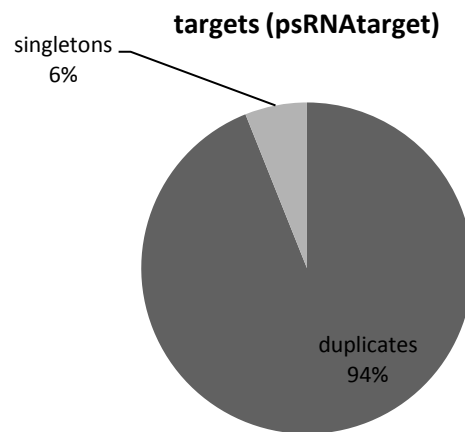
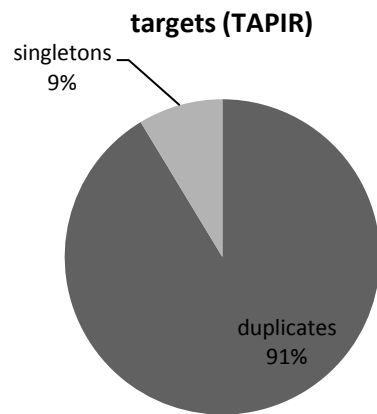


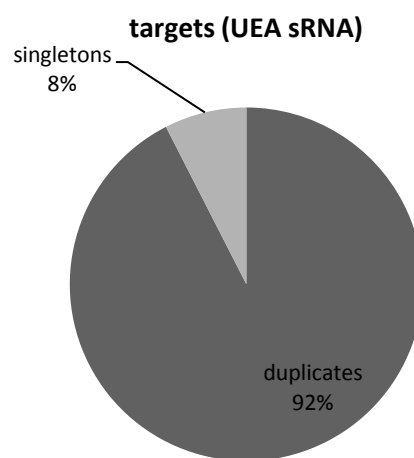
A



B



C



280 290 300 310 320 330 340 350 360
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AT3G59610 VCKR--WNTLF---KERFFNSDLGLARPOFILLAESKICSVVNDLDGPSIEVHNLPSDIPGYKLYMPM--HVEYCDGLFLYATCYGIGI
AT1G19715 SGHA--WDDGM---YTTVKQIIIAHG--SGIDSIQIEYD--KNGSSVWSEKRGGKGGKFF--DKVKFDYPH--EYLISVNGTYGS--FDVWGTI
AT3G59620 -----
AT1G73040 -----MDQ-----
AT5G46000 NGNK--FDDGVYEGTYDGVRLKLVGEDFHGIVYLYKIYV--KNGDVVVKEHGRARGTHITETEFEVKCPD--EYITSIWGTICRN-----
AT2G33070 IGDV--WDDGA---YDGVRRVYVGGEDGIAFVKFEYV--NGSQEVVGDERRGKKTLLG--AEFEVDPDD--YIVYVEGYHEKVFVGTKE
AT3G16390 TGDV--WDDGV---YDNVTKVYVGGQYQYIAFVKFEYA--NGSEVVVGDHEGKTELG--VEEFEIDSD--YIVYVEGYREKVSMTS-E
AT3G16410 GGNQ--WDDGS---EYDAVTKIQVAAGGNGIEYVVKFTYV--KNGQTEEAPLRGVKGRSFEADPFVINHPE--EHLVSVEGRYNP-----EG
AT3G16400 MGDV--WDDGV---YENVRKVYVGGQYQYIAFVKFEYV--NGSQVVVGDHEGKTELG--VEEFEIDADD--YIVYVEGYREKVNMTS-E
AT1G52000 -----WDDGK---HTKVKRVQLTFD--DVIRSEIEY---DGTSLKSQPRGTAGT---KIDGFTLSSDEYITEVNGYYKT---TFSGE
AT5G39330 GGRE--WDDDV---YEGVRKVYVGGQINRITYYKFEYVQEDGQVVTTEYKIIQQ---PKEFVLQYPD--EHIIAVEGNYRG--VALCATE
AT2G39310 GGQE--WDDDV---YEGVRKVYVGGQDLNRITYYKFEYVQEDGQVVTTEYGTNNQH--PKEFVIQYPD--EHIIAVEGNYHQ--VALIATE
AT3G16470 GGEE--WDDGG---AYENVRKVYVGGQDSGVVYVVKFDE--KDGK--LVSHEHGKQTLG--TEEFVVDPE--YITSVKIYYEK--LFGSPIE
AT5G38540 GKKK--WEDGF---DHDNVSKIQLVGGFEGILYIKVDYI--KNGKLETGLIHGDSGGDGFLOKMEINQSKNEYLVYVEGYYDD-----ASE
AT5G38550 GSKK--WDDGF---DHDNVSKIQLVGGFEGILYIKVDYI--KNGKLETGLIHGDSGGDGFLOKMEINQSKNEYLVYVEGYYDD-----ASE
AT1G52120 -----WDDGF---DHDVTKIYLVGGKTKGIDFIKIDYV--KSGKPKNGPFHGYSGG--GFLQMFEDNLKNEYLESVEGYYTN---RSGE
AT1G52130 KSSEYMWDDGS---EHDDVTKIYVRGGTKGIEFIKFGYV--KAGELLDGSFHGYSDT--GFTQMFEDHRKNEHLLSVEGYFDY-----YND
AT1G52110 VGTK--WDDGV---DHAGFTKIHVRSQKGIQYIKFLYVVKYHGLKDGPIHGSISG-----KVEGYYND---HDESG
AT5G49850 VGTK--WDDGV---DQAGFTKIHVRSQKGIQYIKFLYVVKYHGLKDGPIHGSISG-----KVEGYYND---HDESG
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AT5G49860 -----
AT1G60130 GGTD--WNDGA---DHEGVAKIYVRGGKRDICQYIKFDYV--KDRKIYVGPAGHVRGR--GFTEFTEINHLDNEVMVSVGYYDE-----GDSG
AT1G60095 GGTE--WNDGA---EHEGFTKIYVQGGCDGIQYIKFDYV--KDGQHKYVSPHGVKGS--ESTEPFEINHLDKKEYLISVEGYYDE-----GDSG
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AT1G52030 GGSAA--WDDGA---FDGVRKVLVGRNGKVFVSYVRFEYA--KGERMVPHAHGKQRE--APQEFVVDYPN--EHITSVEGTID---G
AT1G52040 GEGE--WDDGA---EHDGVTKIYVAAGGLGIEQIRFDYV--KNGQPKBGSFHGVKGR--STISTIEISHPA--EYLISMEGWYDS-----TN
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AT3G16430 -----
AT3G16420 -----
AT3G16440 -----
AT3G16450 -----
AT1G52100 VGIQ--WDDGS---DYHDVTKIYVRGGLEGIQYIKFDYV--KAGKKVIGPIHGASGR--GFTEFTEINHLLEKEYLLSIEGYYNA-----STG
AT5G35950 GKKR--WDDGF---DYEYVTKIYVRGGLEGIQYIKFDYV--KDGKTTITGPIHGVSGR--GLTQTFEINHLQKEYLLSIEGYYDI-----STG
AT5G35940 GGKE--WDDGF---DYEYVTKIYVRGGLEGIQYIKFDYV--KVGKTIIDGPIHGVSGR--GMTQTFEINHLQKEYLVLSIEGYYDK-----STG
AT1G58160 -----
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AT1G52070 GKKQ--WDDGA---DHDNVAKYVIRGGLEGIQYIKFDYV--KDGKTIIDASIHGVSGS--GFTQTFEIDYQNSEYIVSVVGYDYK-----SG
AT2G25980 GGNQ--WDDGA---DHDNVTKIYVRGGLEGIQYIKFDYV--KAGQVQVHGSVHGLS--GFTQTFEINHLNGEYIVSVVGYDYK-----ISG
AT5G28520 RGLQ--WDDSS---DHDNVTKIYVRGGREGIQYVVKFDYV--KSGQVQVHGSVHGLS--GFTQTFEIDQKD--EHLVSVVEGYYDV-----TKG
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AT1G05760 -----
AT1G05770 -----MEGKIKIP-----
AT2G43730 -----
AT2G43740 -----

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          370       380       390       400       410       420       430       440       450
.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|
AT3G59590 LLRQIRWIKSKVNYRYNGVGYDNSR-----PENHYKIFES-CPYSDDTVVKASITEFVSDAWIS-----
AT3G59610 CNPWLRQ-IRWFKSSYEGYDFSG-----MGYDNSRQDKHYKILGSYCTN-----
AT1G19715 CVRSLTF-ESNR-RKYGPFVGS-----GTFAL-PKSGSKIIGF-HGKAGWYLDATGVHTQPIPKENNPSSKILLHSHQSFSGDKKHE
AT3G59620 -----MAERM-----
AT1G73040 -----QQQGDKNLT-----
AT5G46000 --DHHRY-KSTGGRTFEQL--TAAD--KYDINL-AAKMGTPMYW-NTVSELQFKTSHGRTS-----
AT2G33070 IISTLTF-KTYKGKTSPPFGIVS-G--TKFVL--QGGKIVGF-HGRSTDVLSLHSLGAYIS-----
AT3G16390 MITFLSF-KTSKGKTSQPIVKKP-----GVKFVL--HGGKIVGF-HGRSTDVLSLHSLGAYVS-----
AT3G16410 LILGLTF-KSNK-KTSDLIGYED--GTPFTL-QVQDKKIVGF-YGFAGNNLHSLGAYF-----
AT3G16400 MITFLSI-KTFKGKTSHPIEKRP-----GVKFVL--HGGKIVGF-HGRSTDVLSLHSLGAYVS-----
AT1G52000 VITSLTF-KTNK-RTYGTYGNT-----SSYFVAAPKDNQIVGF-LGSSSHALNSIDAHFAPAPPPGSTGAKPGASGIGSDSGSIGSAG
AT5G39330 VITNLVF-KTSKGRKSLFPGPNLLGITGTFKVI-EDGGKKIVGF-HGRSGNALDALGVYFVHGSLTTS-----
AT2G39310 VITSLVF-KTSK-----GF-HGRAGDAVDALGVYFVLDT-TTS-----
AT3G16470 IVTALIF-KTFKGKTSQPFGLTS-----GEEAEL--GGGKIVGF-HGSSDLIHSVGVYIIPST-----
AT5G38540 TIQGLHF-QTNL-NNPVMMGYKK--GRKFLL-ASNGNKIIGF-HGYADKSLNSLHSLGAYFSRA-----
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AT5G49860 -----
AT1G60130 IIQGIQF-RTNI-KTSELIGYNN--GKKFSL-AANGKKIIGF-HGYADQNLNSLHSLGAYFT-----
AT1G60095 VIQGIQF-KTNI-KTSELIGDKK--GRKFSL-AANGKKIIGF-HGYADKSLNSLHSLGAYFTT-----
AT1G60110 VIQGIQF-KTNI-RTSELMGDNR--GRKFSL-AANGKKIIGF-HGYAENLNSLHSLGAYFTT-----
AT3G16460 VMLGIQF-KTNL-NTYEVSIYPF-EPSTDTKFTL-QVQDKKIIIGF-HGFAGNHVNSIGAYFVPKSSTTPVPS-----
AT1G52030 YLSSLKF-TTSKGRTPVVF--GNVVGSKFVF-EETSFKLVGF-CGRSGEALDALGAHFAP-----LPAPTAPAPAPAPAPAP
AT1G52040 IIQGIQF-KSNK-HTSQYFGYEFGL--DGTQFSL-QVNDNKIISF-HGFADSHLNSVGFAYFAPISSSLTT-----
AT3G21380 AIAALAF-KTNK-TEYGPYGNKT-----RNQFSIHAPKDNQIAGF-QGISSNVLNSIDVHFAPLPS-----
AT3G16430 -----
AT3G16420 -----
AT3G16440 -----
AT3G16450 -----
AT1G52100 VIQCLQF-ITNK-KTYDPIGYNE--GARFTL-SASRSKIIGF-HGFADKYLNSLHSLGAYFIKI-----
AT5G35950 VIQSIQF-KTNQ-QTSDMMGFNE--GTFKSL-RSMRGRIGF-HGFADKNLYSLRAYYIRI-----
AT5G35940 VIQSIQF-KTNV-KTSDMMGFNK--GTFKSL-GIIRNKIIGF-HGFSDKNVYSLGAYFIKV-----
AT1G58160 -----
AT1G57570 VIQALQF-KTNI-KTSELLGYKK--GKKFSL-VDKRKKIVGF-HGYADKSLNSLHSLGAYFTTV-----
AT1G61230 AIQALQF-KTNI-KTSELLGYEK--GKKFSL-ADKGGKIIGF-HGYAENLISLHSLGAYFTTV-----
AT1G52050 VMQALQF-KTNL-KTSEFIGYQK--GTFKSL-GVDGKIVGF-HGSAWRSLSLHSLGAYVKT-----
AT1G52060 VMQALEF-KTNR-KTSEVIGYPSN--TKFSLGGVNGKMINGF-HGSAGKALNSIGAYLTKV-----
AT1G52070 TMQALEF-KTNL-KTSEVIGYPK--GTFKSLGGVNGKMINGF-HGSAGKALNSIGAYLTKV-----
AT2G25980 VIQALQF-ETNQ-RSSEVMGYDDTG--TKFTL-EISGNKITGF-HGSADANLKSLSLHSLGAYFTPP-----
AT5G28520 VIQALKE-KTNK-KTSEMIGYDDTG--IKLSSL-EVKGKKIIGF-HGYAETNLNSLHSLGAYFTTT-----
AT1G33790 LVQGLKF-KTNK-KTSDMIGYDENG--LKFSL-EVNGKKIIGF-HGYAETNLNSLHSLGAYFVTA-----
AT1G05760 -----MKIGPVG-----
AT1G05770 -----
AT2G43730 -----MKSRNREMF-----KVGPIG-----
AT2G43740 -----RREMEKVGPIGS-----

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AT3G59610	-----								
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AT5G46000	-----								
AT2G33070	-----								
AT3G16390	-----								
AT3G16410	-----								
AT3G16400	-----								
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AT1G52040	-----								
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AT5G28520	-----								
AT1G33790	-----								
AT1G05760	-----								
AT1G05770	-----								
AT2G43730	-----								
AT2G43740	-----								

	730	740	750	760	770	780	790	800	810
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AT1G19715	---	TKHKLVTDEKSQSKI	EGGAKTYGPWGGTGGIM	---	FDD	---	---	GI-YTGIRQIN--LSRNVGIVSM--KVCY-DF	
AT3G59620	---	SRDHADFVA	---	HGGTE	---	WDD	---	GA-FVNVKKIK-IFHDWAGITLV--QFDYIDG	
AT1G73040	---	VFVGPWGGN	---	GGTT	---	WDD	---	GI-YDGVREIR-LVYD-HCIDS--SVIY-DK	
AT5G46000	---	EQ	---	FRMPGTGGS	---	NGVS	---	WDD	---
AT2G33070	---	SP	---	ATPKLRGKW	---	IKVEQ	---	KGE	---
AT3G16390	---	LP	---	STPKLLGNW	---	IKVEQ	---	NGE	---
AT3G16410	---	APLTNVTPLNAKLEAKGGD	---	TGDI	---	WDD	---	GV-YDNVRKVY-VGQAQYGIQV--KFEY-VN	
AT3G16400	---	LS	---	STIKLLGKW	---	IKVEQ	---	KGE	---
AT1G52000	SNTNSSP	---	OKLEAQQGN	---	GGNQ	---	---	WDD	---
AT2G39330	---	PPV	---	YKLDAGGGT	---	GGTE	---	WDD	---
AT2G39310	---	TPFPL	---	YKLDAGGGT	---	DGRV	---	WDD	---
AT3G16470	---	PLTPPVSGGLTKLEAQQGR	---	GGDV	---	WDD	---	GGAYDNVKKVY-VGQGDGSGVVYV--KFDY-EK	
AT5G38540	---	TP	---	NKLECGQDC	---	RGMS	---	WDD	---
AT5G38550	---	TP	---	NKLECGQDR	---	GGTE	---	WDD	---
AT1G52120	---	TP	---	TRMEAQQGN	---	GGTK	---	WDD	---
AT1G52130	---	TP	---	ARMEAKGKK	---	GGTE	---	WDD	---
AT1G52110	---	TP	---	TKLAWQGT	---	LGTL	---	WDH	---
AT5G49850	---	IP	---	TKLECGQVT	---	ERSTL	---	WDS	---
AT5G49870	---	TP	---	KKSECKGIT	---	DGSNVWNWDD	---	---	---
AT5G49860	---	---	---	---	---	MDS	---	---	---
AT1G60130	---	TS	---	PFIKLESRE	---	STGDL	---	WDD	---
AT1G60095	---	SPLI	---	SLEHTTGSD	---	LVNHI	---	WDD	---
AT1G60110	---	SPF	---	TKLEV-GTT	---	SADL	---	WDD	---
AT3G16460	---	TP	---	LKLTAEQGE	---	TGAV	---	WDD	---
AT1G52030	---	PP	---	NKVEALGGN	---	GGTI	---	FDD	---
AT1G52040	---	TP	---	NKVEAQQGN	---	GGTE	---	FDD	---
AT3G21380	---	SSSSSSLSQANKVDAQGGK	---	GGTS	---	WDD	---	GA-HDHVRRVY-IGQGDGSGVTVV--KFEY-EK	
AT3G16430	---	MA	---	OKVEAKGKK	---	GGNQ	---	WDD	---
AT3G16420	---	MA	---	OKVEAQQGK	---	GANL	---	WDD	---
AT3G16440	---	MA	---	OKVEAQQGI	---	GGDV	---	WDD	---
AT3G16450	---	MA	---	OKVEAGGGA	---	GGAS	---	WDD	---
AT1G52100	---	PS	---	IQSAIEGAK	---	TTGKG	---	FDD	---
AT5G35950	---	PA	---	TKSAMQGGQ	---	NTGRG	---	YDH	---
AT5G35940	---	LA	---	TKSGMQGGQ	---	NTGKS	---	YDY	---
AT1G58160	---	MA	---	DKLEAKGGN	---	GGKI	---	WDD	---
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AT1G61230	---	SV	---	TKSVCHGSK	---	IIES	---	WDD	---
AT1G52050	---	AP	---	TKSELQGGI	---	TGGEY	---	WDD	---
AT1G52060	---	PP	---	TKSELVGGW	---	GGDY	---	WDD	---
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AT1G05770	---	---	---	VGTDYSGKK	---	TMVD	---	WDE	---
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AT2G43740	---	---	---	GRAYLKNLE	---	---	---	WEE	---

820 830 840 850 860 870 880 890 900

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AT3G59610 SFKHYCILPTKNGHRCQDGRSLAIFR---EDRF-SFLEQEIYNTRNIEIIVVTKETIKNGDGEAVEWVNLMSVLVPEWSSLSVNYPPSYF
AT1G19715 RGQAVWG--SKHGGVGGFK-----HD---KIVF-DYPS-EVLTH--VTGTYG-----PLMYMGPVNIKSL-TFRTNRGKHGP-YG---EE
AT3G59620 TGAIVSG--LDHGTE-----PF-----KIVF-DYPS-EVLTH--VTGTYG-----PLMYMGPVNIKSL-TFRTNRGKHGP-YG---EE
AT1G73040 NGKPAKS--EKHGGVGGNK-----TS---EIKL-QYPE-EYLTG--VSGYYC-----PMVNSGTPVIRSM-TFKSNQVYGP-YG---VE
AT5G46000 GNDRI-T--HCHGKDSKEH-----SIS---PATG-DVPHLSCLGV--RMVSISSLYVFGGRDASRKYNQGFYSFDTTNEWKLLTPVEEGP
AT2G33070 QPIDKHL--YVFDLETRTW---SIS---PATG-DVPHLSCLGV--RMVSISSLYVFGGRDASRKYNQGFYSFDTTNEWKLLTPVEEGP
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AT3G16410 GSQVVG--DEHGKKTGELG---VE---EFEI-D-AD-DYIVY--VEGYRE-----KVNGMTSEMITFL-SFKTYKGTKSQPIE---QR
AT3G16400 QPIDKHL--YVFDLETRTW---SIS---PATG-DVPHLSCLGV--RMVSVGSLTYTFGGRDASRKYNQGFYSFDTTNEWKLLTPVEEGP
AT1G52000 NGQLKEG--PFHGVKGRGG---TS---TIEI-SHPD-EYLVV--VEGLYD-----SSNIQGI-QFQSNK-HTSQYFGYEEYG
AT5G39330 GQKLET--CRHGVKTERS-----LKFEL-N-PD-EYIKS--VEATYD-----KPDFERNVVITSL-TFKTSKGRTS-FSG---YK
AT2G39310 DGEAKT--CNHGGKGDTP-----S---EFVL-GYPD-EYIKS--VEATYQ-----KPNIFSNTAITSL-KFLTSKGRTS-FFG---YN
AT3G16470 DGKIVS--LEHGKQTLG---TE---EFEI-D-PE-DYITY--VKVYYE-----KLFQSPIEIVTAL-IFKTFKGTKSQPFQ---LT
AT5G38540 GQKVEKT--PYRRDVKNEK-----EFVL-DYPN-EFITS--VEGTLA-----APKSVNITWITSL-TFKTSKRRSSPTFG---SA
AT5G38550 GQKVEKT--PYRRDVKNEK-----EFVL-DYPN-EFITS--VEGTLA-----TPTNFDITWILSL-TFKTSKGRTS-PTFG---SSS
AT1G52120 DGDPEKE--QLHGSETGRG---YTLE---PFEI-NHSDKEYLLS-IDGCYD-----EDSGVIQSL-QLKTNI-KTSEVMG---DDE
AT1G52130 DGHPKS--EYHGPTSGQG---YVLE---PFEI-NHLDKEYLMS-IDGYYD-----DASGVIQAL-QFKTNM-KTSELMGYDDD
AT1G52110 DGKVEK--RDHGMQDGYG---GEEV---EFVV-DYPN-EFITS--VVG TMS-----TDRVASL-TFKTSKGRTSQRFGDRTAN
AT5G49850 DGKVVK--RAHGMNDLSR---ITD---EFVV-DYPN-EFITS--VVG TMS-----DSVTSF-VFKTSKGRTSRFTFGERTSD
AT5G49870 AGKVVK--RSHGLNNDH---QEE---KFVV-DYPN-EFITS--VVG TMS-----SSVMPL-IFKTSKGRTSKQFGDYSD
AT5G49860 -----ITSL-TFKTSKGRTSKQFGDYSD
AT1G60130 RGEVEN--RDLGLRVFIA---EEG---EFVV-NYPY-EFIS--VEGTF-----NEKDPHVASL-TFKTSKGRTSSTFG---TP
AT1G60095 KGKVEK--REHGMFYSWV---QQG---EFVV-DYPN-EFITS--VEGTR-----TESFMQVASL-TFKTSKGRTSSTFG---SP
AT1G60110 KGKVEK--REHGIMIAPFIERG---EFVV-DYPN-EFITS--VEVTISKQNDSPVPSLTSETVASL-TFKTSKGRTSSTFG---SP
AT3G16460 GSQVVG--DEGRTRTLG---FE---EFEL-E-SD-EYITS--VEGYE-----KNFGVDT-VVTTL-IFKTSKNTAGPFG---IV
AT1G52030 DGKRET--REHGKMTVLG---TE---EFEV-E-SD-DYITS--IEVSVD-----NVFGFKSEIVTSL-VFKTFKGTISQPFQ---ME
AT1G52040 DGKRET--RDHGMKTLG---TE---EFEV-D-SD-DYITS--IEVSVD-----KVFYNSSEIVTSL-VFKTSKGRTS-PTFG---MV
AT3G21380 DDKKES--REHGKKTLLG---AE---VFEV-D-PD-DYITS--VEVQSD-----RIFGQDTEVITSL-IFKTSKGFSPFPFG---LE
AT3G16430 NGQTEQT--PLRGIKSTI---PTD---PFVI-NHPE-EHLVS--IEIWK-----PDGLIQGL-RFISNK-KTSREFIG---YD
AT3G16420 NGQPEQA--PLRGTGRVL---PAD---PFVI-NHPD-EHLVS--VEGWYS-----PEGIIQGI-KFISNK-KTSDVIG---SD
AT3G16440 GSQEVVG--GEHGKKSLLG---IE---TFEV-DADD--YIVA--VQVTYD-----KIFGYDSDIITSI-TFSTFKGTSPPYG---LD
AT3G16450 DSQDVEG--GEHGKKTLLG---FE---TFEV-D-AD-DYIVA--VQVTYD-----NVFGQSDIITSI-TFNTFKGTSPPYG---LE
AT1G52100 AGQVET--REGAKTGTQ---H---EFTV-NHPY-EYITS--VEGTYA-----HTQPYNCVLTSL-TFKTSKGRASPAIG---KV
AT5G35950 VGQVEC---YEGVKTGTQ---N---QFTI-NYPY-ECITS--VGGSYA-----DTQPYRCIVLRSL-TFKTSNGRTS-VFG---KE
AT5G35940 AGQVEC---YEGDKTGTQ---YKIV-NYPY-ECITS--VEGSYA-----NTQPYGCIVLRSL-TFKTSNGRT-LVIG---TV
AT1G58160 NGQPKAG--STHGVSYHNF---TE---WFDL-NHTCDEHILS-VKCYD-----DGEIQGL-VIKTNI-RTSAYMG---YN
AT1G57570 RAVVV---RQHGWNISIVE--EDGK---EFEL-DYPN-ELITS--VEGTMK-----SFSRSEIRISSL-TFKTSKGRTSPTIG---IA
AT1G61230 HSVVK---RQHGNNISLV---E---EFEL-NYPN-EFITS--VDGTFK-----NSGMRKVMCVTSL-VFKTSKGRISPTYG---SV
AT1G52050 DGQVVT---RYHGMKNGET---Q---EFAV-DYPN-EYMTS--VEGTYD-----HISEGNLVLTLTSL-TFKTSKGRISQTFG---LV
AT1G52060 DGQVVT---SSHGNKEGET---E---EFAI-DYPN-EFLIS--VEGTYD---SILFPDHYVLVITSL-SFKTSKGRISPTYG---VV
AT1G52070 DGQVVT---RYHGMKNGDT---E---EFAI-DYPN-EYMTS--VEGTYD---SILFPDHYVLVITSL-SFKTSKGRISPTYG---VV
AT2G25980 DGKRET--RDHGMKNGDT---E---EFAI-DYPN-EYMTS--VEGTYD---SILFPDHYVLVITSL-SFKTSKGRISPTYG---VV
AT5G28520 GGVV---ROYEPINGYD-----MFEVKEYPT-EYIIS--VECTYD-----DVIPIRSGRRMIRSI-MFKTSKGRVSPIFG---YP
AT1G33790 GGLIER---REYGGNVGRQ---E---EFVV-DYPS-EYIIS--MECTYD-----IVSDASKNRVRSI-MFKTSKGRVSPIFG---KV
AT1G05760 DGKLVLS--DRHGPFSGNM---FD---VIEL-NYPH-EYITG--ISGEYY-----KYEANNPHMRSI-KFNTNTSEYGP-FGTSGSS
AT1G05770 DDTFFLS--SCHGQNTGSM---FD---VILL-NCPH-EYITG--ISGEYL-----KSDGASGPQIRSL-AFATNLNQYGFPGG---SSS
AT2G43730 GVHVVS---EKHGSSKQGS-----YEIV-RLNDDYVTC--LSGIFW-----ERKVTSL-TFHNTQKKGHPFCNGTGS
AT2G43740 GGHVVS---KKYGMSDAQKQKYGSYNCRFHVVMV-RLNDDYVTC--LSAIYL-----CKGITNL-NIHTNQKKGHPICDRYSS

	910	920	930	940	950	960	970	980	990
AT3G59590	VPKWSSLR	EKACIYIA	KGDK	FHEIIIND	LVVEYPT	RHHRT	YVPS		
AT3G59610	VDEDKVGL	TLTVIC	CYKKEG	KAYIYIA	KGDKFHEI	EIKDLVEY	NPR		
AT1G19715	QG	PSFTHQ	MDEGKVV	GFLGREGL	F	FLDSIGVH	VMECKI		
AT3G59620	EG	ARAEFWLR	DDEYI		TIVTAF	GGY			
AT1G73040	QG	TPFTFS	VNGGRIV	GMNGRSGW	Y	LDSIGFH			
AT5G46000	VG	TKFQLEAK	GFDKIV	GFRGRSSV	NRLNAL	GAN	FAVV		
AT2G33070	TP	RSFHSMTA	DENNVV	VFGVSAT	VRLKTL	DAY	NIVDH		
AT3G16390	TP	RSFHSMAA	DEENVV	VFGVGAM	DRIKTL	DSY	NIVDK		
AT3G16410	PG	IKFVLQ	GGKIV	GFHGR	ST	DVLD	SLGAYISL	SPTPNLHGKWKV	DENGDGPGLRCSHDIAQVGNKIYSFGGEFTPN
AT3G16400	TP	RSFHSMAA	DEENVV	VFGVSAT	ARLNTL	DSY	NIVDK		
AT1G52000	DG	TQFSLQ	VNEKKI	GFHGFADS	HLNSL	GAY	FVPI	S	
AT5G39330	GG	KKFKLE	QKGRRLV	GFHKGEGS	AIDAL	GAY	FAP		
AT2G39310	VG	KKFVLE	QKGRRLV	GFHKGEDA	AIDAL	GAY	FGPV		
AT3G16470	SG	EEAELG	GGKIV	GFHGTSSD	LHSL	GAY	IIPS		
AT5G38540	SS	RKFVLE	KNGSPLV	GFHGYNSV	GNTLNSL	GAY	YRPI		
AT5G38550	PG	RKFVLE	KNGSALV	GFHYIGP	GYNIKAL	GAY	YRPI		
AT1G52120	KG	TKFTLG	CNGHEI	GFHGSAD	NLNAL	GAY	ITTLT		
AT1G52130	A	VKFTIG	CTVNKI	GFHGHAGK	NLYSL	GAY	FTTL		
AT1G52110	L	VEFVLE	NKDCAI	VFHGWTP	SYLTAL	GAY	SFPM		
AT5G49850	S	VEFVIE	SKGCAV	GFHWYAPL	GAGYI	TALGAH	FYPM		
AT5G49870	DS	VEFVLE	SKGCAI	VFHWHNP	VSGYMTAL	GAY	YYPM		
AT5G49860	DS	VEFVLE	SKGCAI	VFYGWYKT	GSGYTAL	GAY	YYPM		
AT1G60130	GT	KKFVLQ	SKGCGV	GFHGVLSN	DYISGL	GAY	FRL		
AT1G60095	SD	KKFVLE	SKGCGV	GFYGRCS	SIFDL	GAY	FRL		
AT1G60110	AT	KKFVLQ	SKGCGV	GFGRSSY	YTYAL	GAH	FCPL		
AT3G16460	SG	TKFEFK	KEGYKI	TGFHGR	AG	EYVNAI	GAY	LAPS	
AT1G52030	TE	KKLELKD	GKGGKLV	GFHGR	AS	DVLYAL	GAY	FAPTT	
AT1G52040	TE	KKFELKD	GNGGKLV	GFHGR	AS	DVLYAL	GAY	FAPS	
AT3G21380	GS	QKYELKD	GNGGKLV	GFHGRVGG	ELLNAL	GAY	FAPS		
AT3G16430	RG	TRFVLQ	VQDKKI	GFHGSAGD	NLNNSL	GAY	FAPL		
AT3G16420	EG	THFTLQ	VKDKKI	GFHGSAGG	NLNNSL	GAY	FAPL		
AT3G16440	TE	NKFVLE	KNGGKLV	GFHGRAGE	ILYAL	GAY	FTTT		
AT3G16450	TQ	KKFVLE	KNGGKLV	GFHGRAGE	ALYAL	GAY	FATT		
AT1G52100	TG	SKFKLE	RQGD	AI	VFHGR	VG	SCIDGIGVY	YAPL	
AT5G35950	TG	TTFLE	SQGN	AI	VFHGRVGS		CVDSIGY	YAPF	
AT5G35940	TG	TKFLE	SKGN	AI	VFHGRVGS		CVDSIGY	YAPF	
AT1G58160	IG	TTFTLE	VKGGKLV	GFHGSF	DK	NLTS	L	GAY	FAPL
AT1G57570	SG	TKFLLA	SKGCAV	GFYGRHDD	RDLVAI	GAY	FSPL		
AT1G61230	TG	TKFVLE	TKDCAL	AGFHWTF	L	GFLTAI	GAY	FSLL	
AT1G52050	IG	TKFVLE	TKGNV	ISGFHGRDGG	SFDAI	GAY	FSPI		
AT1G52060	SG	TKFVLE	SQGN	AI	VFYGRNGG		AFDAIGVY	FSPI	
AT1G52070	SG	TKFVLE	SQGN	AI	VFYGRDGG		AFDAIGVY	FSPI	
AT2G25980	SE	RTFVFE	SKGR	ALVGLHGRCC	WAI	DALGAH	FGAP		
AT5G28520	AA	RKFVLE	NNGGAL	GFHGRVGA	GIDAL	GAY	FSSF		
AT1G33790	AA	RKFVFE	SNGSAL	GFHGRAAA	AVDAI	GAY	FSRF		
AT1G05760	ND	KFAFKL	GKSPQ	FGFHGT	YDA	SGLQYI	GVY	L	LRPK
AT1G05770	QSSIWN	HEQQFR	EKLGKFR	QFSGFY	TYNA	SGLQNI	GVY	L	QPT
AT2G43730	SSY	MADYKKEI	DVKIRDR	REFGGFFGSFDD	EFDGLT	SIGIY	VYPT		
AT2G43740	KNIMDN	YKVEID	VKIRDR	REFGGFFGSFDN	YGLT	SIGIY	VCPI		


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1180      1190      1200      1210      1220      1230      1240      1250      1260
.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|
AT3G59590 ---GNEWDDGI-FHNVKKINVGVDNFDIVFVKFHYSKY-NRIEAGAGHGNGATTHNPDDE---IMIAGGDYIEA-----VEGTYT
AT3G59610 ---GDEWDDGF-FDNVKEIIHTNSLGIIIVKFFYRNG-NRVVAGAAHGDESTETR-----GLMVPDDDYIEA-----VQGYT
AT1G19715 ---GQAWDDGV-FSGIKQIFVTRGNDAITSIQIEYDRNGQSVWSIKHGSDSNGVATHR---IKFEYPDESITC-----ISGYYG
AT3G59620 -----
AT1G73040 -----
AT5G46000 ---GNEWDDGI-HDDARMIT-----FKLYFNKEYITS-----VEGHYG
AT2G33070 EVVQ GKVVVYG-FNGCE-----VDDVHCYDPAQDKWTQVETFGKPCARSVFASAVVGKHLVFGGGEIAMDPKAHEGPGQLSGGTFA
AT3G16390 EVVQ GKWVIVYG-FNGCE-----VDDVHFYDPAEDKWTQVETFGVKPNERSVFASAAIGKHIVIFGGEIAMDPRAHVGPQLIDGTFA
AT3G16410 EVVQ GKVVVYG-FNGCE-----VDDVHYDVPQDKWTQVETFGVVRPERSVFASAAIGKHIVIFGGEIAMDPLAHVGPQLDGTFA
AT3G16400 EVVQ GKVVVYG-FNGCE-----VDDVHYDVPQDKWTQVETFGVVRPERSVFASAAIGKHIVIFGGEIAMDPLAHVGPQLDGTFA
AT1G52000 ---GETFDDGA-FDHVRKVVYGGD SGVAVKFDY EKDKKET--QEHGKMTLSG-TEE--FEVD-SDDYITS-----MEVYVD
AT5G39330 ---GVAWDDGV-YDGVKILVGGNDGVAFFVKFEYNKG-KDLVSGDDHGKMTLLG-TEE--FVLE-DGEYITA-----IDGYVD
AT2G39310 ---GVTWDDGV-YDGVKILVGGNDGVSFVKFEYSKG-KDLVPGDDHGKMTLLG-AEE--FVLE-DGEYLMN-----IDGYVD
AT3G16470 ---GVAWDDGV-HDSVKKIYVGGDSCVTYFKADYEKA-SKPVLSGDHGKMTLLG-AEE--FVLE-DGEYITA-----VSGYYD
AT5G38540 -----ELLG-MMV--FELD-PLERITS-----VEGYD
AT5G38550 ---GASWDDGGTFNSVRKIYIGLGNVGVFKFLYKKN-ARVVI GDDHGNKMTLLSLLLE--FLLD-PFEYIIS-----VEGYD
AT1G52120 ---SDIWDGDT-FEGVKKVSFYHNDGIVRCIEFDYVKD--GKIETRVQGGKRGTDFTKEEFTVDYPNEFLT-----VEGYR
AT1G52130 ---GNLWDDGS-FQGVKKVHIYDGYSVRCVRFYD DDD--CKVSEHGHGKIVAA-VQEGGFVLDYPNEVITS-----VEGIAT
AT1G52110 ---GASWDDGGNFEGVRKICIGTGEIGIVSVKFLYENDTHEIVVGDHGHGNKMLIK-HEE--FELDYPGEYITL-----VEGSYD
AT5G49850 ---GVPWDDGSNFERVKIYIGTCEVGIYVRFLENDIEEIVVGDHGHGNKMLLR-HEE--FDLDNACEYITS-----VEGSYD
AT5G49870 ---GAPWDDGSNFGVRKIYIGTGEVGIYSIKFLYENDVHEIVVGDHGHGNKMLLR-HEE--FDLDYPSEYITS-----VEGSYD
AT5G49860 ---GAPWDDGSNFEVVRKIYIGTGEIGIVSIKFLYENDIHEIIVGDHGHGNKMLLR-HEE--FDLDYPSEYITS-----VEGSYD
AT1G60130 ---GASWDDGG-FDCIRKIYIGHGEMGIAFVKFLYDKD-NKFVVGDDHGSKTLLG-VDE--FELEHPDEYILIS-----VEGSYD
AT1G60095 ---GASWDDGG-FDGIRNIYIGHNKMGIASFVKFLYDKD-SQIVVGDHGHGNKMLLR-VDE--FELEHPGEYILIS-----VEGSYD
AT1G60110 ---GASWDDGR-FDCIRKIYIGHSEMGIASFVKFLYDKD-NKVVVGDHGHGNKMLLR-VDE--FELEHPDEYILIS-----VEGSYD
AT3G16460 ---GTLWDDGA-FDGVKRVSVGQAQDGI GAVSFVYDKA-GQVVEGKEHGKPTLLG-FEE--FELDYPSEYITA-----VDGYD
AT1G52030 ---GASWDDGV-FDGVKILVGGNDGVAFFVTFEYNKG-SQAILGDRHGKQTLTG-TET--FELDYPSEYITS-----VEGYD
AT1G52040 ---GASWDDGV-FDGVKILVGGNDGVAFFVTFEYNKG-SQAILGDRHGKQTLTG-TET--FELDYPSEYITS-----VEGYD
AT3G21380 ---GNPWDDGP-HEGVRKVYIGQD SGVSVYKFFVYDKD-SKEVPGNDHGKRTLLA-PEE--FLLEYPNEYITS-----VELNYD
AT3G16430 ---GTAWDDGA-YVGVKKVYVGAQDGI SAVKFFVYDKS-PEEVTGEEHGKSTLLG-FEE--FVLDYPSEYIIA-----VEGYD
AT3G16420 ---GTVWDDGA-YVGVKKVYVGAQDGI SAVKFFVYDKS-PEEVTGEEHGKSTLLG-FEE--FVLDYPSEYITA-----VDGYD
AT3G16440 ---GTAWDDGA-FDGVKKVYIGQAQDGI SAVKFFVYDKG-AEDIVGDEHGNDTLLG-FEE--FQLDYPSEYITA-----VEGYD
AT3G16450 ---GTAWDDGA-YDGVKKVYVGGQDGI SAVKFEYNKG-AENIVGGEHGKPTLLG-FEE--FEIDYPSEYITA-----VEGYD
AT1G52100 ---GDSWDDGA-FKNVKKIYVGGDVGIAAVKFEYETYTSEVILAEERHGKPTLLG-YED-----
AT5G35950 ---GDSWDDGA-FLNVKKVICIGQGFIVSVKFEYENDASEVVVGDHGHKATLLG-YEE--FELDYPSEYITS-----VEACQD
AT5G35940 ---GDSWDDGA-FLNVKKVYIGQGSNGIVAVKFEYENDASEVVVGDHGHKPTLLG-YEV--FELDYPNEYITS-----LEGCHD
AT1G58160 -----
AT1G57570 ---GDSWDDGV-FEGVRKLYVGGKNCVAFKLVVYDSN-TQVVI GEDHGNKTLFE-VKE--YELEYPSEYITA-----VDGCYN
AT1G61230 ---GAFWDDGV-YDGVKKIYVGGQENGI APLKFFVYDKD-TRMVI GDDHGNKTPLE-VKE--LDLEYPGEYVTA-----VEGCYN
AT1G52050 -----ISS-----
AT1G52060 -----
AT1G52070 -----
AT2G25980 ---GESWDDGA-FDGVRKIYVGGQENGI ASVKFFVYDKN-NQLVLGEEHGKHTLLG-YEE--FELDYPSEYITA-----VEGYD
AT5G28520 ---GDPWDDGI-FNGVREIHLEDGEG--IALKFFVYDKD-VQVTELKVHGEPSGIG-FNE--FKLDYPSEYITT-----VEGFWD
AT1G33790 ---GDPWSDGV-FNGVRNIYVGGQENGVSAVKFFVYDKD-SQVAEGNDHGKPTLLG-YEE--FKLEYPSEYITT-----VEGCFD
AT1G05760 -----IVKPTGTRNAEET-----
AT1G05770 -----
AT2G43730 ---NQAWDP--LYAFAHNQIPTIADGIPVMHIRYKPKLKDRIF-----SKLDFKRAMLCL-----IKVFLD
AT2G43740 -----TRINDVALRTRYKVTDDYDDQSTFVQSSGPLTTINHRK--LEYQMPHEVSDV-----KPIVHN

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1270      1280      1290      1300      1310      1320      1330      1340      1350
.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|
AT3G59590 E-----SHITSITFRMRKQDM-----MPQYGRING---TFPSLRGERSKAIGFYGRSSGVHLTALGVHFSPPPLY
AT3G59610 E-----SHITSMARLHKGNR-----SLRFGFFEG---MSFVLGGARGSKIIIFYGRSSDLYLTAFGVHFSPLP---
AT1G19715 PLNN---SDR-----YNVVKLSFYTSRGR-----YGPYGEETG---TFFTSTT-TQCKVLGFHGRSSFH-LDAIGVHMQHHLGNN
AT3G59620 -----CVRKIEFITNK-RT-----FDFG-----GFN-----
AT1G73040 -----KMINKLRKKIHW-----LTRIVA-----
AT5G46000 KRLAAPNASASAMSSFTGYMTMLKFMNTNR-TTYQVLSHSPEYTYEG---TSFKLEE-KDNKIVGFYGKTEVS-LNQIGVYVVKPIANA-
AT2G33070 LD-----TET-----LKWKLDKLGEEE-ET-----PSIRGWSAS---TTGTIDGKKGLVMFVGKKAQTNDR-FGDLFFYGVDSA---
AT3G16390 LDTE-----TLQWERLDKFEFEG---T-----PSSRGWTAS---TTGTIDGKKGLVMHGGKAPTNDR-FDDLFFYGIDSV---
AT3G16410 LDTE-----TLQWERLDKFGGEE-ET-----PSSRGWTAS---TTATIGGKKGLVMHGGKAPTNDR-FDDLFFYGIDSA---
AT3G16400 LDTE-----TLQWERLDKFGGEE-ET-----PSSRGWTAS---TTATIDGKKGLVMHGGKAPTNDR-FDDLFFYGIDSA---
AT1G52000 KVYG---YKS-----EIVIALTFKTFKGET-----SPRFGIETE---NKYEVKDGKGGKLAGFHKASDV-LYAIGAYFIPAAN--
AT3G39330 KIFG---VET-----PMIICLQFKTNK-RE-----SPFGMDSG---EKFSLGE-KGHKIVGFHGQASDV-VHSIGVIVVPIGNTK
AT2G39310 KIFG---VEE-----PIIVCLQFKTNK-RE-----SMPFGMDSG---KKFSLGE-EGHKIVGFHGQASDV-VHSIGVIVPITTE
AT3G16470 KIFS---VDA-----PAIVSLKFKTNK-RT-----SIPYGLEGG---TEFVLEK-KDNKIVGFYGOAGEY-LYKLGVMVAPIAK--
AT5G38540 DKIG-----GITMLRFKTNK-KD-----SPYFGFGLT---PSFVLHK-DNHQIVGFHGKSSNM-LHQIGVHVLVPLNGFKF
AT5G38550 DTSG-----GITMLRFKTNL-QK-----SPYFGFGLT---SNFLLHK-DNHQIVGFHGKSSNM-LHQIGVHVLVPLDPP
AT1G52120 DNPQ-----GTLITSLTFKTSNNRT-----SPILGKASN---KTFLLS-KGCALVGFHGASSDFFLYALGAYSFPMTSLA
AT1G52130 VVNTGLSFSTG-----NVMIKSLTFKTSKGR-----SPFGNVEFGNYLSEFKLES-QCQIVGFHGGRSSYNSHGLGAYFFMPSSH
AT1G52110 IVPQ---SEE-----TEVIIMLMFTTNM-RA-----SPCYGLDDN---PSFVLQK-RGHKIVGFHGKSSKM-LHQIGVHVLVPIHP-
AT5G49850 VIPG---SED-----VEVIIMLMFTTNK-RT-----SPCYGLDDD---PTFVLEK-AGHRIIGFHGKSSNM-LHKLGIVHVLVPIHP-
AT5G49870 VVPQ---SEE-----YEVIIMLMFTTNK-RT-----SPCYGLDDD---PIFVLEK-EGHKIVGFHGKSSNM-LHKLGIVHVLVPIHP-
AT5G49860 VVPQ---SEE-----DEVIMLMFTTNM-RT-----SPCYGLDDD---PSFVLEK-EGHKIVGFHGKSSNM-LHKLGIVHVLVPIHP-
AT1G60130 VVDG---SES-----EVIMLMRFKTNM-RT-----SQVFGDFTT---SSFILEK-ECHKIVGFHGKIGKM-LHQIGVHVLVPIHP-
AT1G60095 VVDG---SES-----EVIRMLRFKTNL-RT-----SQVFGDFTT---SNFLLHK-DNHQIVGFHGKSSNM-LHQIGVHVLVPIHP-
AT1G60110 VVDG---SES-----EVIRMLRFKTNM-RT-----SQVFGDFTT---SNFLLHK-DNHQIVGFHGKSSNM-LHQIGVHVLVPIHP-
AT3G16460 AIFG---NEP-----IVNMLRFKTNK-RV-----SIPFGIGAG---TAFEFK-DGQKIVGFHGRAGDL-LHKFGVHVAPIPK-
AT1G52030 KIFG---VEA-----EVVTSLTFKTNK-RT-----SQVFGDFTT---EHFELNE-DGYKIVGFHGKAGDL-VHQIGVHAVPIFTNY
AT1G52040 KIFG---VEA-----EVVTSLTFKTNL-RT-----SQVFGDFTT---EHFELKE-DGYKIVGFHGKAGDL-VHQIGVHAVPIFTNY
AT3G21380 KIFG---TEG-----EIIITMLRFKTNK-RT-----SPPFGLEGA---KSVLLKE-DGHKIVGFHGKAGADIIHQVGVHVKPISK-
AT3G16430 KIFG---SDG-----SVITMLRFKTNK-QT-----SPPFGLEAG---TAFELKE-EGHKIVGFHGRADAL-LHKIGVHVVRVPSN-
AT3G16420 KIFG---SDG-----SVITMLRFKTNK-QT-----SPPFGLEAG---TVFELKE-EGHKIVGFHGRADVL-LHKIGVHVVRPLSN-
AT3G16440 KIFG---FET-----EVINMLRFKTNK-KT-----SPPFGLEAG---TAFELKE-EGCKIVGFHGKVSAN-LHQIGVHILVPTN-
AT3G16450 KIFG---SDG-----LIITMLRFKTNK-QT-----SAPFGLEAG---TAFELKE-EGHKIVGFHGKASEL-LHQIGVHVMPITN-
AT1G52100 -----LNWTIR-----VSTLQLWVVTIK-
AT5G35950 KVMG---AET-----GVLITMLRFKTNL-RI-----SPSFGKAG---FNFVLEK-EGHKINGFHGKSSSM-LHQIGVHVPIHP-
AT5G35940 KVMG---AET-----GVITMLRFKTNK-RT-----SPPFGLEAG---VNFVLEK-ESHKIVGFHGKSSSM-LHQIGVHVVPITN-
AT1G58160 -----SPAK-----
AT1G57570 KVNG---TEV-----EVITMLRIQTNK-RT-----SIPVGCESN---SSFVLEK-EGYKIVGFHGKASNM-INQLGVHVVPLTE-
AT1G61230 KGIE---GDV-----ESITMLKFKTNK-RT-----SISFGFESS---SSFVLEK-EGFKIVGFHGKASNM-INQLGVHVVPIHP-
AT1G52050 -----
AT1G52060 -----PS-----
AT1G52070 -----
AT2G25980 KVFG---SES-----SVIVMLKFKTNK-RT-----SPYGMDSG---VSFILK-EGHKVGFHGKASPE-LYQIGVIVAPIPK-
AT5G28520 KTSQ---NER-----GVITRLRFKTNK-QT-----FRPVGLEST---TSFSLGK-EGYKIVGFHGNSSTDKLHQLGVVVPITRE-
AT1G33790 KIFG---SGG-----GVITMLKFKTNK-RT-----SPPFGLETT---SNFVLEK-EGYKIVGFHGTSSEH-LHQIGVHVMPITN-
AT1G05760 -----TVLPKIDTGNAE-ET-----ESKIVLG-
AT1G05770 -----ESNIVLG-
AT2G43730 -----
AT2G43740 PNFE-----DKISLYQSSDRLARS-----TNTRTLE-----YQIPEFLDNPIGRKSKLKYGIFSKLARLFRNLDD-

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.....|.....|.....|..
AT3G59590 SFPNHSPVFN-----
AT3G59610 -----
AT1G19715 KSYYSRASCFKLF-----
AT3G59620 -----
AT1G73040 -----
AT5G46000 -----
AT2G33070 -----
AT3G16390 -----
AT3G16410 -----
AT3G16400 -----
AT1G52000 -----
AT2G39330 -----
AT2G39310 -----
AT3G16470 -----
AT5G38540 VS-----
AT5G38550 I-----
AT1G52120 EAGRGAIHTSW-----
AT1G52130 DGKALEEQGGDGLGGV
AT1G52110 -----
AT5G49850 -----
AT5G49870 -----
AT5G49860 -----
AT1G60130 -----
AT1G60095 -----
AT1G60110 -----
AT3G16460 -----
AT1G52030 RCVF-----
AT1G52040 RVAI-----
AT3G21380 -----
AT3G16430 -----
AT3G16420 -----
AT3G16440 -----
AT3G16450 -----
AT1G52100 -----
AT5G35950 -----
AT5G35940 -----
AT1G58160 -----
AT1G57570 -----
AT1G61230 -----
AT1G52050 -----
AT1G52060 -----
AT1G52070 -----
AT2G25980 -----
AT5G28520 -----
AT1G33790 -----
AT1G05760 -----
AT1G05770 -----
AT2G43730 -----
AT2G43740 -----
```