

AGR\_C\_620 .....MIDLSKLEIIEICAKRGMHMDRVRVAVLVQES-AD-NPD 38  
RH50 CH0378 .....MDVAKTEIEELVFERGMHMDRVRVAVLVQES-AD-NPD 38  
CC\_0057 .....MDRIEKACIEKGMHMDRVRVAVLVQES-AD-NPD 38  
Adeh\_1564 .....MKGSSRRPREGGSAQVSGPTAAAYIERGLQKQSRERIAQSPFAM-EG-VFV 53  
Pear\_1952 .....MFKRIETPKRYISVQQGLLRLRERITLDELPLRS-AA-HLS 58  
Hq\_1418 .....MILHMVVEIEAKKFKPKRKKRMVYCSLMLTLDLADT-MK-HEF 45  
Acid345\_3367 .....MMRREADVTHKHLKVKLKHREDRVILKRVET-RD-HLS 39  
Bcen\_0166 .....MTNPTDLNLIKALGLPKIKLEIFQGS-FVRHLA 34  
Reut\_A2837 .....MPSFAELNLIKALVPRKIKLEIFQGS-EQRHLA 34  
Aave\_4555 .....MNTDILMLSTLGLALVPRKIKLEIFQGS-AQRHPT 34  
Reut\_B5330 .....MFTVMDERAILRGLALVPRKIKLEIFQGS-DRHHLA 38  
ALS\_0895 .....MRKALAVLPRKIKLEIENS-KQHHLA 28  
h0683 .....MTDNPTALKKALGLVPRKIKLEIVQER-DNHVVS 35  
PA4764 .....MNVEN-SELKRALGLVPRKIKLEIOMLDSA-EQRHPT 34  
LA3094 .....MHRKQKELTAKTQAVRMEHQFVEYLKRELIYRMRVAVRIFSI-HN-HEF 54  
RP1027 .....MHR-L-LETLESLERLKRKKNLKNKREKREVVSVLVS-ET-HLS 44  
WS2043 .....MHQKRENLDATYDRRLSTRKKNLKNKREKREKLVLYEN-EG-HLS 45  
CJ80449 .....MLENVEVDVLERFKLILQGLLYKPRKIKLEIVLVS-DT-VFV 45  
RB8465 .....MACKRFVLSQRVLSVSVSSVSESLERLVALTPKRFKPEYLSKROKRLPRKIKLEIFQGS-RA-DFD 68  
Hq\_1418 .....MFLAELFRKPKRKKRMVYCSLMLTLDLADT-MK-HEF 45  
Aaar\_2630ACTINO .....MFPASIPREVLEQMSQTSATTQNEAFATPSVQKQKRVKGLAVSAALEDL-DD-FVH 57  
Arth\_2638ACTINO .....MARGAKAPQTKLAFASAGQKRVKGLAVSAALEDL-DD-FVH 44  
Franeal3\_0061ACTINO .....MERRPAP-SRGTAVRA-EGDVA-SALAAFT-DA-FVH 22  
FranealDRAFT\_4289ACTINO .....MDVVAIVKGERVSSPRMSASDRAALGAGAGSDRFRGAVSRFR-EGTGSVAAP-EGDVA-SALAAFT-NA-FVH 73  
MAV\_2036ACTINO .....MTPSGDG-AGVSVSRPRRAAISTLLETV-DD-FR 33  
HAF2139ACTINO .....MTPSGDG-AGVSVSRPRRAAISTLLETV-DD-FR 33  
MS2380ACTINO .....MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
BCG\_2373ACTINO .....MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
MT2428ACTINO .....MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
Rv2359ACTINO .....MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
MUL\_3612ACTINO .....MTPSG-MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
MGL024ACTINO .....MTPSG-MSAAG-VSRPRRAAISTLLETV-DD-FR 27  
MSMEG\_4487ACTINO .....MTGA-VSRPRRAAISTLLETV-DD-FR 26  
Mvan\_3820ACTINO .....MTGA-VSRPRRAAISTLLETV-DD-FR 26  
Hjls\_3458ACTINO .....MSPAP-VSRPRRAAISTLLETV-DD-FR 26  
Mms\_3510ACTINO .....MSPAP-VSRPRRAAISTLLETV-DD-FR 26  
Mmcs\_3447ACTINO .....MSPAP-VSRPRRAAISTLLETV-DD-FR 26  
nfa14570ACTINO .....MQDKTSAQKQ-VGSRPRRAAISTLLETV-DD-FR 35  
RHAI\_ro01222ACTINO .....MTQATQ-RKVVVVVRA-EGSALGALDDI-EE-FR 36  
SAV5631ACTINO .....MTTAS-SFVRSRPRRAAISTLLETV-DD-FR 31  
SC02508ACTINO .....MFKVSGA-EGSALGALDDI-EE-FR 31  
Noca\_1934ACTINO .....MTSTEAH-ETFLRPRPRRAVVALDSF-SD-FR 33  
Tfu\_0856ACTINO .....MSESR-MSR-HEAVQALHS-EG-FR 20  
Acel\_2085ACTINO .....MSESES-RGSRPRRAAISTLLETV-DD-FR 31  
Lxx25010ACTINO .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
BAD\_0517ACTINO .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
BL1280ACTINO .....MTPFVHEI-ERQKQKADRALANG-DE-FR 24  
CE2180ACTINO .....MLKKPFRPLRSRTRNNHCFFDPSDQGLNRIHGEK-SFKLVGS-PRRAVVDLLET-DN-FAS 64  
NGL2200ACTINO .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
DIP1710ACTINO .....MKNRTR-SVFKLVGS-PRRAVVDLLET-DN-FAS 35  
jk0612ACTINO .....MSPATN-KLEKIGORPRRAVVALDSF-SD-FR 35  
PFA0948ACTINO .....MKNR-MKNR-ERQKQKADRALANG-DE-FR 24  
DEP1505 .....MTPSG-MSAAG-VSRPRRAAISTLLETV-DD-FR 33  
cbdb\_14178 .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
Acid\_1857 .....MALDSISGSLRERQVLRKQKILLETDTT-HE-HLD 36  
DEP1147 .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
cbdb\_A1081 .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
gi|15642897|ref|NP\_227318.1 .....MSEHI-MSEHI-VQKQKADRALANG-DE-FR 24  
DEP0020 .....MKNQSIAGLADSPFLRPRVLLLEALDM-AEGHIS 37  
cbdb\_A24 .....MKNQSIAGLADSPFLRPRVLLLEALDM-AEGHIS 37  
SAV4029ACTINO .....MVS-TDNKDLQKQVLRPRRAVVDLLET-DN-FAS 35  
SC04180ACTINO .....MVS-TDNKDLQKQVLRPRRAVVDLLET-DN-FAS 35  
FranealDRAFT\_1571ACTINO .....MSPAP-VSRPRRAAISTLLETV-DD-FR 26  
Acel\_0061ACTINO .....MFKVSGA-EGSALGALDDI-EE-FR 31  
Noca\_4251ACTINO .....MT-EELAAELQKQVLRPRRAVVDLLET-DN-FAS 62  
FrAAAL2799ACTINO .....MERRPAP-SRGTAVRA-EGDVA-SALAAFT-DA-FVH 22  
Franeal3\_2661ACTINO .....MERRPAP-SRGTAVRA-EGDVA-SALAAFT-DA-FVH 22  
cbdb\_A617 .....MTPSQSRIRQKQKIPRRAVVDLLET-DN-FAS 35  
Roc1\_1140ACTINO .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
Ava\_1178 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
Tery\_1958 .....MALTYPFKKALIEKGRMMPRRAVVDLLET-DN-FAS 35  
syc0557\_d .....MVTYASLKAELNENGRQLPRREELRFRVQNLPAEHLH 40  
Tery\_3404 .....MAYVHDSKSELMQRQVLRPRRAVVDLLET-DN-FAS 35  
syc1925\_c .....MTPVTSLSLAVRVAALSALEDAQVLRPRRAVVDLLET-DN-FAS 35  
RBA443 .....MEER-TEKFKQKQKQKIPRRAVVDLLET-DN-FAS 35  
SAB1359c .....MEER-LNRVQKQKQKIPRRAVVDLLET-DN-FAS 35  
CAC1682 .....MALKSPLERKLNKLDKQKQKIPRRAVVDLLET-DN-FAS 35  
Roc1\_1228ACTINO .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
THL77 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
CAC0951 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
Dgeo\_0519 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
DR\_0865 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
Roc1\_1144ACTINO .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
pc1801 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
LB183 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
RBI3099 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
Reut\_P374 .....MTPDPPFQSLRVRVKEFQGLDDELEAVLPHMGRQVTPRRAVVDLLET-DN-FAS 35  
CC\_0357 .....MMSHNAFSCQHDHNVQVAAJAAJLDAALCAALQVAPRPRVAVLLEA-GQPVK 60  
PA5499 .....MYKIAKPKLACQPHDI-SQCVSTALAAADALCARQVLRPRRAVVDLLET-DN-FAS 35  
GBAA4503 .....MNTLRLRMDKQVLRPRRAVVDLLET-DN-FAS 35  
SAB1426 .....MNTLRLRMDKQVLRPRRAVVDLLET-DN-FAS 35  
Dgeo\_2727 .....MS-BALQKHLERQ-LVQVPRRLLLEFFARS-SQHF 36  
TTC1730 .....MFRKESRVARLAVLRPRRAVVDLLET-DN-FAS 35  
Acid345\_4099 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
EVM\_02397 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SAV0533ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SC05206ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Acid\_1111 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Acel\_2095ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Noca\_0839ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mmcs\_4974ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mmcs\_4885ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Hjls\_5253ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MSMEG\_6253ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
nfa320ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
RHAI\_ro04308ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Tfu\_0145ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
FrAAAL3168ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
FranealDRAFT\_1683ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Noca\_0874ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MSMEG\_6383ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mvan\_3209ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MAY\_2752ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MAP1669cACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MUL\_2189ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Hjls\_2712ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mmcs\_2681ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mmcs\_2762ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MSMEG\_3460ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mb1944cACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
MT1960ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Rv1909cACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
BCG\_1948cACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
RHAI\_ro05274ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Mvan\_2983ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
nfa2949ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SC00561ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Aaar\_3058ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Arth\_3077ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Lxx02790ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
syc2438\_d .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Dgeo\_2141 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
TTC1639 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
FrAAAL5117ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Franeal3\_3112ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
FranealDRAFT\_4643ACTINO .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
CJ80367 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
W80545 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
sq\_1207 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
BP3019 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
FN2045 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SYN\_02524 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
CAC2834 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
GBAA0537 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SAB1794c .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Pcar\_2798 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Aru0153 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
ROR\_C\_249 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
RHE\_CH00106 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
TM1515 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
CT1455 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
BF3244 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
SYN\_00953 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
LA2887 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
PG0465 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
Ava\_0536 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
LA187 .....MFKELDFGLRERHLLAERPRRIFVQVTA-APGVS 48  
ruler 1.....10.....20.....30.....40.....50.....60.....70.....80

AGR\_C\_620 VEEVRRS-AVD-PRHS VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
RHE CH0178 VEEVRRS-AVD-PRHS VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
CC\_0057 VEEVRRH-AVD-PRHLSA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Adeh\_1564 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Pear\_1952 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
1418 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Acid345\_3367 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Bcen\_0166 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Reut\_A2837 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Aave\_4555 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Reut\_8530 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
AIS\_0895 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
h0683 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
PA4764 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
LA3094 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
HP1207 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
W82043 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
CJ80449 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
RB8465 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Adeh\_3806 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Aaar\_2630ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 129  
Arch\_2630ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 129  
FRAA0074ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 94  
Franc03\_0061ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
FraneandRAFT\_4289ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
MNAV\_2036ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
HAF2139ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 102  
H82380ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
BCG\_2373ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
MT2428ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
Rv2359ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
MUL\_3612ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
M8020ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
MSMG\_4487ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 95  
Mvan\_3820ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 95  
Hjls\_3458ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
Mhms\_3510ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
Mhcs\_3447ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
nfca1570ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
RHAI\_ro01222ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
SAV5631ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
SC02508ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
Noca\_1934ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 102  
Tfu\_0856ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
Aed\_2085ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
Lxx25010ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
BAD\_0517ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
BL1128ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 100  
CE2180ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 134  
Ncg12200ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
DIP1710ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
hJ0612ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
PFA0948ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
DEP1505 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
cbbd\_11478 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
Acid\_1857 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
DE17147 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
cbbd\_A0181 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
gi|15642897|ref|NP\_22718.1 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
DEP0020 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
cbbd\_A24 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
SAV4029ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
SC04180ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
FraneandRAFT\_1571ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
Acid\_0061ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
Noca\_4251ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
FRAA2799ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 134  
Franc03\_2661ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
DEP0630 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
cbbd\_A617 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
Rocyl\_11440ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 121  
Ava\_1178 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 96  
Tery\_1958 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
tocy0557\_d VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
Tery\_3404 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
sycy1925\_c VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 118  
GBAA413 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 111  
SAB1359 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 111  
CAC1682 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
Rocyl\_1228ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
TH176 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
CAC0951 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Dgeo\_0519 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 93  
DR\_0865 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 93  
TC0925 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 92  
Rocyl\_11444ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 92  
pc1801 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 97  
LB183 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 99  
RBI3099 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 113  
Reut\_0164 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 113  
CC\_0357 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 112  
PA5499 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 129  
GBAA4503 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
SAB1426 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Dgeo\_2727 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
TTC1730 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Acid345\_4099 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
SVN\_02397 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
SAV9053ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
SC05206ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
Acid\_1111 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
Accl\_2095ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
Noca\_0839ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
Ave\_4974ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
Mhcs\_4885ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 108  
MSMG\_6253ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 108  
nf8305ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
RHAI\_ro04308ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 107  
Tfu\_0145ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
FRAA3168ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 102  
FraneandRAFT\_1681ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Noca\_0874ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
MSMG\_6839ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
Mvan\_3209ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
NAV\_2752ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
HAF1669ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
MUL\_2189ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 94  
Hjls\_2172ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Mhcs\_2681ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
Mhms\_2762ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
MSMG\_3460ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
Mh1944ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
MT1960ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Rv1909ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
BCG\_1948ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
RHAI\_ro05274ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Nvan\_2983ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
nf82949ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
SC00561ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 111  
Aaar\_3058ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
Arch\_3077ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
Lxx02790ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 104  
syc2438\_d VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 110  
Dgeo\_2141 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 106  
TTC1639 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 111  
FRAA5117ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 84  
Franc03\_3112ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 97  
FraneandRAFT\_4643ACTINO VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
CJ80367 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 97  
W80545 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
sq\_1207 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
BP3019 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
FM2045 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 101  
SYN\_02524 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 118  
CAC2834 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 117  
ABR\_C\_249 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
SAB1794 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
Pcar\_2798 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Atu0153 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
GBAA0537 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
SAB1794 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 103  
Pcar\_2798 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
Atu0153 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
RHE\_CH0106 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
TH1515 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 109  
CF1455 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 117  
BF3244 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 115  
SYN\_00953 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 111  
LA2887 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
PG0465 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 114  
Ava\_0516 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 117  
DAB187 VEEVLRV-RKH-PRVVA VVTRVWVLEAGLIRERDRDR-SRVTEVVE-----EHHHDLTKNSVVEVH-S 105  
Ruler 96.....90.....100.....110.....120.....130.....140.....150.....160

AGR\_C 620 FEIEALQKRIK --- SHGFVLVDRIELVYVFLK --- PEER --- 142  
RHE CH0178 FEIEALQKRIK --- SHGFVLVDRIELVYVFLK --- EDH --- 142  
CC 0057 FEIEALQKRIK --- SHGFVLVDRIELVYVFLK --- E --- 142  
Adeh 1564 ERIEELQEMVAR --- RHQFVESHRIELVGRCA --- CRFPQRARQEARF --- 167  
Pear 1952 ERIEELQEMVAR --- RHQFVESHRIELVGRCA --- CSBS --- 143  
sq 1418 ERIEELQEMVAR --- RHQFVESHRIELVGRCA --- QRSK --- 142  
Acid345 3367 FEIEEKVEKIDK --- KHNTTRTRSPQVQICNN --- CSKARDNR --- 149  
Bcen 0166 AEIERQQQAIK --- ERFPLQELSHLAMYGSCTT --- ENCPRHRK --- 142  
Reut\_A2837 GEIEERQQQAIK --- ERFPLQELSHLAMYGSCTT --- MDCPRPKR --- 143  
Aave 4555 FEIEERQQQAIK --- ARHFVQVDSHSLMYGCKA --- CAKAKASSDNR --- 145  
Reut\_8530 FEIEERQQQAIK --- ARHFVQVDSHSLMYGCKA --- CRAEQPAG --- 144  
AIS 0895 DVIEEKQHSVAE --- QHPTFLAQSHLMLYGCBE --- SECQALRKK --- 138  
h0683 DSEIARQEZAA --- KHRLTNLSLMLYGCBA --- GDCREDEHAEK --- 148  
PA4764 AEIEERQKQIVR --- ERGFVLVDRIELVYVFLK --- VRRK --- 134  
LA3094 FEIEERQQQAIK --- ERGFVLVDRIELVYVFLK --- BSSSK --- 160  
HP1027 FEIEERQKQIVR --- ERGFVLVDRIELVYVFLK --- QRSK --- 150  
WS2043 KEHEELQKRIK --- GHAKILSHDRIFAVCKE --- CAKAQNL --- 152  
CJ80449 FEIEERQQQAIK --- ERFPLQELSHLAMYGSCTT --- CNQKPVVKVI --- 157  
RB8465 EELIARQDEAAA --- KHQFVSHRIELVYVFLK --- CRFRHRKQKQIDL --- 184  
Adeh 3806 FEIEERQQQAIK --- ARHFVQVDSHSLMYGCKA --- CRAEQPAG --- 144  
Arch 263ACTINO FAVETWAARVAA --- ERFPLQELSHLAMYGSCTT --- CTKAKKAGLL --- 168  
FRAA0074ACTINO FEIEEALALAD --- ARHFVQVDSHSLMYGCKA --- CAKAKASS --- 154  
Franecl3 0061ACTINO FEIEEALALAD --- ARHFVQVDSHSLMYGCKA --- CTRKAD --- 131  
Franecl3 4289ACTINO FEIEEALALAD --- ARHFVQVDSHSLMYGCKA --- CAASRNSDNGPFRPQGG --- 192  
MAV 2036ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 135  
MAP2139ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 135  
HB2380ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 135  
BCG 2373ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 130  
MP2428ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 130  
Rv2359ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 130  
MUL 3612ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 137  
MLO290ACTINO HEVEENATAVAA --- KHQFVSHRIELVYVFLK --- CR --- 137  
MSMEG 4487ACTINO GDVETWAARVAA --- ERFPLQELSHLAMYGSCTT --- CTRFRAPQNT --- 136  
Mvan 3820ACTINO GDVETWAARVAA --- ERFPLQELSHLAMYGSCTT --- CA --- AGN --- 131  
Hj1e 3458ACTINO GQVETWAADIR --- ERFPLQELSHLAMYGSCTT --- CSAR --- 131  
Mhcs 3510ACTINO GQVETWAADIR --- ERFPLQELSHLAMYGSCTT --- CSAR --- 131  
Mhcs 3447ACTINO GQVETWAADIR --- ERFPLQELSHLAMYGSCTT --- CSAR --- 131  
nfa14570ACTINO FTVEANADALAG --- ERFPLQELSHLAMYGSCTT --- CAARRS --- 141  
RHAI ro01222ACTINO FTVEANADALAG --- ERFPLQELSHLAMYGSCTT --- CSATQ --- 131  
SAV5631ACTINO FAVEKNAZAAA --- ARHFVQVDSHSLMYGCKA --- CAARR --- 138  
SC02508ACTINO FAVEKNAZAAA --- ARHFVQVDSHSLMYGCKA --- CAARR --- 138  
Noca 1934ACTINO FAVEKNAZAAA --- ARHFVQVDSHSLMYGCKA --- CG --- 139  
Tfu 0856ACTINO FAVEKNAZAAA --- ARHFVQVDSHSLMYGCKA --- CAARR --- 138  
Acel 2085ACTINO ISVERNAERVAA --- ARHFVQVDSHSLMYGCKA --- CAARR --- 138  
Lxx25010ACTINO ISVERNAERVAA --- ARHFVQVDSHSLMYGCKA --- CAARR --- 138  
BAD 0517ACTINO F-SEANLKRISD --- ERFPLQELSHLAMYGSCTT --- CRKADK --- 132  
BL1128ACTINO F-SEANLKRISD --- ERFPLQELSHLAMYGSCTT --- CRKADK --- 132  
CE2180ACTINO GPFVNAEVAR --- ERFPLQELSHLAMYGSCTT --- CRKADK --- 132  
NCgl2200ACTINO GPFVNAEVAR --- ERFPLQELSHLAMYGSCTT --- CRKADK --- 132  
DIP1710ACTINO GPFVNAEVAR --- ERFPLQELSHLAMYGSCTT --- CSATY --- 142  
jk0612ACTINO GPFVNAEVAR --- ERFPLQELSHLAMYGSCTT --- CRKAS --- 143  
PFA0948ACTINO KILEDNRDIAA --- KYFVSETHLELFGICSE --- CAHVTRSVS --- 137  
DEP1505 FLETYLSH-VPE --- ASGFVLMDLRFSGVCDS --- CS --- 140  
cbbd j1478 FLETYLSH-VPE --- ASGFVLMDLRFSGVCDS --- CS --- 140  
Acid 1857 FLQLRRLKQ-IES --- HFQFVQLLRAEVEGVYCAH --- CRKLRAREVEELR/FLTAADAKPFAARRRRA --- 169  
DET1147 DMLSSRLRIS --- KYFVSETHLELFGICSE --- CRK --- 135  
cbbd\_A1081 DMLAKRRDIAA --- KYFVSETHLELFGICSE --- CRK --- 135  
TH1776 FCEVDEKQVIA --- ERFPLQELSHLAMYGSCTT --- CDEKA --- 142  
DEP0020 DMVREQESILK --- ERFPLQELSHLAMYGSCTT --- CRK --- 135  
cbbd\_A24 DMVREQESILK --- ERFPLQELSHLAMYGSCTT --- CAASD --- 142  
SAV4029ACTINO SVAAEPAKIRE --- ERFPLQELSHLAMYGSCTT --- CALKSSTTKS --- 145  
SC04180ACTINO SVAAEPAKIRE --- ERFPLQELSHLAMYGSCTT --- CALKSSTTKS --- 145  
Franecl3 371ACTINO SVAAEPAKIRE --- ERFPLQELSHLAMYGSCTT --- CALKSSTTKS --- 145  
Acel 0061ACTINO EVVQSLQRIDD --- ERFPLQELSHLAMYGSCTT --- CRSTT --- 142  
Noca 4251ACTINO EVIPLAERLVR --- ERFPLQELSHLAMYGSCTT --- CEDR --- 137  
FRAA2799ACTINO DILLQVADRIR --- ERFPLQELSHLAMYGSCTT --- CAAR --- 139  
Franecl3 2661ACTINO DILLQVADRIR --- ERFPLQELSHLAMYGSCTT --- SVTVEVPELQALAA --- 144  
DEP0630 COLKKEIENISR --- QTFQVADTLELFGICSE --- CRK --- 143  
cbbd\_A617 COLKKEIENISR --- QTFQVADTLELFGICSE --- CRK --- 143  
Roc1 1140ACTINO CFLOG-ALRGR --- ERFPLQELSHLAMYGSCTT --- CR --- 152  
Ava 1147 CFLOG-ALRGR --- ERFPLQELSHLAMYGSCTT --- CR --- 152  
Tery 1958 DSILKIKLQKAE --- DSILKIKLQKAE --- CR --- 170  
syc0557\_d DSILKIKLQKAE --- DSILKIKLQKAE --- CR --- 147  
Tery 3404 DSMIKSQKQAE --- DSMIKSQKQAE --- CR --- 174  
syc1925\_c DRVTHSESLAD --- DRVTHSESLAD --- CR --- 152  
GBAA4313 DRVTHSESLAD --- DRVTHSESLAD --- CR --- 152  
SAB1359c DILLPEVNRVEN --- ERFPLQELSHLAMYGSCTT --- CAARR --- 149  
CAC1682 DILLPEVNRVEN --- ERFPLQELSHLAMYGSCTT --- CR --- 149  
Roc1 1228ACTINO ELMYELTQWER --- ERFPLQELSHLAMYGSCTT --- CAAR --- 138  
TH1776 ELMYELTQWER --- ERFPLQELSHLAMYGSCTT --- CR --- 138  
CAC0951 F-HDQVEIENK --- ERFPLQELSHLAMYGSCTT --- CAARR --- 143  
Dgeo 0519 CR-VALPSSVYV --- PGQFVVEAEVTLVGCQPE --- CMAKSSNKKNS --- 135  
DR 0865 CR-VALPSSVYV --- PGQFVVEAEVTLVGCQPE --- CAAR --- KTAAG --- 137  
CTC0925 C-REKAGEL --- ERFPLQELSHLAMYGSCTT --- CA --- 122  
Roc1 1144ACTINO AL-LVYDAGEL --- ERFPLQELSHLAMYGSCTT --- CLREERPEPQGG --- 132  
pc1801 S---AVHASSL --- ERFPLQELSHLAMYGSCTT --- CNS --- 130  
LB183 CR-IPDKS --- ERFPLQELSHLAMYGSCTT --- CNS --- 130  
RB13099 VKLTA --- QR --- ERFPLQELSHLAMYGSCTT --- CR --- 143  
Reut\_J0164 VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- CSARVHRPDSAT --- 163  
CC 0357 FKASAEIYAGE --- YLDEAEV-IWGLCPDGI --- CR --- 143  
PA5499 FDISRAIVAGAN --- SVQFAVESVTLVGCQPE --- CR --- 167  
GBAA4503 CR --- HDPRKND --- CR --- 137  
SAB1426c CR --- HDPRKND --- CR --- 137  
Dgeo 2727 -LQLEPFGPQ --- GWYIAGARVLDQICPA --- CR --- 145  
TTC1730 NLFLELVSPAMQAAERTWALEGFRLEFRKCP --- QR --- 137  
Acid345 4099 FLDEVRERAFKFP --- KIEQFVY-DILGCSSEKAR --- QBAH --- 140  
SVN 02397 FEVEVDEDEIDG --- RLDEAEV-VWGLCPDGI --- QTRKMF --- 153  
SAV035ACTINO GNPALASDHG --- YLDEAEV-IWGLCPDGI --- CA --- 143  
SC05206ACTINO GNPALASDHG --- YLDEAEV-IWGLCPDGI --- CA --- 143  
Acel 1111 EVPRPALGSLK --- VLRECEL-IFRGLTRGAFRR --- ASR --- 141  
Acel 2095ACTINO VGVVPCPLPADAG --- YLDEAEV-IWGLCPDGI --- CA --- 166  
Noca 0839ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- CA --- 143  
Mhcs 4985ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Mhcs 5253ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
MSMEG 6253ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
nfa33050ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
RHAI ro04308ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Tfu 0145ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
FRAA3168ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Franecl3 1681ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Noca 0874ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
MSMEG 6383ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Mvan 3209ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
NAV 2752ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
MAP16769ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
MUL 2189ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Hj1e 2712ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Mhcs 2681ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Mhcs 2762ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
MSMEG 3460ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Mb1944ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
HT1960ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Rv1909ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
BCG 1948ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
RHAI ro05274ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Nvan 2983ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
nfa2949ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
SC00556ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Aaur 3058ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Arch 3077ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Lxx02790ACTINO VGEAPCLASDHG --- YLDEAEV-IWGLCPDGI --- EPPAAGSACRL --- 108  
Dgeo 2438\_d AIAIDGAPAE --- ERFPLQELSHLAMYGSCTT --- CR --- 149  
Dgeo 2141 AVPTIPAAALPA --- ERFPLQELSHLAMYGSCTT --- CR --- 137  
TTC1639 DIFDLRALAREAR --- ERFPLQELSHLAMYGSCTT --- ALK --- 131  
FRAA5117ACTINO FVFDNMAEARRS --- ERFPLQELSHLAMYGSCTT --- SDPARAASGTFVTWARGALHAA --- 146  
Franecl3 3112ACTINO FVFDNMAEARRS --- ERFPLQELSHLAMYGSCTT --- SDPARAASGTFVTWARGALHAA --- 146  
CJ80367 DAKLYEVEHEKRRIG --- MVLNLSVCAVDSCKHK --- EGRERKR --- 141  
WB0545 --- YDELMQCKIEGS --- YQREASL-AMHGLCPQAKR --- CR --- 134  
sq 1207 --- YDELMQCKIEGS --- YQREASL-AMHGLCPQAKR --- CR --- 134  
BP3019 Q---VEMKQVRLQNDG --- HEVSEVYV-YKRVCKKLNHIRE --- D --- 142  
FN2045 N-IDSKSQ-ELIG --- CDIEKRI-YFKVCKKLNHIRE --- D --- 142  
SYN 05254 E---FDLKLFP-ADRIG --- FEITENYV-DFVQVCEPRKQGV --- RQQQLKRRKEPFAACEKRN --- 171  
CAC2634 T---FDMLNKVSHRFD --- YVYENKL-YFGLCKKDKK --- CR --- 138  
GBAA0537 E---LEKREAAKTV --- ERFPLQELSHLAMYGSCTT --- CR --- 144  
SAB1794c Q---LNEIERLAGHMT --- FVTHHRM-ELYVCKRQDQA --- CR --- 138  
Pcar 2798 G---FQLEPFGITDG --- FEIDYAV-TLVGCQPE --- CR --- 146  
Aur0153 NQIDMLPEPE --- ERFPLQELSHLAMYGSCTT --- CR --- 139  
Roc C 249 NQIDMLPEPE --- ERFPLQELSHLAMYGSCTT --- CR --- 144  
RHE CH00106 NQIDMLPEPE --- ERFPLQELSHLAMYGSCTT --- CR --- 139  
TH1515 ELKLSGVKRRK --- ERFPLQELSHLAMYGSCTT --- CR --- 138  
CT1455 ELKLSGVKRRK --- ERFPLQELSHLAMYGSCTT --- CR --- 138  
BF3244 ALQNAERTLE --- ERFPLQELSHLAMYGSCTT --- CR --- 163  
SYN 90593 QYKLSRREK --- ERFPLQELSHLAMYGSCTT --- CR --- 151  
LA2887 FSELSKSLFP --- ERFPLQELSHLAMYGSCTT --- CR --- 146  
PG0465 NVKSIADKLR --- ERFPLQELSHLAMYGSCTT --- CR --- 145  
Ava 0536 LPEAFQEVQR --- ERFPLQELSHLAMYGSCTT --- CR --- 149  
LH185 SKVQVSEK --- ERFPLQELSHLAMYGSCTT --- CR --- 145  
Ruler .....170.....180.....190.....200.....210.....220.....230.....240



	AGR_C_620	-----	142
	RHE_CH00378	-----	142
	CC_0057	-----	135
	Adeh_1564	-----	167
	Pcar_1952	-----	143
	sq_1418	-----	152
	Acid345_3367	-----	149
	Bcen_0166	-----	142
	Reut_A2837	-----	143
	Aave_4555	-----	145
	Reut_85530	-----	146
	AlS_0895	-----	138
	b0683	-----	148
	PA4764	-----	134
	LA3094	-----	160
	HP1027	-----	150
	WS2043	-----	152
	CJE0449	-----	157
	RB8465	-----	184
	Adeb_3806	-----	152
	AAur_2630ACTINO	-----	168
	Arth_2638ACTINO	-----	154
	FRAAL0074ACTINO	-----	131
	Franci3_0061ACTINO	-----	142
	Franean1DRAFT_4289ACTINO	-----	192
	MAV_2036ACTINO	-----	135
	MAP2139ACTINO	-----	135
	MS2380ACTINO	-----	130
	BCG_2373ACTINO	-----	130
	MT2428ACTINO	-----	130
	Rv2359ACTINO	-----	130
	MUL_3612ACTINO	-----	137
	ML0924ACTINO	-----	131
	MSMEG_4487ACTINO	-----	136
	Mvan_3820ACTINO	-----	131
	Hjls_3458ACTINO	-----	131
	Mkms_3510ACTINO	-----	131
	Mnca_3447ACTINO	-----	131
	nfa14570ACTINO	-----	141
	RHA1_ro01222ACTINO	-----	141
	SAV5631ACTINO	-----	138
	SC02508ACTINO	-----	139
	Noca_1934ACTINO	-----	135
	Tfu_0856ACTINO	-----	129
	Acel_2085ACTINO	-----	138
	Lxx25010ACTINO	-----	138
	BAD_0517ACTINO	-----	132
	BL1128ACTINO	-----	146
	CE2180ACTINO	-----	175
	NCgl2200ACTINO	-----	144
	DIP1710ACTINO	-----	142
	jk0612ACTINO	-----	143
	PPA0948ACTINO	-----	137
	DET1505	-----	141
	cbdb_A1478	-----	141
	Acid_1857	-----	174
	DET1147	-----	135
	cbdb_A1081	-----	135
gi 15642897 ref NP_227338.1	DET0220	-----	121
	DET0020	-----	142
	cbdb_A24	-----	142
	SAV4029ACTINO	-----	145
	SCO4180ACTINO	-----	145
	Franean1DRAFT_3571ACTINO	-----	144
	Acel_0061ACTINO	-----	150
	Noca_4251ACTINO	-----	139
	FRAAL2799ACTINO	-----	177
	Franci3_2661ACTINO	-----	173
	DET0630	-----	143
	cbdb_A617	-----	143
	Rcy1_1140ACTINO	-----	152
	Ava_1165	-----	151
	Tery_1958	-----	170
	syc0557_d	-----	147
	Tery_3404	-----	174
	syc1925_c	-----	152
	GBAA4313	-----	151
	SAB1359c	-----	149
	CAC1682	-----	151
	Rcy1_1228ACTINO	-----	138
	TM1776	-----	152
	CAC0951	-----	143
	Dgeo_0519	-----	135
	DR_0865	-----	132
	TTC0925	-----	122
	Rcy1_1144ACTINO	-----	137
	pc1801	-----	130
	LB183	-----	130
	RB13099	-----	143
	Reut_A0164	-----	172
	CC_0357	-----	163
	PA5499	-----	167
	GBAA4503	-----	137
	SAB1426c	-----	136
	Dgeo_2727	-----	135
	TTC1730	-----	147
	Acid345_4099	-----	143
	SYN_02397	-----	150
	SAV3053ACTINO	-----	138
	SC05206ACTINO	-----	138
	Acid_1111	-----	141
	Acel_2095ACTINO	-----	166
	Noca_0839ACTINO	-----	143
	Mkms_4974ACTINO	-----	108
	Mnca_4885ACTINO	-----	108
	Hjls_5253ACTINO	-----	158
	MSMEG_6253ACTINO	-----	154
	nfa3250ACTINO	-----	143
	RHA1_ro04308ACTINO	-----	152
	Tfu_0145ACTINO	-----	140
	FRAAL3168ACTINO	-----	148
	Franean1DRAFT_1681ACTINO	-----	174
	Noca_0874ACTINO	-----	146
	MSMEG_6383ACTINO	-----	153
	Mvan_3209ACTINO	-----	147
	MAV_2752ACTINO	-----	134
	MAP1669cACTINO	-----	146
	MUL_2189ACTINO	-----	138
	Hjls_2712ACTINO	-----	157
	Mnca_2681ACTINO	-----	195
	Mkms_2726ACTINO	-----	157
	MSMEG_3460ACTINO	-----	146
	Mb1944cACTINO	-----	150
	MT1960ACTINO	-----	150
	Rv1909cACTINO	-----	150
	BCG_1948cACTINO	-----	150
	RHA1_ro05274ACTINO	-----	144
	Mvan_2983ACTINO	-----	149
	nfa29490ACTINO	-----	146
	SC00561ACTINO	-----	151
	AAur_3058ACTINO	-----	158
	Arth_3077ACTINO	-----	155
	Lxx02790ACTINO	-----	147
	syc2438_d	-----	149
	Dgeo_2141	-----	137
	TTC1639	-----	131
	FRAAL5117ACTINO	-----	146
	Franci3_3112ACTINO	-----	146
	Franean1DRAFT_4643ACTINO	-----	141
	CJE0367	-----	136
	WS0545	-----	134
	sq_1207	-----	144
	BP3019	-----	139
	FN2045	-----	142
	SYN_02524	-----	171
	CAC2834	-----	138
	GBAA0537	-----	144
	SAB1794c	-----	148
	Pcar_2798	-----	146
	Atu0153	-----	139
	AGR_C_249	-----	144
	RHE_CH00106	-----	139
	TM1515	-----	138
	CP1455	-----	163
	BP3244	-----	162
	SYN_00953	-----	151
	LA2887	-----	145
	PG0465	-----	166
	Ava_0536	-----	149
	LA1857	-----	145
	ruler	.....	145