150 239 FNALIDAFVKEGKLEAEELKLYDEMIDORSIDPDITITYNSLIDGFCMHDRLDEAKOMFKFMVSKDCLPNITQTYNTLIRGFCCK  
Rfo 240 YNALINAFVKEGKLEAEELKLYDEMIRGLIIPNTITYSSIDGFCMNRRLDAAEHMFVIMATKGCSPNIIITYNTLIRGFCCK  
Rf-1petunia 205 FNSVIDGLCKEKGVEDAEEMTYMIEKGVPEIITYNVMDGFCYLRGOMGRARRIFDSMIDKGIETPDIISVYALINGYVE  
Rf-1rice 239 FNSIIDSCHCKEGRVIESEKLFELMVRIGVKNVITYNTLIRGFCYLAGKMDEAMKLLSGMVSGLKPNITVYNTLIRGFCCK  
consensus 241 fnalidafvKEGklveaeklydeMi rgi pn itynslidgfcM nrldea hmfldlmvskgc P ivtyntLInGyck

1g12620 319 ANLIDDGELFRKMSLRGVVADTVTYNTLIQGFCELGKLEVAKELFQEMVSRVRPDIIVSVKILLDGLCDNGEPEKALEI  
1g12770 319 ANRIDDGELFRMSLRGVIANVTVTYNTLVOGFCOSGKLEVAKLFQEMVSRVRPDIIVSVKILLDGLCDNGEPEKALEI  
1g12700 284 VKRVDDGMKVFNRNISKRGLVANVTYSILVQGFCSGKIKLAEELFQEMVSHGVLPDVTYNTLIDGLCDNGLEKALEI  
1g63070 285 KYRVEGMEVFRMSORGLVNTVYTTLIHGFFOARDCNAAQMVFKOMVSDGVHPDMTYNTLIDGLCDNNGVETALVV  
1g63080 319 AKRVVDGMELFRDMSRRGLVNTVYTTLIHGFFOASDCDNAQMVFKOMVSDGVHPNIMTYNTLIDGLCDNNGLEKAMVV  
1g63130 319 AKRVEDGMELFRMSORGLVNTVYTTLIHGFFOARDCNAAQMVFKOMVSDGVLPDMTYNTLIDGLCDNNGVETALVV  
1g63150 319 CKRVEDGVEFRMSORGLVNTVYTTLIQGFQAGCDNAAQMVFKOMVSRVRPDMTYNTLIDGLCDNNGVETALVI  
Rfo 320 AKRIDDGEMELHEMTEGLVADTTTYNTLIHGFFYLVGDLNAAALDLOEMISSGLCPDIVTCDTLLDGLCDNGLKDALEM  
Rf-1petunia 285 KKKMDKAMOLFREISONGLKPSIVTCSVLLRGLFEVGRTECAKIFDEMOAAGHINLTYHTCTLLGGYFKNGLVEBAMSH  
Rf-1rice 319 ISRMEDKALVLEKEMESSGVSPDITTYNTLIQGFQTRTAAAKIEFVRYRITESGTOIELSTYNTLIDGLCDNGLKDALEM  
consensus 321 akrvddgmelfrems rGlvanTVtyntliqGffq e A mlf emvs gv pdimty illDglc ngkle Al i

1g12620 399 FEKIEKSK-----MELDIGYNIIIHGMCNASKVDADWDLFCSLPLKGVKPDVKTYNIMIGGLCKRGSISEADL  
1g12770 399 FGKIEKSK-----MELDIGYMIIIHGMCNASKVDADWDLFCSLPLKGVKLDARAYNIMISELCKRQDSLSKADI  
1g12700 364 FEDLOKSK-----MDLGIYMTTIIIEGCKGKVEDAWNLFCSLPCKGVKPNVMTYNTMISGLCKRGSISEANI  
1g63070 365 FEYMQKRD-----MKLDIVTYTMIIEALCKAGKVEDGWDLFCSLSLKGVKPNVVTYNTMMSGFCRKGKKEADA  
1g63080 399 FEYLQKSK-----MEPDITYNIMIEGCKAGKVEDGWDLFCSLSLKGVKPDVIAVNTMISGFCRKGKKEAYT  
1g63130 399 FEYLQKSK-----MEPDITYNIMIEGCKAGKVEDGWDLFCSLSLKGVKPNVVTYNTMMSGFCRKGKKEADA  
1g63150 399 FKYLOKSE-----MELNFIYNTMIEGCKAGKVEAWDLFCSLSIK---PDVVTYNTMISGLCKRQLLQEADD  
Rfo 400 FKVMQKSKKDLDASHFPNGVPEVDVQYNTLISGLINEGFLAEELYEEMPHRGIPTITYNTMISGLCKRQLLQEADD  
Rf-1petunia 365 FHKLEKRR-----EDTNQIYTAVINGLCKNGKLDKAHATFEKLPILIGLHPDVTYNTMISGLCKRQLLQEADD  
Rf-1rice 399 FQNLCLMD-----LKLKARTFNIMIDALLKVRNDEAKDLFVAFSSNGLVFNWYTYRLMAENIIGOGILLLELDDQ  
consensus 401 Fe lqsk meldi tynimiegmckagkvddawdlfcs1 lkgvkdvtYntMismglckkglleead

1g12620 468 LFRKMEEDGHSFNGCTYNI LIRAHLGEGDATKSAKLEI EIKRCGFSVDAST-VKMVVDML  
1g12770 468 LFRKMEEDGHPDELTYNII LIRAHLGDDATTAELIEEMKSSGFPADVST-VKMVINML  
1g12700 433 LFRKMEEDGNAPNDCTYNTLIRAHLDGDLTASAKLEIEMKSSGFSADASS-IKMVIDML  
1g63070 434 LFVEMKEDGFLPNSGTYNTLIRAHLRDGEAASAELIKEMRSCGFAGDAST-FGLVFNML  
1g63080 468 LFIKMKEDGFLPDSGTYNTLIRAHLRDGDKAASAELIKEMRSCRFAGDAST-YGLVTNML  
1g63130 468 LFRKMEEDGFLPDSGTYNTLIRAHLDGDKAASAELIREMRSCRFVGDAST-IGLVTDML  
1g63150 465 LFRKMKEDGFLPNSGTYNTLIRAHLRDGDRAASAELIKEMRSCGFVGDAST-ISLVFNML  
Rfo 480 MFDMSGKSFSPNVVTFTLLINGYCKAGRVDGLELFCMGRRGIVANAITYITLICGFR  
Rf-1petunia 434 MLRKMEDNGLPDPNRTYNTVIVRFFRSKVSSEMKAFLKEIAGKSSFEAAT-VELLMDII  
Rf-1rice 468 LFLSMEEDNCTVDSGMLNFIVRELQGEITRAGTYLSMDEKHESSLEAST-ASLFDLLE  
consensus 481 lfrkm edg lp sgyntlirahlrdgd tasealikemkscgf adast v lvvdm