

CLUSTAL W (1.83) multiple sequence alignment

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7297444      CAICGDRATGKHYGASSCDGCKGFFRRSVR - K - NHQYTCRF - - - - - ARNCVVDKDK - - - -
7297445      CAICGDRATGKHYGASSCDGCKGFFRRSVR - K - NHQYTCRF - - - - - ARNCVVDKDK - - - -
Hs21361185   CAICGDRATGKHYGASSCDGCKGFFRRSVR - K - NHMYSCR - - - - - SRQCVVDKDK - - - -
HsM4504443   CAICGDRATGKHYGASSCDGCKGFFRRSVR - K - NHMYSCR - - - - - SRQCVVDKDK - - - -
Hs6631088    CAICGDRATGKHYGASTCDGCKGFFRRSIR - K - SHIYSCR - - - - - SRQCVVDKDK - - - -
CE14120      CHICNDKSTGKHYGAI - SCDGCKGFFRRSIR - K - RYHYQCRF - - - - - EQNCDVTKNK - - - -
CE16926      CAICGDRATGKHYGAMSCDGCKGFFRRTIR - K - RHSYVCRF - - - - - GEKQVVDKAK - - - -
CE29071      CHICSDVATGRHYGAIACNGCKGFFRRTVR - R - NYEYHCRF - - - - - ESKEIDKHN - - - -
CE01542      CLICGEPSTGKHYGIVACLGCKTFFRRAVV - Q - RQDTECKR - - - - - EKPCDVTTMA - - - -
CE12084      CAVCGDKSTGTHYGVIS - CNGCKGFFRRTVL - R - DQKFTCRF - - - - - NKRCVIDKNF - - - -
CE28943      CAVCGDKSTGTHYGVIS - CNGCKGFFRRTVL - R - DQKFTCRF - - - - - NKRCVIDKNF - - - -
CE21136      CVVCGDKAIGKHYGAVAC - CNGCKGFFRRSVW - Q - NLQYTCRF - - - - - NKQCNIDKDH - - - -
CE17474      CAVCGDGIAKLHYGVLAC - YGCKGFFRRTL - G - KYRYACRF - - - - - SNNCIVDKFQ - - - -
CE28032      CAVCGDTPAKIHYGVLAC - FCGCKGFFRAVKDG - R - NKYVCRF - - - - - EKNCEVTKFE - - - -
CE28062      CKVCGDGNAKTHYGVVTC - FCGCKGFFRRTLK - R - PSEYTCRH - - - - - NGHCVVDRHE - - - -
CE18798      CSVCCDEASGRHYGVVAC - FCGCKGFFRRTVRAG - KN - YVCRY - - - - - SKKCRIDKAG - - - -
CE00815      CLVCSDISTGYHYGVPS - CNGCKTFFRRTIM - K - NQTFSCQF - - - - - QGKCPVDKSI - - - -
CE29114      CLVCQDFASGYHYGVPS - CVGCKTFFRRTIM - K - KQKYICQF - - - - - EGNCVVDKTI - - - -
CE18808      CLVCQDFSSGYHYGIP - SCNGCKTFFRRTVM - K - KQKVCQF - - - - - DQNCVVDKSI - - - -
CE27766      CLVCNDLSSGYHYGVPS - CNGCKTFFRRTIM - K - KQLFVCQH - - - - - EKNCVVDKSI - - - -
CE28757      CAVCSDLATGYHYGVAS - CNGCKTFFRRTIV - S - EQTFICQY - - - - - NGNCDVNKNI - - - -
CE27727      CAVCDDIATGKHYSVAS - CNGCKTFFRRALV - N - NREFVCQG - - - - - NKDCPVNKGV - - - -
CE28413      CAVCDDIATGKHYSVAS - CNGCKTFFRRALV - N - NREFVCQG - - - - - NKDCPVNKGV - - - -
CE28074      CVVCSDFASGIHYSVAS - CNGCKTFFRRALV - N - KQTFVCQF - - - - - SGDCVVGKSV - - - -
CE17465      CSVCGDRPTGYHYDVL - SCNGCKTFFRRTII - N - SRNFICTK - - - - - GGNCQFTKDF - - - -
CE06166      CVVCGDAADGFHYGVR - SCRCGNAAFFRAVT - F - NMSFTCRR - - - - - GGRCPVTKNA - - - -
CE09369      CLVCGDPNIQRHYGT - VSCNGCKGFFRRSIW - E - KRTYKCSF - - - - - NHQCSIEHKY - - - -
CE28893      CLVCGDPHGKRHYGAM - SCNGCKGFFRRSIW - E - KRTYKCSF - - - - - NNECIEEFKY - - - -
CE27764      CRVCGDSRAGRHYGT - IACNGCKGFFRRSIW - E - QRDYVCRF - - - - - GGKCLVVQEY - - - -
CE28894      CLVCGDDKASRHYGT - VACNGCKGFFRRSVW - E - KRTYFCIA - - - - - NEDCEVLQQF - - - -
CE20124      CAVCGDVALGKHYGVN - ACNGCKGFFRRSIW - K - NRTYACRH - - - - - GGKCLVAKEQ - - - -
CE20125      CAVCGDVALGKHYGVN - ACNGCKGFFRRSIW - K - NRTYACRH - - - - - GGKCLVAKEQ - - - -
CE27988      CAVCGDTALGKHYGVT - ACNGCKGFFRRSIW - K - NRTYACRY - - - - - QGKCGVAKEQ - - - -
CE24934      CDVCGDVAFGKHYGIN - ACNGCKGFFRRSVW - S - RRQYSCR - - - - - GGDCPVVKEH - - - -
CE27305      CVVCGDQAFGKHYGVN - ACNGCKGFFRRSVW - H - NRQYLCRF - - - - - EGRCIAAKEH - - - -
CE02111      CSVCGDVASGIHYSVA - ACNGCKTFFRRVVL - E - NRTYSCKN - - - - - NGDCIIDKSM - - - -
Hs4506755    CAICGDRSSGKHYGVYS - CEGCKGFFKRTVRKD - LTYT - CR - - - - - DNKDCLIDKRQ - - - -
Hs5902068    CAICGDRSSGKHYGVYS - CEGCKGFFKRTIRKD - LIYT - CR - - - - - DNKDCLIDKRQ - - - -
Hs11415052   CAICGDRSSGKHYGVYS - CEGCKGFFKRTIRKD - LTYS - CR - - - - - DNKDCTVDKRQ - - - -
7290245      CSICGDRASGKHYGVYS - CEGCKGFFKRTVRKD - LTYA - CR - - - - - ENRNCIIDKRQ - - - -
Hs4507673    CVVCGDKASGRHYGAVT - CEGCKGFFKRSIRKN - LVYS - CR - - - - - GSKDCIINKHH - - - -
Hs4507675    CVVCGDKASGRHYGAVS - CEGCKGFFKRSVRKN - LTYS - CR - - - - - SSQDCIINKHH - - - -
7296444      CLVCGDRASGRHYGAI - SCEGCKGFFKRSIRKQ - LGYQ - CR - - - - - GAMNCEVTKHH - - - -
Hs14149746   CVVCGDKSSGKHYGQFT - CEGCKSFFKRSVRRN - LSYT - CR - - - - - ANRNCPIDQHH - - - -
Hs5032173    CVVCGDKSSGKHYGQFT - CEGCKSFFKRSVRRN - LTYT - CR - - - - - ANRNCPIDQHH - - - -
7299588      CVVCGDKSSGKHYGQFT - CEGCKSFFKRSVRRN - LTYS - CR - - - - - GSRNCPIDQHH - - - -
Hs22052265   CVVCGDKSSGKHYGQFT - CEGCKSFFKRSVRRN - LTYT - CR - - - - - ANRNCPIDQHH - - - -
Hs20070199   CVVCGDKSSGKHYGVFT - CEGCKSFFKRSIRRN - LSYT - CR - - - - - SNRDCQIDQHH - - - -
CE05957      CVVCGDKSSGKHYGQFS - CEGCKSFFKRSIRRS - LSYT - CR - - - - - ATKNC AIDVQH - - - -
7301986      CKVCRDHSSGKHYGIY - ACDGCAGFFKRSIRRS - RQYV - CK - - - - - SQKQGLCVVDKTH - - - -
CE18491      CRVCEDHSSGKHYSIF - SCDGCAGFFKRSIRRH - RQYV - CKNK - GSPSE - GQCKVDKTH - - - -
Hs4507537    CKVCGDRSSGKHYGVY - ACDGCSGFFKRSIRRN - RTYV - CK - - - - - SGNQGGCPVDKTH - - - -
7297033      CKVCGDRSSGKHYGIY - SCDGCSGFFKRSIHRN - RIYT - CKAT - GDLK - GRC - PVDKTH - - - -
Hs7657395    CRVCGDSSSGKHYGIY - A - CNGCSGFFKRSVRRR - LIYR - CQ - - - - - VGAGMCPVDKAH - - - -

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Hs7706515 CRVCGDSSSGKHYGIYACNGCSGFFKRSVRRR-LIYR-CQ----VGAGMCPVDKAH----
CE28464 CAVCGDVSSGKHYGILACNGCSGFFKRSVRRR-LIYR-CQ----AGTGNCVVDKAH----
7303078 CVVCGDTSSGKHYGILACNGCSGFFKRSVRRR-LIYR-CQ----AGTGRCVVDKAH----
7298928 CAVCGDQSSGKHYGVSCCDGCSCFFKRSVRRG-SSYA-CI----ALVGNVCVVDKAR----
CE26181 CEICGDKSYGRHYGVWACDGCSCFFKRSVRKN-IIYT-CI----AGNWKCVVDKGR----
CE16040 CAVCGDTSNGNHYGVPTCFGCSGFFRRTVRNK-LVHG-CW----NGDGNCVIDKAN----
CE03323 CKVCGDKASGYHYGVTSCEGCKGFFRRSIQRK-IDYR-CL-----KQQVCEIKRES----
CE24972 CKVCGDKASGYHYGVTSCEGCKGFFRRSIQRK-IDYR-CL-----KQQVCEIKRES----
7296404 CKVCGDKASGYHYGVTSCEGCKGFFRRSIQKQ-IEYR-CL-----RDGKCLVIRLN----
7303778 CKVCGDKSSGVHYGVITCEGCKGFFRRSQSSV-VNYQ-CP-----RNKQCVVDRVN----
CE24775 CKVCGDKSSGVHYGVITCEGCKGFFRRSQSSI-VNYQ-CP-----RQKNCLVDRVN----
Hs19743901 CKICGDKSSGIHYGVITCEGCKGFFRRSQQSN-ATYS-CP-----RQKNCLIDRTS----
Hs4506577 CKICGDKSSGIHYGVITCEGCKGFFRRSQQSN-ATYS-CP-----RQKNCLIDRTS----
Hs19743903 CKICGDKSSGIHYGVITCEGCKGFFRRSQQSN-ATYS-CP-----RQKNCLIDRTS----
Hs19743905 CKICGDKSSGIHYGVITCEGCKGFFRRSQQSN-ATYS-CP-----RQKNCLIDRTS----
Hs19743907 CKICGDKSSGIHYGVITCEGCKGFFRRSQQNN-ASYS-CP-----RQRNCLIDRTN----
Hs19743909 CKICGDKSSGIHYGVITCEGCKGFFRRSQRCN-AAYS-CT-----RQQNCPIDRTS----
CE26023 CQVCSDKASGFHYGVFACGCKGFFRRSIQOK-ITYRACT-----RAEDCLILRNN----
Hs13430848 CKVCGDVASGFHYGVHACGCKGFFRRSIQQN-IQYKRCL-----KNENCSIVRIN----
Hs20336229 CRVCGDKASGFHYGVHACGCKGFFRRRTIRLK-LIYDRCD-----LN--CRIHKKS----
Hs20336231 CRVCGDKASGFHYGVHACGCKGFFRRRTIRLK-LIYDRCD-----LN--CRIHKKS----
Hs5453940 CRVCGDKASGFHYGVHACGCKGFFRRRTIRMK-LEYEKCE-----RS--CKIQKKN----
Hs7549811 CRICGDKASGYHYGVHACGCKGFFRRRTIRLK-LVYDKCD-----RS--CKIQKKN----
Hs14916494 CFVCGDKSSGYHYGVSAPEGCKGFFRRSIQKN-MIYT-CH-----RDKNCVINKVT----
Hs4506419 CFVCGDKSSGYHYGVSAPEGCKGFFRRSIQKN-MVYT-CH-----RDKNCIINKVT----
Hs4506423 CFVCGDKSSGYHYGVSSCEGCKGFFRRSIQKN-MVYT-CH-----RDKNCIINKVT----
CE08543 CMVCGDNSTGYHYGVQSCGCKGFFRRSVHKN-IAYV-CT-----KGENCTFSYENCAAN
Hs20070193 CPVCGDKVSGYHYGLLTCESCKGFFKRTVQNN-KHYT-CT-----ESQSKIDKTO----
Hs4504343 CPVCGDKVSGYHYGLLTCESCKGFFKRTVQNN-KRYT-CI-----ENQNCIDKTO----
7293866 CPVCGDKVSGYHYGLLTCESCKGFFKRTVQNK-KVYT-CV-----AERSCHIDKTO----
CE03191 CPVCGDRVSGYHYGLLTCESCKGFFKRTVQNK-KQYQ-CS-----AEANCHVDRTC----
7298773 CPICGDKISGFHYGIFSCESCKGFFKRTVQNR-KNYV-CV-----RGGPCQVSIST----
Hs15451846 CLICGDRATGLHYGIIISCEGCKGFFKRSICNK-RVYR-CS-----RDKNCVMSRKQ----
Hs15451850 CLICGDRATGLHYGIIISCEGCKGFFKRSICNK-RVYR-CS-----RDKNCVMSRKQ----
Hs15451848 CLICGDRATGLHYGIIISCEGCKGFFKRSICNK-RVYR-CS-----RDKNCVMSRKQ----
CE27779 CSVCGDKSTGLHYGAATCEGCKGFFKRSVQNK-KVYH-CS-----QDNCCEIDKQN----
Hs11276071 CAVCGDNAACQHYGVRTCEGCKGFFKRTVQKN-AKYV-CL-----ANKNCPVDKRR----
Hs5453822 CAVCGDNAACQHYGVRTCEGCKGFFKRTVQKN-AKYV-CL-----ANKNCPVDKRR----
7298701 CAVCGDTAACQHYGVRTCEGCKGFFKRTVQKG-SKYV-CL-----ADKNCPVDKRR----
Hs21361342 CAVCGDNASCQHYGVRTCEGCKGFFKRTVQKN-AKYI-CL-----ANKDCPVDKRR----
HsM4504441 CAVCGDNASCQHYGVRTCEGCKGFFKRTVQKN-AKYI-CL-----ANKDCPVDKRR----
CE24859 CAVCNDRACLHYGARTCEGCKGFFKRTVQKN-SKYT-CA-----GNKTCPIDKRY----
Hs22035687 CLVCGDIASGYHYGVASCEACKAFFKRTIQGN-IEYS-CP-----ATNECEITKRR----
HsM4758308 CLVCGDIASGYHYGVASCEACKAFFKRTIQGN-IEYS-CP-----ATNECEITKRR----
Hs14741342 CLVCGDIASGYHYGVASCEACKAFFKRTIQGN-IEYS-CP-----ATNECEITKRR----
Hs18860920 CLVCGDVASGFHYGVASCEACKAFFKRTIQGS-IEYS-CP-----ASNECEITKRR----
7295148 CLVCGDVASGFHYGVASCEACKAFFKRTIQGN-IEYT-CP-----ANNECEINKRR----
Hs22049513 CLVCGDIASGYHYGVASCEACKAFFKRTIQGN-IEYS-CP-----ATNECEITKRR----
Hs10835013 CAVCSDYASGYHYGVWSCEGCKAFFKRSIQGH-NDYI-CP-----ATNQCTIDKNR----
Hs4503603 CAVCNDYASGYHYGVWSCEGCKAFFKRSIQGH-NDYM-CP-----ATNQCTIDKNR----
Hs21322252 CLICGDEASGCHYGALTCGSKVFFKRAAEGK-QKYL-CA-----SRNDCTIDKFR----
HsM4557331 CLICGDEASGCHYGALTCGSKVFFKRAAEGK-QKYL-CA-----SRNDCTIDKFR----
Hs4504133 CLVCSDEASGCHYGVLTGCGSKVFFKRAVEGQ-HNYL-CA-----GRNDCIIDKIR----
Hs4505199 CLVCGDEASGCHYGVVTCGSKVFFKRAVEGQ-HNYL-CA-----GRNDCIIDKIR----
Hs4505767 CLICGDEASGCHYGVLTGCGSKVFFKRAVEGQ-HNYL-CA-----GRNDCIIDKIR----
7301249 CAVCGDKALGFNFNAVTCECKAFFRRNALA--KKQFTCPFN-----QNCIDITVVT----
CE18456 CRVCGDKAFSYNFNVITCECKAFFRRNANK--EKEIRCPFN-----EQCEINMVS----

CE20746 CTVCSDRANGYNFGVLTCESECKAFFRRNASK--HKEIKCPFS-----DSCQITSAS-----
 Hs11863132 CRVCGDKATGYHFNVMTCEGCKGFFRRAMKR--NARLRCPFRK----GACEITRKT-----
 Hs11863134 CRVCGDKATGYHFNVMTCEGCKGFFRRAMKR--NARLRCPFRK----GACEITRKT-----
 Hs14702164 CRVCGDKATGYHFNVMTCEGCKGFFRRAMKR--NARLRCPFRK----GACEITRKT-----
 Hs4507883 CGVCGDRATGFHFNAMTCEGCKGFFRRSMKR--KALFTCPFN-----GDCRITKDN-----
 Hs4826661 CVVCGDQATGYHFNALTCEGCKGFFRRTVSK--SIGPTCPFA-----GSCEVSKTQ-----
 Hs10835123 CVVCGDKATGYHYRCITCEGCKGFFRRTIQKNLHPSYSCKYE-----GKCVIDKVT-----
 Hs20127452 CVVCGDKATGYHYRCITCEGCKGFFRRTIQKNLHPTYSCKYD-----SCCVIDKIT-----
 7302184 CLVCGDRASGYHYNALTCEGCKGFFRRSVTKS--AVYCCKFG-----RACEMDMYM-----
 Hs4826980 CVVCGDRASGYHYNALTCEGCKGFFRRSITKN--AVYCKKNG-----GNCVMDMYM-----
 Hs11321630 CRVCGDKASGFHYNVLSCEGCKGFFRRSVVRRGGARRYACRGG-----GTCQMDAFM-----
 Hs14786961 CRVCGDKASGFHYNVLSCEGCKGFFRRSVVRRGGARRYACRGG-----GTCQMDAFM-----
 Hs5031893 CSVCGDKASGFHYNVLSCEGCKGFFRRSVIKG--AHYICHSG-----GHCPCMDTYM-----
 CE17475 CRVCCDSNGQPHYGTICCPSCCKGFFRRVYMSD--KKFECYR-----GNMCVIQKGT-----
 CE26822 CSICREPGDGFHFHGAEEACRACAAFFRRSVSQSK--TYLCQGN-----NDCDVTVN-----
 CE28079 CAICQESAEGFHFHGAEEACRACAAFFRRTVSNRK--TYSQGN-----NDCDVTIN-----
 CE29473 CSICQESGDGFHFHGAEEACRACAAFFRRSISENK--LYTCSGN-----NDCDVTVN-----
 CE26532 CSICREDGDGYHFGAEACRACAAFFRRSVSLDK--TYLCRGN-----NDCEITAN-----
 CE06214 CAVCNEVDGDLHFGAEACRACAAFFRRSVVALSK--KYECRAG-----RNCEVSSN-----
 CE22324 CSICGEVGNVHFGAEACRACAAFFRRSVALNK--LYRCRGD-----GNCDILST-----
 CE27061 CSVCGEAGDGAHFGAEACRACAAFFRRSVALNK--AYVCRAM-----GTCVIQKN-----
 CE27770 CLICCEVADGHHFGAAACRACAAFFRRTVQLNK--VHDCPKN-----GQCFILSN-----
 CE06213 CAICGDVGDGHHFGLDACRACAAFFRRTVALGK--KFECRQQ-----GACKINTI-----
 CE17496 CLICGDSADSLHFGALSCRACAAFFRRKVAGRRNIFR--RCD-----RQCKVDTG-----
 CE24323 CRVCGECADAVHFGALSCRACAAFFRRKVAAGKPLSSSRCS-----GSCKLENQV-----
 CE16588 CKVCGDTGNMHHFGAFTCRACAAFFRRAASRKFLR-----KCNHLI-----
 CE17011 CRICFEKGGHYHFGVFSRACAAFFRRCHFLKENRRRCRLS-----KGKCGPNKN-----
 CE17824 CEVCGDKTSGRHFGVMSCRACAAFFRRAATWNLEKRICPN-----GTCHTSVN-----
 CE16602 CEKICCEPAHGVHFGVASCRAAAFFRRTTVLGGKYYTCRQKN-----EKCTTNNE-----

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7297444 ---RNQC-----RYCRLRKCFKAGMKKEAVQNERDRISCRRTSNDDP
 7297445 ---RNQC-----RYCRLRKCFKAGMKKEAVQNERDRISCRRTSNDDP
 Hs21361185 ---RNQC-----RYCRLKKCFRAGMKKEAVQNERDRISTRSSYEDS
 HsM4504443 ---RNQC-----RYCRLKKCFRAGMKKEAVQNERDRISTRSSYEDS
 Hs6631088 ---RNQC-----RYCRLRKCFRAGMKKEAVQNERDRISTRSTFDGS
 CE14120 ---RNAC-----RACRLQKCVKAGMKSNAIQNERDAIGKRKKTGAE
 CE16926 ---RNSC-----RKCRFDVCLRKGMRRAVQTERDRIRPANPLSNGS
 CE29071 ---RAVC-----RYCRFMKCISSGMRDDQVQSERDVIKREKKNM
 CE01542 ---RKAC-----RACRYRKCLESGMSKEALQPRDLIGCRRIRSRPS
 CE12084 ---RCAC-----RYCRFQKCVQVGMKREAIQFERDPVGSPTSASLN
 CE28943 ---RCAC-----RYCRFQKCVQVGMKREAIQFERDPVGSPTSASLN
 CE21136 ---RNAC-----RYCRFQKCLADGMKPEAIQNERDRIGSTKRRKRS
 CE17474 ---RNSC-----RYCRFQRCIQAGMDPKAVRPDRDQTKGQKVPRIK
 CE28032 ---RNAC-----RYCRFRKCLLVGMNPDYVRPDREKSKGKTVLSK
 CE28062 ---RNSCRFFSNFLFLKNFLIPKTSRFRFCRFFKCCIEVGMMDPKAVRPDRDATGRHYQ
 CE18798 ---RNVC-----RSCRFFQKCLEVGMPEPDAIRPDRDKTGRQKNPRRNT
 CE00815 ---RCAC-----RHCRFEKCLQVGMDRNAIQNRDPIGYTKRTRYP
 CE29114 ---RCAC-----RYCRFEKCLSVGMDRNLQQRDPIGYTKRTRR
 CE18808 ---RCAC-----RFCRFEKCLKVGMMDKTSLSQASRDPIGYTKRNRKTL
 CE27766 ---RCAC-----RFCRFEKCIQVGMMDKSALQASRDPIGYTKRTRKPK
 CE28757 ---RCAC-----RHCRFNKCLLVGMMDAKAIQNRDRDRIGPTKKIKMSS
 CE27727 ---RCAC-----RYCRLQKCLAVGMDKNSIQNRDRDRIGYTKRKRHD
 CE28413 ---RCAC-----RYCRLQKCLAVGMDKN-----CKFLVYFEI-----
 CE28074 ---RCVC-----RSCRLKKCFDMGMDPKAIQHDKIRYTKALKKKR
 CE17465 ---RCAC-----RACRFEKCVRVGMNPSAIQFPSSKN--HNEADDMS
 CE06166 ---RCAC-----RACRLAKCYAVGMDKKAVQPKREVHTSNGSFDQND

CE09369 ---RNRC-----RACRLEKCFRAGMDASAIRNKRAKR - KSQPESPCT
 CE28893 ---RNRC-----RACRLKRCLHVGMDANAVRSERTRKIKTEIDGDVK
 CE27764 ---RNRC-----RACRLRKCFVTGMDARAVQSERDKHKKNPKDSNNE
 CE28894 ---RNRC-----RACRFNKCVVMVGMDARAVQSERE - IRPNETAKKPK
 CE20124 ---RNAC-----RSCRLTRCLDVGMNPRAVQGDTVEDPEWDEEAMPE
 CE20125 ---RNAC-----RSCRLTRCLDVGMNPRAVQGDTVEDPEWDEEAMPE
 CE27988 ---RNAC-----RSCRLKECIKVGMINPRAVQGD - IDTASTSSASPN
 CE24934 ---RNVC-----RSCRLKKCFEVMNPDVSVQNER - DRNAKNGGMGGP
 CE27305 ---RNVC-----RACRLKQCFVAGMINPRAVQSER - VEREQNGSPN - Q
 CE02111 ---RCSC-----RHCRYKKCI IAGMDRGELSMERRRKRKLNGLGELS
 Hs4506755 ---RNRCQ-----YCRYQKCLAMGMKREAVQEERQGRKDRNENEVES
 Hs5902068 ---RNRCQ-----YCRYQKCLVMGMKREAVQEERQGRSREAESEAE
 Hs11415052 ---RNRCQ-----YCRYQKCLATGMKREAVQEERQGRKDK - DGDGEG
 7290245 ---RNRCQ-----YCRYQKCLTCGMKREAVQEERQGRARNAAGRLSA
 Hs4507673 ---RNRCQ-----YCRQLQRCIAFGMKQDSVQCERKPIEVSREKSSNC
 Hs4507675 ---RNRCQ-----FCRLKKCLEMGMKMSVQSERKPFVQREKPSNC
 7296444 ---RNRCQ-----FCRLQKCLASGMR - TVQHERKPIVDRKEGIIAA
 Hs14149746 ---RNQCQ-----YCRLLKCLKVGMRREAVQGRMPPTQP - - - THG
 Hs5032173 ---RNQCQ-----YCRLLKCLKVGMRREAVQGRMPPTQP - - - NPG
 7299588 ---RNQCQ-----YCRLLKCLKMGMRREAVQGRVPPTQPGLAGMHG
 Hs22052265 ---RNQCQ-----YCRLLKCLKRFSEEECLQ - - - P - - SP - - - IQA
 Hs20070199 ---RNQCQ-----YCRLLKCFRVGMRKEAVQGRGRI PHSLP - - - - G
 CE05957 ---RNQCQ-----YCRLLTKCIRMGMRKEGRRSNETQTAVSAVQRGRL
 7301986 ---RNQCR-----ACRLRKCFEVMNPKDAVQHERGPRNSTLRR - - - H
 CE18491 ---RNQCR-----ACRLRKCLEIGMNKDAVQHERGPRNSSLRR - - - Q
 Hs4507537 ---RNQCR-----ACRLKKCLEVNMMNDAVQHERGPRSTIRK - - - Q
 7297033 ---RNQCR-----ACRLAKCFQSAMNKDAVQHERGPRKPKLHP - - - Q
 Hs7657395 ---RNQCQ-----ACRLKKCLQAGMNQDAVQNERQPRSTAQVH - - LD
 Hs7706515 ---RNQCQ-----ACRLKKCLQAGMNQDAVQNERQPRSTAQVH - - LD
 CE28464 ---RNQCQ-----ACRLKKCLNKGMINKDAVQNERQPRSTATIRPALD
 7303078 ---RNQCQ-----ACRLKKCLQMGMINKDDDSIDVTNDNEEPPHA - - VS
 7298928 ---RNWCP-----SCRFRQCLAVGMNAAAVQEERGPRNQVALY - - R
 CE26181 ---RNWCP-----ACRLAKCTRLKMNRLGPAFFSSTHGEKAKIWI - - G
 CE16040 ---RNRCK-----SCRICKCFKKGMKNNAVQPERSHYSYTVVEY - - VE
 CE03323 ---RNRCQ-----YCRFKKCLDSGMSKDSVRQMKFRNAMR - - DDKSP
 CE24972 ---RNRCQ-----YCRFKKCLDSGMSKDSVRQMKFRNAMR - - DDKSP
 7296404 ---RNRCQ-----YCRFKKCLDSGMSRDSVRYGRVPPKRSRELNGAAA
 7303778 ---RNRCQ-----YCRLLQKCLKLGMSRDAVKFGRMSKKQREKVEDEV
 CE24775 ---RNRCQ-----YCRLLKCCIELGMSRDAVKFGRMSKKQREKVEDEV
 Hs19743901 ---RNRCQ-----HCRLQKCLAVGMSRDAVKFGRMSKKQRDSLAEV
 Hs4506577 ---RNRCQ-----HCRLQKCLAVGMSRDAVKFGRMSKKQRDSLAEV
 Hs19743903 ---RNRCQ-----HCRLQKCLAVGMSRDAVKFGRMSKKQRDSLAEV
 Hs19743905 ---RNRCQ-----HCRLQKCLAVGMSRDAVKFGRMSKKQRDSLAEV
 Hs19743907 ---RNRCQ-----HCRLQKCLALGMSRDAVKFGRMSKKQRDSLAEV
 Hs19743909 ---RNRCQ-----HCRLQKCLALGMSRDAVKFGRMSKKQRDSLAEV
 CE26023 ---RNRCQ-----CCRLKKCLAVGMSRDAVRFGRVPPKREKARMFEEEM
 Hs13430848 ---RNRCQ-----QCRFKKCLSVGMSRDAVRFGRVPPKREKARMLAEM
 Hs20336229 ---RNKCQ-----YCRFQKCLAVGMSHNAIRFGRMPQAEKEKLLAEI
 Hs20336231 ---RNKCQ-----YCRFQKCLAVGMSHNAIRFGRMPQAEKEKLLAEI
 Hs5453940 ---RNKCQ-----YCRFQKCLALGMSHNAIRFGRMPQAEKRKLVAAGL
 Hs7549811 ---RNKCQ-----YCRFHKCLSVGMSHNAIRFGRMPRSEKAKLKAIEI
 Hs14916494 ---RNRCQ-----YCRLLQKCFEVMGMSKESVRNDRNKKKKKETSQKQECT
 Hs4506419 ---RNRCQ-----YCRLLQKCFEVMGMSKESVRNDRNKKKKKKEVPKPECS
 Hs4506423 ---RNRCQ-----YCRLLQKCFEVMGMSKEAVRNDNRNKKKKKKEEGSP
 CE08543 RGVVTRCQ-----ACRFAKCLAVGMNDRNVRVNKETDKDVKPSVASP
 Hs20070193 ---RKRCP-----FCRFQKCLTVGMRLEAVRADRMGRGRN - - KFGPM
 Hs4504343 ---RKRCP-----YCRFQKCLSVGMKLEAVRADRMGRGRN - - KFGPM

7293866 ---RKRCP-----YCRFQKCLEVGMKLEAVRADRMGRGRN--KFGPM
CE03191 ---RKRCP-----SCRFFQKCLTMGMKMEAVRADRMGRGRN--KFGSF
7298773 ---RKKCP-----ACRFEKCLQKGMKLEAIREDRTRGGRS--TYQCS
Hs15451846 ---RNRCQ-----YCRLLKCLQMGMMNRKAIREDGMPGGRN--KSIGPV
Hs15451850 ---RNRCQ-----YCRLLKCLQMGMMNRKAIREDGMPGGRN--KSIGPV
Hs15451848 ---RNRCQ-----YCRLLKCLQMGMMNRKTIREDGMPGGRN--KSIGPV
CE27779 ---RNRCQ-----SCRFRKCI SKGMLTEAVREDRMPGGRNNGNSIYSN
Hs11276071 ---RNRCQ-----YCRFQKCLSVGMVKEVVRTDSLKGRRG--RLPSK
Hs5453822 ---RNRCQ-----YCRFQKCLAVGMVKEVVRTDSLKGRRG--RLPSK
7298701 ---RNRCQ-----FCRFQKCLVVGVMVKEVVRTDSLKGRRG--RLPSK
Hs21361342 ---RNRCQ-----FCRFQKCLAVGMVKEVVRTDSLKGRRG--RLPSK
HsM4504441 ---RNRCQ-----YCRFQKCLAVGMVKEVVRTDSLKGRRG--RLPSK
CE24859 ---RSRCQ-----YCRYQKCLEVGMVKEIVRHGSLSGRRG--RLSSK
Hs22035687 ---RKSCQ-----ACRFMKCLKVGMLKEGVRLDRVRGGRQ--KYKRR
HsM4758308 ---RKSCQ-----ACRFMKCLKVGMLKEGVRLDRVRGGRQ--KYKRR
Hs14741342 ---RKSCQ-----ACRFMKCLKVGMLKEGVRLDRVRGGRQ--KYKRR
Hs18860920 ---RKACQ-----ACRFTKCLR VGMLKEGVRLDRVRGGRQ--KYKRR
7295148 ---RKACQ-----ACRFQKCLLMGMLKEGVRLDRVRGGRQ--KYRRN
Hs22049513 ---RKSCQ-----ACRFMKCLKVGMLKEELCCLIWQPPAT--RGSRV
Hs10835013 ---RKSCQ-----ACRLRKCYEVGMVKCGSRRERCGYRLV--RRQRS
Hs4503603 ---RKSCQ-----ACRLRKCYEVGMMKGGIRKDRRGGRML--KHKRQ
Hs21322252 ---RKNCQ-----SCRLRKCYEAGMTLGARKLKKLGNLKL--QEEGE
HsM4557331 ---RKNCQ-----SCRLRKCYEAGMTLGARKLKKLGNLKL--QEEGE
Hs4504133 ---RKNCQ-----ACRYRKCLQAGMNLEARKTKK--KIKG--IQQAT
Hs4505199 ---RKNCQ-----ACRLQKCLQAGMNLGARKSKKLKGLK--IHEEQ
Hs4505767 ---RKNCQ-----ACRLRKCCQAGMVLGGRKFKKFNKVRV--VR-AL
7301249 ---RRFCQ-----KCRLRKCLDIGMKS ENIMSEEDKL--IKRRIETN
CE18456 ---RRFCQ-----RCRLTKCFAVSLAEKSHRLEELFVGMKKEWIMSE
CE20746 ---RKFCQ-----ACRLNKCFAVGMNSEWLNLDLKPSSIVSGKFKRK
Hs11863132 ---RRQCQ-----ACRLRKCLESGMKKEMIMSDEAVE--ERRALIKRK
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Hs14702164 ---RRQCQ-----ACRLRKCLESGMKKEMIMSDEAVE--ERRALIKRK
Hs4507883 ---RRHCQ-----ACRLKRCVDIGMMKEFILTDEEVQ--RKREMILKR
Hs4826661 ---RRHCP-----ACRLQKCLDAGMRKDMILSAEALA--LRRAKQAQR
Hs10835123 ---RNQCQ-----ECRFKKCIYVGMATDLVLDLDDSKRL--AKRKLIEEN
Hs20127452 ---RNQCQ-----LCRFKKCIAVGMAMDLVLDLDDSKRV--AKRKLIEQN
7302184 ---RRKCQ-----ECRLKKCLAVGMRPECVV PENQCAMKRREKKAQK
Hs4826980 ---RRKCQ-----ECRLRKCKEMGMLAECLL TEIQCKSKRLRKNVKQ
Hs11321630 ---RRKCQ-----QCRLRKCKEAGMREQCVLSEEQIRKKKIRKQQQQ
Hs14786961 ---RRKCQ-----QCRLRKCKEAGMREQCVLSEEQIRKKKIRKQQQ--
Hs5031893 ---RRKCQ-----ECRLRKCRQAGMREECVLSEEQIRLKKLKRQEEE
CE17475 ---RNICR-----ACRYKKCLQVGMNVKGSTTRHNLRLINIYVQTSAE
CE26822 ---IRCMCR-----ACRYVKCIEVGMNPPVGVQQKP--RLPKNRKEVSID
CE28079 ---IRCMCR-----ACRYIKCIEVGMNPPAGVQQR--PPSKTLVEVSMD
CE29473 ---IRCMCR-----ACRLTKCIEVGMNPPVGVVQKPGSFRKSKELISPS
CE26532 ---IRCMCR-----SCRFAKCLEVGMNPPAGVQQRRTIGK--REIKPD
CE06214 ---IRCMCR-----SCRYDKCIEVGMNPECVQNR--ENDTPKADLQFD
CE22324 ---IRCMCR-----ACRFKCMVAVGMKREAVQKYRDAYGK--RGSDVE
CE27061 ---VRCMCR-----ACRFTKCIAVGMRKSAVQRHRELFAS--QETSSE
CE27770 ---VRNMCR-----ACRYEKCLEVGMQRS SVQQRDQLGR--RDGLP
CE06213 ---IRSICK-----SCRLNKCLNLGMKRS CVQPRRDQPQKEEKLILPS
CE17496 ---MRKLCA-----SCRYDKCLKVGMRSAVLSRLAKKNQNYKKSIVG
CE24323 ---LRLCA-----KCRYEKCVQVGMRTSAVLSRLAVKSEPEFESLLD
CE16588 ---FALKCK-----NCRLQRCYEAGMSEN FQFCRDLIGAKGAI PKLK
CE17011 ---GKWFCK-----TCRLERC FRLGMTPSNIQYDRDAY--KSSVKKIK
CE17824 ---GKFNCK-----QCRLKKCLDVGM DTRSESKVQCLKITIRLISGFQ
CE16602 ---DRFNCR-----YCRYQKCLSNGMTPESTDV KYNYDAAVHYNKKPS

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Hs21361185 ---SLPSINALLQAEVL-----
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CE21136 --ANSENNSDSEGTPS-----
CE17474 K-QIDEELLNHMMRL-----
CE28032 K-SVSRSLSYRLAD-----
CE28062 -----
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7301249	RAKRRLMENGTDACD-----
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CE22324	SPGSSSVS--LPNQDGF-----
CE27061	SSSNPRISPTLSWPMD-----
CE27770	TNREEPVLDTMRRAYEK-----
CE06213	MNVSPADIEVSCIE-----
CE17496	SPD-AYEPSTSTSDS-----
CE24323	QIKLAYERLQMA-----
CE16588	VPKSFEQTVGRPYFVLQCDP----
CE17011	DSAENITEPKRDAT-----
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