CLUSTAL X (1.8) multiple sequence alignment

SRF5\_At1g78980\_Q6R2K1 FSPGNLLGEGSIGRVYRAKYSDGRTLAVKKIDSTLFDSGKSEGITPIVMS

SRF4\_At3g13065 FSPNRLLGEGTIGRVYKAKFQDGRKFAVKEIDSSLLGKGNPEEFSHIVSS

SRF6\_At1g53730\_Q9C8M9 FSVDNLLGEGTFGRVYRAEFDDGKVLAVKKIDSSALPHGMTDDFIEMVSK

SRF7\_At3g14350\_Q9LUL4 FSVDNLLGEGTFGRVYRAQFEDGKVLAVKKIDSSALPTDTADDFTEIVSK

SRF8\_At4g22130\_Q6R2J8 FSQENIIGEGSLGRVYRAEFPNGKIMAIKKIDNAALSLQEEDNFLEAVSN

SRF1\_At2g20850.1\_Q06BH3 FSHENLIGTGMLGSVYRAELPGGKLFAVRKLDKKSPNHEEEGKFLELVNN

SRF3\_At4g03390\_Q6R2K3 FAQENLIGSGMLGSVYRARLPNGKLFAVKKLDKRASEQQQDHEFIELVNN

SUB\_At1g11130\_Q8RWZ1 FSEENIIGEGSIGNVYRAELRHGKFLAVKKLSNTINRTQSDGEFLNLVSN

SRF2\_At5g06820\_Q9FG24 FSEENLLGEGPLGSVYRAKLPDGQFAVVRNIPMSSLSLHEEEQFTEVLQT

\*: .::\* \* :\* \*\*:\*. \*: .:::: : : .

SRF5\_At1g78980\_Q6R2K1 LSKIRHQNIAELVGYCSEQGHNMLVYEYFRNGSLHEFLHLSDCFSKPLTW

SRF4\_At3g13065 ISSIHHKNMAELVGYCSEQGRNMLVYEYFTSGSLHRFLHLSDDFSKPLTW

SRF6\_At1g53730\_Q9C8M9 IANLDHPNVTKLVGYCAEHGQHLVVYEFHKNGSLHDFLHLSEEESKALVW

SRF7\_At3g14350\_Q9LUL4 IAHLDHENVTKLDGYCSEHGQHLVVYEFHRNGSLHDFLHLAEEESKPLIW

SRF8\_At4g22130\_Q6R2J8 MSRLRHPNIVPLAGYCTEHGQRLLVYEYVGNGNLDDTLHTNDDRSMNLTW

SRF1\_At2g20850.1\_Q06BH3 IDRIRHANIVQLVGFCSEHSQRLLIHEYCRNGTLHDLLHIDDRLKIELSW

SRF3\_At4g03390\_Q6R2K3 IDMIRHSNIVELVGYCAEHDQRLLVYEYCSNGTLQDGLHSDDEFKKKLSW

SUB\_At1g11130\_Q8RWZ1 VLKLKRGHILELLGYCNEFGQRLLVYEYCPNGSLQDALHLDRKLHKKLTW

SRF2\_At5g06820\_Q9FG24 ASKLRHPNIVTLLGFCIENGEHLLVYEYVGHLSLYNAMH--DEVYKPLSW

: : :: \* \*:\* \* ...::::\*: .\* :\* \* \*

SRF5\_At1g78980\_Q6R2K1 NTRVRIALGTARAVEYLHEACSPSVMHKNIKSSNILLDADLNPRLSDYGL

SRF4\_At3g13065 NTRIRIALGTAKAIEYLHETCSPPLVHKNIKSSNILLDNELNPRLSDYGL

SRF6\_At1g53730\_Q9C8M9 NSRVKIALGTARALEYLHEVCSPSIVDKNIKSANILLDSELNPHLSDSGL

SRF7\_At3g14350\_Q9LUL4 NPRVKIALGTARALEYLHEVCSPSIVHKNIKSANILLDSELNPHLSDSGL

SRF8\_At4g22130\_Q6R2J8 NARVKVALGTAKALEYLHEVCLPSIVHRNFKSANILLDEELNPHLSDSGL

SRF1\_At2g20850.1\_Q06BH3 NVRVRIALEAAKALEYLHEICDPPSIHRNFKSANILLDDDIRVHVSDCGL

SRF3\_At4g03390\_Q6R2K3 NTRVSMALGAARALEYLHEVCEPPIIHRNFKSANVLLDDDLSVLVSDCGL

SUB\_At1g11130\_Q8RWZ1 NVRINIALGASKALQFLHEVCQPPVVHQNFKSSKVLLDGKLSVRVADSGL

SRF2\_At5g06820\_Q9FG24 GLRLRIAIGVARALDYLHSSFCPPIAHSDLKATNILLDEELTPRIADCGL

. \*: :\*: .::\*:::\*\*. \*. . ::\*::::\*\*\* .: ::\* \*\*

SRF5\_At1g78980\_Q6R2K1 SKFYLR----TSQNLG---E---GYNAPEARDPSAYTPKSDVYSFGVVML

SRF4\_At3g13065 ANFHHR----TSQNLG---V---GYNAPECTDPSAYTQKSDVYSFGVVML

SRF6\_At1g53730\_Q9C8M9 ASFLPT----ANELLNQTDE---GYSAPEVSMSGQYSLKSDIYSFGVVML

SRF7\_At3g14350\_Q9LUL4 ASFLPT----ANELLNQNDE---GYSAPETSMSGQYSLKSDVYSFGVVML

SRF8\_At4g22130\_Q6R2J8 AALTPN----TERQVSTQVVGSFGYSAPEFALSGIYTVKSDVYTFGVVML

SRF1\_At2g20850.1\_Q06BH3 APLISSGA--VSQLSGQLLA-AYGYGAPEFEY-GIYTMKCDVYSFGVVML

SRF3\_At4g03390\_Q6R2K3 APLISSGS--VSQLSGQLLA-AYGYGAPEFDS-GIYTWQSDVYSFGVVML

SUB\_At1g11130\_Q8RWZ1 AYMLPPRP--TSQMAG--------YAAPEVEY-GSYTCQSDVFSLGVVML

SRF2\_At5g06820\_Q9FG24 ASLRPLTSNSVKLRASEIAIQNTGYIAPEHGQPGSSGTKSDTYALGVLLL

: : .. . \* \*\*\* . :.\* :::\*\*::\*

SRF5\_At1g78980\_Q6R2K1 ELLTGRVPFDGEKPRPERSLVRWATPQLHDIDALSNIADPALHGLYPPKS

SRF4\_At3g13065 ELLTGRKPYDSGRPKAEQSLVRWAKPQLKDMDTLDEMVDPALCGLYAPES

SRF6\_At1g53730\_Q9C8M9 ELLTGRKPFDSTRSRSEQSLVRWATPQLHDIDALAKMVDPALKGLYPVKS

SRF7\_At3g14350\_Q9LUL4 ELLTGRKPFDSTRSRSEQSLVRWATPQLHDIDALGKMVDPALKGLYPVKS

SRF8\_At4g22130\_Q6R2J8 ELLTGRKPLDSSRTRAEQSLVRWATPQLHDIDALSKMVDPSLNGMYPAKS

SRF1\_At2g20850.1\_Q06BH3 ELLTGRKSYDKKRDRGEQFLVRWAIPQLHDIDALAKMVDPSLKGDYPAKS

SRF3\_At4g03390\_Q6R2K3 ELLTGRMSYDRDRSRGEQFLVRWAIPQLHDIDALGKMVDPSLNGQYPAKS

SUB\_At1g11130\_Q8RWZ1 ELLTGRRPFDRTRPRGHQTLAQWAIPRLHDIDALTRMVDPSLHGAYPMKS

SRF2\_At5g06820\_Q9FG24 ELLTGRKAFDSSRPRGEQLLVKWASTRLHDRRSLEQMIDGGIAGTFSSRV

\*\*\*\*\*\* . \* : : .: \*.:\*\* .:\*:\* :\* .: \* .: \* :. .

SRF5\_At1g78980\_Q6R2K1 LSRFADIIALCVQVEPEFRPPMSEVVEAL----

SRF4\_At3g13065 VSSFADIVSICVMTEPGLRPPVSNVVEALKRLV

SRF6\_At1g53730\_Q9C8M9 LSRFADVIALCVQPEPEFRPPMSEVVQAL----

SRF7\_At3g14350\_Q9LUL4 LSRFADVIALCVQPEPEFRPPMSEVVQALVV--

SRF8\_At4g22130\_Q6R2J8 LSRFADIIALCIQPEPEFRPPMSEVVQQLVRL-

SRF1\_At2g20850.1\_Q06BH3 LSHFADVISRCVQSEPEYRPLMSEVVQDL----

SRF3\_At4g03390\_Q6R2K3 LSHFADIISRCVQSEPEFRPLMSEVVQDLLDMI

SUB\_At1g11130\_Q8RWZ1 LSRFADIISRSLQMEPGFRPPISEIVQDL----

SRF2\_At5g06820\_Q9FG24 ASQYADIISLCTQAEKEFRPPVSEIVEAL----

\* :\*\*::: . \* \*\* :\*::\*: \*

NCRK\_At2g28250.1\_Q9SL30 FSSNSVIGHGGSSCVYRGQLKDGKTAAIKRLNTPKGDDTDTLFSTEVELL

SRLHHYHVVPLIGYCSEFHGKHAERLLVFEYMSYGSLRDCLDGELGEKMT

WNIRISVALGAARGLEYLHEAAAPRILHRDVKSTNILLDENWHAKITDLG

MAKCLSSDGLQSGSSSPTTGLQGTFGYFAPEYAIAGCASQMSDVFSFGVV

LLELITGRKPIQKPSNNKGEESLVIWAVPRLQDSKRVIEELPDPRLNGKF

AEEEMQIMAYLAKECLLLDPESRPTMREVVQIL

Y1864\_At1g80640\_A8MSF7 FSDSNVLSRGGRGCLYRACLDEKSSVTVKKLDGGGETDIEKQFETEVDWL

T5K6.10\_At5g11020\_Q9FY63 FKESNILGQGGFGCVYSATLENNISAAVKKLDCAN-EDAAKEFKSEVEIL

F10N7.190\_At4g32000\_O49391 FKDGNLIGRGGFGDVYKACLGNNTLAAVKKIENVS-QEAKREFQVPKQNT

T22F11.19\_At2g25220.1\_F4IRL6 FKESSVIGQGGFGCVYKGCLDNNVKAAVKKIENVS-QEAKREFQVFKEIA

\*.:..::.:\*\* \* :\* . \* :: .:\*\*\*:: . : ::\*: :

Y1864\_At1g80640\_A8MSF7 AKIRHQNIVSLLGFCVYRQTSCIVYELMQNGSLESQLHGPSQGSGLTWQL

T5K6.10\_At5g11020\_Q9FY63 SKLQHPNIISLLGYSTNDTARFIVYELMPNVSLESHLHGSSQGSAITWPM

F10N7.190\_At4g32000\_O49391 T-------------------------------------------------

T22F11.19\_At2g25220.1\_F4IRL6 DTFSTPRPV----------F----------------SS-----VNIGFDS

Y1864\_At1g80640\_A8MSF7 RMKIAVDIARGLEYLHEHCHPPVVHRDLKSSSILLDSDFNAKISDFGFAT

T5K6.10\_At5g11020\_Q9FY63 RMKIALDVTRGLEYLHEHCHPAIIHRDLKSSNILLDSNFNAKISDFGLAV

F10N7.190\_At4g32000\_O49391 -----------VEYLHERCRPPVIHRDLKSSNILLDSSFNAKISDFGLAV

T22F11.19\_At2g25220.1\_F4IRL6 VNRFALFDSRGLEYLHEHCRPPVIHRDLKSSNILLDSSFNAKISDFGLAV

:\*\*\*\*\*:\*:\*.::\*\*\*\*\*\*\*.\*\*\*\*\*.\*\*\*\*\*\*\*\*\*:\*.

Y1864\_At1g80640\_A8MSF7 VLTTQNKN-------LIHKASEDLLDGKVTDKNDVYSFGVILLELLLGKK

T5K6.10\_At5g11020\_Q9FY63 VDGPKNKNHK-LSGTVGYVAPEYLLNGQLTEKSDVYAFGVVLLELLLGKK

F10N7.190\_At4g32000\_O49391 MVGAHGKNNIKLSGTLGYVAPEYLLDGKLTDKSDVYAFGVVLLELLLGRR

T22F11.19\_At2g25220.1\_F4IRL6 SLDEHGKNNIKLSGTLGYVAPEYLLDGKLTDKSDVYAFGVVLLELLLGRR

:.\*\* : : \*.\* \*\*:\*::\*:\*.\*\*\*:\*\*\*:\*\*\*\*\*\*\*::

Y1864\_At1g80640\_A8MSF7 SVEKPSS-EPESIVTWAVPKLSDRANLPNILDPAIKGTMDLKHLYQVAAV

T5K6.10\_At5g11020\_Q9FY63 PVEKLAPGECQSIITWAMPYLTDRTKLPSVIDPAIKDTMDLKHLYQVAAV

F10N7.190\_At4g32000\_O49391 PVEKLSSVQCQSLVTW------------------------------IALV

T22F11.19\_At2g25220.1\_F4IRL6 PVEKLTPAQCQSLVTW------------------------------VAAM

.\*\*\* :. : :\*::\*\* :\* :

Y1864\_At1g80640\_A8MSF7 AVLCVQPEPSYRPLITD--VLHSLI----

T5K6.10\_At5g11020\_Q9FY63 AILCVQPEPSYRPLITD--VLHSL-----

F10N7.190\_At4g32000\_O49391 NECTVSKNLQAMPQLTDRSKLPKIVDPVI

T22F11.19\_At2g25220.1\_F4IRL6 AVLCVQPEPSYRPLITD--VLHSLV----

\*. : . \* :\*\* \* .:

ALE2\_At2g20300.1\_Q8RWW0 FSAKRVLGEGGFGRVYQGSMEDGTEVAVKLLTRDNQNRDREFIAEVEMLS

AY094451.1\_At5g56885\_Q8LPR4 FDESRVLGEGGFGRVYEGVFDDGTKVAVKVLKRDDQQGSREFLAEVEMLS

T10M13.2\_At4g02010\_Q8L7V7 FESASILGEGGFGKVYRGILADGTAVAIKKLTSGGPQGDKEFQVEIDMLS

\*. :\*\*\*\*\*\*\*:\*\*.\* : \*\*\* \*\*:\* \*. .. : .:\*\* .\*::\*\*\*

ALE2\_At2g20300.1\_Q8RWW0 RLHHRNLVKLIG--ICIEGRTRCLIYELVHNGSVESHLH-----EGTLDW

AY094451.1\_At5g56885\_Q8LPR4 RLHHRNLVNLIG--ICIEDRNRSLVYELIPNGSVESHLHGIDKASSPLDW

T10M13.2\_At4g02010\_Q8L7V7 RLHHRNLVKLVGYYSSRDSSQHLLCYELVPNGSLEAWLHGPLGLNCPLDW

\*\*\*\*\*\*\*\*:\*:\* . :. : \* \*\*\*: \*\*\*:\*: \*\* . .\*\*\*

ALE2\_At2g20300.1\_Q8RWW0 DARLKIALGAARGLAYLHEDSNPRVIHRDFKASNVLLEDDFTPKVSDFGL

AY094451.1\_At5g56885\_Q8LPR4 DARLKIALGAARGLAYLHEDSSPRVIHRDFKSSNILLENDFTPKVSDFGL

T10M13.2\_At4g02010\_Q8L7V7 DTRMKIALDAARGLAYLHEDSQPSVIHRDFKASNILLENNFNAKVADFGL

\*:\*:\*\*\*\*.\*\*\*\*\*\*\*\*\*\*\*\*.\* \*\*\*\*\*\*\*:\*\*:\*\*\*::\*..\*\*:\*\*\*\*

ALE2\_At2g20300.1\_Q8RWW0 AREAT--EGSQHISTRVMGTFGYVAPEYAMTGHLLVKSDVYSYGVVLLEL

AY094451.1\_At5g56885\_Q8LPR4 ARNALDDEDNRHISTRVMGTFGYVAPEYAMTGHLLVKSDVYSYGVVLLEL

T10M13.2\_At4g02010\_Q8L7V7 AKQAPEGRGN-HLSTRVMGTFGYVAPEYAMTGHLLVKSDVYSYGVVLLEL

\*::\* ... \*:\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ALE2\_At2g20300.1\_Q8RWW0 LTGRRPVDMSQPSGEENLVTWARPLLANREGLEQLVDPALAGTYNFDDMA

AY094451.1\_At5g56885\_Q8LPR4 LTGRKPVDMSQPPGQENLVSWTRPFLTSAEGLAAIIDQSLGPEISFDSIA

T10M13.2\_At4g02010\_Q8L7V7 LTGRKPVDMSQPSGQENLVTWTRPVLRDKDRLEELVDSRLEGKYPKEDFI

\*\*\*\*:\*\*\*\*\*\*\*.\*:\*\*\*\*:\*:\*\*.\* . : \* ::\* \* :.:

ALE2\_At2g20300.1\_Q8RWW0 KVAAIASMCVHQEVSHRPFMGEVVQAL---

AY094451.1\_At5g56885\_Q8LPR4 KVAAIASMCVQPEVSHRPFMGEVVQAL---

T10M13.2\_At4g02010\_Q8L7V7 RVCTIAAACVAPEASQRPTMGEVVQSLKMV

:\*.:\*\*: \*\* \*.\*:\*\* \*\*\*\*\*\*:\*

F24J8.18\_At1g21590\_Q8VZG4 FCADNFIGKGGSSRVFRGYLPNGR-EVAVKILKRT-ECVLKDFVAEIDII

T14N5.13\_At1g77280\_O80661 FSADNFIGKGGSSRVFRGCLSNGR-VVAVKILKQT-EDVLNDFVAEIEII

MBM17.4\_At5g63940\_Q9LVN9 FASENLVGEGGNSYVYRGDLPDGR-ELAVKILKPC-LDVLKEFILEIEVI

T24I21.16\_At2g16750.1\_Q9SLE3 FSLENLIGKGGCNEVYKGFLEDGK-GVAVKILKPSVKEAVKEFVHEVSIV

M4E13.90\_At4g35030\_O49610 FSQENVIGKGGCNEVYRGILEDGK-GIAVKILKSSSKEAMTNFVHEINII

F28G11.10\_At1g66460\_Q9C706 FSKRRVLGRGACSYVFKGRIGIWRKAVAIKRLDKKDKESPKSFCRELMIA

K22F20.5\_At5g37790\_Q0WPI7 FSKGRVLGRGACSYVFRGKIGMWRTALAIKRLDKEDKESPKSFCRELMIA

\*. ..:\*.\*. . \*::\* : : :\*:\* \*. ..\* \*: :

=================================claster========================================================

F24J8.18\_At1g21590\_Q8VZG4 TTLHHKNVISLLGYCFE-NNNLLLVYNYLSRGSLEENLHGNK-----KDL

T14N5.13\_At1g77280\_O80661 TTLHHKNIISLLGFCFE-DHNLLLVYNYLSRGSLEENLHGNK-----KDP

MBM17.4\_At5g63940\_Q9LVN9 TSVHHKNIVSLFGFCFE-NNNLMLVYDYLPRGSLEENLHGNR-----KDA

T24I21.16\_At2g16750.1\_Q9SLE3 SSLSHSNISPLIGVCVH-YNDLISVYNLSSKGSLEETLQVS------VGK

M4E13.90\_At4g35030\_O49610 SSLSHQNISPLLGVCVQ-DNELISVYNLSNTGSLEETLHGKQ-----KGK

F28G11.10\_At1g66460\_Q9C706 SSLNSPNVVPLLGFCIDPDQGLFLVYKYVSGGSLERFLHDKKKKKSRKTP

K22F20.5\_At5g37790\_Q0WPI7 SSLHSSNIVPLLGFCIDPEEGLFLVYKYVSGGSLEHYLHDKKKKKGVKAA

::: \*: .\*:\* \*.. . \*: \*\*. \*\*\*\*. \*: .

F24J8.18\_At1g21590\_Q8VZG4 VAFRWNERYKVAVGIAEALDYLHNDAPQPVIHRDVKSSNILLSDDFEPQL

T14N5.13\_At1g77280\_O80661 LAFCWSERYKVAVGVAEALDYLHNTASQPVIHRDVKSSNILLSDDFEPQL

MBM17.4\_At5g63940\_Q9LVN9 KKFGWMERYKVAVGVAEALDYLHNTHDPEVIHRDVKSSNVLLADDFEPQL

T24I21.16\_At2g16750.1\_Q9SLE3 HVLRWEERLKIAIGLGEALDYLHNQCSNPVIHRDVKSSNVLLSDEFEPQL

M4E13.90\_At4g35030\_O49610 YVLSWEERFKIAIGLAEALDYLHNRCSKPVIHRDVKTSNVLLSLELQPQL

F28G11.10\_At1g66460\_Q9C706 LNLPWSTRYKVALGIADAIAYLHNGTEQCVVHRDIKPSNILLSSNKIPKL

K22F20.5\_At5g37790\_Q0WPI7 FGLPWSARYKVALGIADAIAYLHNGTEQCVVHRDIKPSNILLSSKKIPKL

: \* \* \*:\*:\*:.:\*: \*\*\*\* \*:\*\*\*:\*.\*\*:\*\*: . \*:\*

F24J8.18\_At1g21590\_Q8VZG4 SDFGLAKWA-SESTTQIICSDVAGTFGYLAPEYFMYGKMNNKIDVYAYGV

T14N5.13\_At1g77280\_O80661 SDFGLARWA-SISTTHIICSDVAGTFGYLAPEYFMYGKVNDKIDVYAFGV

MBM17.4\_At5g63940\_Q9LVN9 SDFGFASLA-SSTSQHVAGGDIAGTFGYLAPEYFMHGKVTDKIDVYAFGV

T24I21.16\_At2g16750.1\_Q9SLE3 SDFGLSMWG-SKSCRYTIQRDVVGTFGYLAPEYFMYGKVSDKVDVYAFGV

M4E13.90\_At4g35030\_O49610 SDFGLSMWGPTTSSRYSIQGDVVGTFGYLAPEYFMYGKVSDKVDVYAFGV

F28G11.10\_At1g66460\_Q9C706 CDFGLATWT-AAPSVPFLCKTVKGTFGYLAPEYFQHGKISDKTDVYAFGV

K22F20.5\_At5g37790\_Q0WPI7 CDFGLATWT-AAPSVPFLCKTVKGTFGYLAPEYFQHGKISDKTDVYAFGV

.\*\*\*:: : . : \*\*\*\*\*\*\*\*\*\*\* :\*\*:.:\* \*\*\*\*:\*\*

F24J8.18\_At1g21590\_Q8VZG4 VLLELLSGRKPVNSESPKAQDS-------------LVMWAKPILDD--KE

T14N5.13\_At1g77280\_O80661 VLLELLSGRKPISSGCPKGQES-------------LVMWVCTTANQ--LS

MBM17.4\_At5g63940\_Q9LVN9 VLLELISGRKPICVDQSKGQES-------------LVLWANPILDS--GK

T24I21.16\_At2g16750.1\_Q9SLE3 VLLELISGRTSISSDSPRGQES-------------LVMWAKPMIEK--GN

M4E13.90\_At4g35030\_O49610 VLLELISGRNPISPQNPRGQESLHKQHFVKPKKRYLGMQAKPLIDT--GN

F28G11.10\_At1g66460\_Q9C706 VLLELITGRKPIEARRPSGEEN-------------LVVWAKPLLHRGIEA

K22F20.5\_At5g37790\_Q0WPI7 VLLELITGRKPIEARRASGQEN-------------LVVWAKPLLDRGIEA

\*\*\*\*\*::\*\*..: . .::. \* : . . .

F24J8.18\_At1g21590\_Q8VZG4 YSQLLDSSLQDDNNS-DQMEKMALAATLCIRHNPQTRPTMGMVLELL

T14N5.13\_At1g77280\_O80661 QNQAFSILLLKTS-----MYDVHIQAKPILDD--------GKYSQLL

MBM17.4\_At5g63940\_Q9LVN9 FAQLLDPSLENDNSN-DLIEKLLLAATLCIKRTPHDRPQIGLVLKI-

T24I21.16\_At2g16750.1\_Q9SLE3 AKELLDPNIAGTFDE-DQFHKMVLAATHCLTRAATYRPNIKEILKLL

M4E13.90\_At4g35030\_O49610 LKVLLDPDVTDIFDE-SQFQRMVLAASHCLTRSATHRPNIRQILRLL

F28G11.10\_At1g66460\_Q9C706 TEELLDPRLKCTRKNSASMERMIRAAAACVINEESRRPGMKEILSI-

K22F20.5\_At5g37790\_Q0WPI7 IVELLDPRLKCTRKNSVQMERMIRAAAACVINEESRRPGMEEIVSIL

:. : : : \* : :

===================/claster====================================================================

RBK2\_At3g05140\_Q8RXC8 FSPENIIGRGGYADVYQGILP-EGKLIAVKRLTKGTPD--EQTAEFLSEL

F17K4.160\_At5g18910\_Q8GXZ5 YSRENLIGEGGYAEVYKGQMA-DGQIVAIKKLTRGSAE--EMTMDYLSEL

MEE13.6\_At5g35960\_Q9FGC3 FSLENLIGKGGYAEVYKGMLP-NGQMVAIKRLMRGNSE--EIIVDFLSEM

K21L13.3\_At5g65530\_Q8GWR7 FNPENMIGKGGHAEVYKGVLP-DGETVAIKKLTRHAKEVEERVSDFLSEL

RBK1\_At5g10520\_Q8H1D6 FNPENMIGKGGHAEVYKGVLI-NGETVAIKKLMSHAKEEEERVSDFLSEL

F19F24.9\_At2g18890.1\_O64619 FSSENLVGRGGFAEVYKGILGKNGEEIAVKRITRGGRDDERREKEFLMEI

:. \*\*::\*.\*\*.\*:\*\*:\* : :\*: :\*:\*:: : . ::\* \*:

RBK2\_At3g05140\_Q8RXC8 GIIAHVDHPNTAKFIGCCIEGGMHLVFRLSPLGSLGSLLHGPSKYKLTWS

F17K4.160\_At5g18910\_Q8GXZ5 GIIVHVDHPNIAKLIGYCVEGGMHLVLELSPNGSLASLLY-EAKEKLNWS

MEE13.6\_At5g35960\_Q9FGC3 GIMAHVNHPNIAKLLGYGVEGGMHLVLELSPHGSLASMLY-SSKEKMKWS

K21L13.3\_At5g65530\_Q8GWR7 GIIAHVNHPNAARLRGFSCDRGLHFVLEYSSHGSLASLLF-GSEECLDWK

RBK1\_At5g10520\_Q8H1D6 GIIAHVNHPNAARLRGFSSDRGLHFVLEYAPYGSLASMLF-GSEECLEWK

F19F24.9\_At2g18890.1\_O64619 GTIGHVSHPNVLSLLGCCIDNGLYLVFIFSSRGSLASLLHDLNQAPLEWE

\* : \*\*.\*\*\* : \* : \*:::\*: :. \*\*\*.\*:\*. : : \*.

RBK2\_At3g05140\_Q8RXC8 RRYNVALGTADGLVYLHEGCQRRIIHRDIKADNILLTEDFQPQICDFGLA

F17K4.160\_At5g18910\_Q8GXZ5 MRYKVAMGTAEGLYYLHEGCQRRIIHKDIKASNILLTQNFEAQISDFGLA

MEE13.6\_At5g35960\_Q9FGC3 IRYKIALGVAEGLVYLHRGCHRRIIHRDIKAANILLTHDFSPQICDFGLA

K21L13.3\_At5g65530\_Q8GWR7 KRYKVAMGIADGLSYLHNDCPRRIIHRDIKASNILLSQDYEAQISDFGLA

RBK1\_At5g10520\_Q8H1D6 IRYKVALGIADGLSYLHNACPRRIIHRDIKASNILLNHDYEAQISDFGLA

F19F24.9\_At2g18890.1\_O64619 TRYKIAIGTAKGLHYLHKGCQRRIIHRDIKSSNVLLNQDFEPQISDFGLA

\*\*::\*:\* \*.\*\* \*\*\*. \* \*\*\*\*\*:\*\*\*: \*:\*\*..::..\*\*.\*\*\*\*\*

RBK2\_At3g05140\_Q8RXC8 KWLPKQLTHHNVSKFEGTFGYFAPEYFMHGIVDEKTDVFAFGVLLLELIT

F17K4.160\_At5g18910\_Q8GXZ5 KWLPDQWTHHTVSKVEGTFGYLPPEFFMHGIVDEKTDVYAYGVLLLELIT

MEE13.6\_At5g35960\_Q9FGC3 KWLPENWTHHIVSKFEGTFGYLAPEYLTHGIVDEKTDVFALGVLLLELVT

K21L13.3\_At5g65530\_Q8GWR7 KWLPEHWPHHIVFPIEGTFGYLAPEYFMHGIVDEKTDVFAFGVLLLEIIT

RBK1\_At5g10520\_Q8H1D6 KWLPENWPHHVVFPIEGTFGYLAPEYFMHGIVDEKIDVFAFGVLLLEIIT

F19F24.9\_At2g18890.1\_O64619 KWLPSQWSHHSIAPIEGTFGHLAPEYYTHGIVDEKTDVFAFGVFLLELIS

\*\*\*\*.: .\*\* : .\*\*\*\*\*::.\*\*: \*\*\*\*\*\*\* \*\*:\* \*\*:\*\*\*:::

RBK2\_At3g05140\_Q8RXC8 GHPALDE-SQQSLVLWAKPLLERKAIKELVDPSLGDEYNREELIRLTSTA

F17K4.160\_At5g18910\_Q8GXZ5 GRQALDS-SQHSIVMWAKPLIKENKIKQLVDPILEDDYDVEEL-------

MEE13.6\_At5g35960\_Q9FGC3 GRRALDY-SKQSLVLWAKPLMKKNKIRELIDPSLAGEYEWRQIKLVL---

K21L13.3\_At5g65530\_Q8GWR7 GRRAVDTDSRQSIVMWAKPLLEKNNMEEIVDPQLGNDFDETEMKRVMQTA

RBK1\_At5g10520\_Q8H1D6 SRRAVDTASRQSIVAWAKPFLEKNSMEDIVDPRLGNMFNPTEMQRVMLTA

F19F24.9\_At2g18890.1\_O64619 GKKPVDA-SHQSLHSWAKLIIKDGEIEKLVDPRIGEEFDLQQLHRIAFAA

.: .:\* \*::\*: \*\*\* ::: :..::\*\* : :: ::

RBK2\_At3g05140\_Q8RXC8 SLCIDQSSLLRPRMSQVVELL

F17K4.160\_At5g18910\_Q8GXZ5 ---------------------

MEE13.6\_At5g35960\_Q9FGC3 ---------------------

K21L13.3\_At5g65530\_Q8GWR7 SMCIHHVSTMRPDMNRLVQLL

RBK1\_At5g10520\_Q8H1D6 SMCVHHI--------------

F19F24.9\_At2g18890.1\_O64619 SLCIRSSSLCRPSMIEVLEVL