

CLUSTAL W (1.83) multiple sequence alignment

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At3g17610_1      EYRSLKRLLRNRVSAQQ - ARERKKVYVS - DLESRANELQNNNDQLEEKI STLTNENTMLR
At5g11260       ENKRLKRLLRNRVSAQQ - ARERKKAYLS - ELENRVKDLENKNSLEERLSTLQENQMLR
Hs19745184      ARKREVRLMKNREAARE - CRRKKKEYVK - CLENRVAVLENQNKTLEELKALKD - - - - -
Hs4758054      ARKREVRLMKNREAARE - CRRKKKEYVK - CLENRVAVLENQNKTLEELKALKD - - - - -
Hs8393194      TRKRELRLMKNREAARE - CRRKKKEYVK - CLENRVAVLENQNKTLEELKALKD - - - - -
Hs4885073      QLKREIRLMKNREAARE - CRRKKKEYVK - CLENRVAVLENQNKTLEELKTKLD - - - - -
7293451        TRKREIRLQKNREAARE - CRRKKKEYIK - CLENRVAVLENQNKALIEELKSLKELYCQTK
CE24265        NRKRQVRLKKNREAAKE - CRRKKKEYVK - CLENRVSVLENQNKALIEELKTKLKE - - - - -
CE24266        NRKRQVRLKKNREAAKE - CRRKKKEYVK - CLENRVSVLENQNKALIEELKTKLKE - - - - -
Hs15298466     VLRRQQRMIKNRESACQ - SRKKKKEYML - GLEARLKAALSENEQLKKENGT LKRQLDEVV
Hs6671585     VLRRQQRMIKNRESACQ - SRKKKKEYML - GLEARLKAALSENEQLKKENGT LKRQLDEVV
Hs20631977     LLKRQQRMIKNRESACQ - SRRKKKEYLQ - GLEARLQAVLADNQQLRRENAALRRRLEALL
7302252       - - KKYQRMIKNRESASL - SRKKRKEYV - SLETRINKLEKECDLSLKAENITLRDQI - - - -
7294270       SLKKIRRKIKNKISAE - SRRKKKEYMD - QLERRVEILVTENHDYKKRLEGLEETNANLL
Hs16418355     ALKRVRRKIKNKISAE - SRRKKKEYVE - CLEKKVETFTSENNE LWKKVETLENANRTLL
CE01814       SLKIVRRKIKNKLSAE - SRRKRKEYID - ALEGR LHCFSEENKSLKKQVHQLEASNRDLQ
Hs14211949     VLKKIRRKIRNKQSAE - SRKKKKEYID - GLETRMSACTAQNQELQRKVLHLEKQNL SLL
Hs18702325     VLKVRRKIRNKQSAQD - SRRRKKKEYID - GLESRVAACSAQNQELQKKVQELERHNI SLV
Hs20127492     ILKRVRKIRNKRSAE - SRRKKKVVYV - GLESRVLKYTAQNME LQNKVQLLEEQNLSLL
CE11300       DLKRIRRKIRNKRSAT - SRKRQDYIE - QLEDRVSESTKENQALQQIERLSS ENQSVI
CE01056       EEKMDRRKLNKRVAAQ - ARDKKERSA - KIEDVMRDLVEENRRLRAENERLRRQNKNL -
Hs14110395     EEKALRRKLNKRVAAQ - ARDRKKARMS - ELEQQVVDLEEENQKLLLENQLLREKTHGLV
7291250       EEKVQRKLNKRVAAQ - SRDRKKARME - EMDYEIKELTDRTEILQNKCD SLQAINESLL
CE17828       - - - - QNRKIRNRMYAQ - SRMRKKEADE - HMKMNLOELLQENEILRTENAALKQR - - - - L-
Hs14775169     QLKQRRRTLKNRGYAA - CRVKRVQKE - ELEKQKAELOQVEVEKLASENASMKLELDALR
Hs4505073     QLKQRRRTLKNRGYAA - CRVKRVQKE - ELEKQKAELOQVEVEKLASENASMKLELDALR
Hs4505075     QLKQRRRTLKNRGYAA - CRVKRVQKE - ELEKQKAELOQVEVEKLASENASMKLELDALR
Hs6912490     RLKQRRRTLKNRGYAA - CRVKRVQKE - ELQKQSELEREVDKLARENAAMRLELDALR
7302350       RMKQRRRTLKNRGYAA - CRKRIEQKD - ELETKKS YEWTELEQM HEDNEQVRREVSNWK
Hs14770839     RLKQKRRTLKNRGYAS - CRYKRVQKH - HLENEKTQLIQQVEQLKQEV SRLARERDAYK
Hs4885447     RLKHKRRTLKNRGYAS - CRYKRVQKH - HLENEKTQLIQQVEQLKQEV SRLARERDAYK
Hs5453736     RLKQKRRTLKNRGYAS - CRFKRVQQRH - VLESEKNQLLQQVDHLKQEI SRLVRERDAYK
Hs5453802     RLKQRRRTLKNRGYAA - CRSKRLQQR - GLEAERARLAAQLDALRAEVARLARERDLYK
Hs21361118     - - QGRTRKRKQSGHSPARAGKQRMKEKEQENERKVAQLAEENERLQKQEI ERLTREVEATR
HsM4758132     - - QGRTRKRKQSGHSPARAGKQRMKEKEQENERKVAQLAEENERLQKQEI ERLTREVEATR
Hs20149576     LIRDIRRRGKNKVAAQ - CRKRKLENIV - ELEQDLHLKDEKEKLLKEKGENDKSLHLLK
Hs5453774     LVRDIRRRGKNKVAAQ - CRKRKLETIV - QLERELERLTNERERLLRARGEADRTLEV MR
Hs21918831     LIRDIRRRGKNKVAAQ - CRKRKLDIIL - NLEDDVCNLQAKKETL KREQAQCNKAINIMK
HsM5731347     LIRDIRRRGKNKVAAQ - CRKRKLDIIL - NLEDDVCNLQAKKETL KREQAQCNKAINIMK
Hs4505379     LIRDIRRRGKNKMAAQ - CRKRKLDIIL - NLERDVEDLQRDKARLLREKVEFLRSLRQMK
7300970       LIRDIRRRGKNKVAAQ - CRKRKLDQIL - TLEDEVNAVVKRKTQLNQDRDHLESERKRIS
Hs13540490     - - - - RRRSKNRIAAQR - CRKRKLDICIQ - NLECEIRKLVCEKEKLLSERNQLK - - - - -
Hs4502353     - - - - RRRSKNRIAAQR - CRKRKLDICIQ - NLESEIEKLQSEKESLLKERDHILSTLGETK
Hs10938014     RIKAERKRLRNRIASK - CRKRKLERIA - RLEEKVKTLKSONTELASTANMLREQVAQLK
Hs4758616     RIKAERKRLRNRIASK - CRKRKLERIA - RLEEKVKTLKSONTELASTANMLREQVAQLK
Hs4504809     RIKVERKRLRNLAATK - CRKRKLERIA - RLEDKVKTLKAENAGLSSTAGLLREQVAQLK
7303798       KIKLERKQRNRVAASK - CRKRKLERIS - KLEDRVKVLKGENVDL ASIVKLNKDHVAQLK
CE16461       KKKLERKRARNRQAATK - CRQKKMDRIK - ELEEQVLHEKHRGQR LDAELLELNRALEHFR
YEL009c       - - - - - KRARNT EAARR - SRARKLQRMK - QLEDKVEELLSKN - - - - - YHLENEVARLK
Hs4502263     DERKKRRRERNKIAAAK - CRNKKKEKTE - CLQKESEKLESVNAELKAQIEELKNEKQH LI
Hs4755128     DERKKRRRERNKIAAAK - CRNKKKEKTE - CLQ - - - - - LQ
Hs18497306     EERRKRRREKNKVAAAR - CRNKKKERTE - FLORESERLELMNAELKTQIEELKQERQQLI
7290135       ED RRRRRRERNKIAATK - CRMKKRERTQ - NLIKESEVLDTQNV ELKNQVRQLETERQKLV
Hs5453563     DVRRVQRREKNRIAAQK - SRQRQTQKAD - TLHLESEDL EKQNAALRKEIKQLTEELKYFT
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Hs8924246 DDRKVRREKRNVAQR - SRKKQTQKAD - KLHEEYESLEQENTMLRREIGKLTEELKHLT  
Hs4885245 EEKRRIRREERNKLAASK - CRNRRRELTE - KLQAETEELEEEKSGLQKEIAELQKEKEKLE  
Hs5803017 EEKRRVRRERNKLAASK - CRNRRRELTD - RLQAETDQLEEEKAELESEIAELQKEKERLE  
Hs4885241 EEKRRIRREERNKMAASK - CRNRRRELTD - TLQAETDQLEDEKSALQTEIANLLKEKEKLE  
Hs4885243 EERRRVRRERNKLAASK - CRNRRKELTD - FLQAETDKLEDEKSGLQREIEELQKQKERLE  
7301826 EQKRAVRRERNKQAAAR - CRKRRVDQTN - ELTEEVEQLEKRGESMRKEIEVLTNSKNQLE  
CE27375 DDKRLKRRQRNKEAAAR - CRQRRIDLK - ELQDQVNDFKNSNDKMAECNNIRNKLNSLK  
Hs4503033 DEKRRKFLERNRAAASR - CRQKRKVWVQ - SLEKKAEDLSSLNGQLQSEVTLRNEVAQLK  
Hs5802980 DERRQRFLERNRAAASR - CRQKRKLWVS - SLEKKAEEELTSQNIQLSNEVTLRNEVAQLK  
Hs4758500 DERRRKFLERNRAAATR - CRQKRKVWVM - SLEKKAEEELTQTNMQLQNEVSMLKNEVAQLK  
SPAC21E11.03c DEKRRRILERNRIAASK - FRQKKKEWIK - ELEQTANAAFEQSKRLQLLLSLOLQEEAFRLK  
SPBC2F12.09c DMKRRRFLERNRIAASK - CRQKKKLWVQ - NLEKTAHIAACEQSKALRILVSLQREEVICLK  
SPAC22F3.02 GTKQSMKARNRQAAQK - CRIKKKKYLQ - TLQDQVNYTSENKELLQSANDLREEI I KLR  
SPBC29B5.01 EEKRSFLERNRQAALK - CRQKRKQWLS - NLQAKVEFYGNENEILSAQVSALREEIVSLK  
YER045c - - KRARLLERNRIAASK - CRQKRKMSQL - QLQREFDQISKENTMMKKKIENYEKLVQKMK  
YIL036w - - KRARLLERNRIAASK - CRQKRKVAQL - QLQKEFNEIKDENRILLKKNLYYEKLI SKFK  
CE19687 DERRNTILERNKAAAVR - YRKRKKEEHD - DMMGRVQAMEAEKNQLLTQNVLRRELERVT  
Hs13654761 LDKKLKMEQNKTAATR - YRQKKRAEQE - ALTGECKELEKKNEALKERADSLAKEIQYLK  
Hs4502265 LDKKLKMEQNKTAATR - YRQKKRAEQE - ALTGECKELEKKNEALKERADSLAKEIQYLK  
Hs12597625 GDRKQKKRDQNKSAALR - YRQKRRAEGE - ALEGECQGLEARNRELKERAESVEREIQYVK  
7298780 EDRKIRKKEQNKNAATR - YRQKKKLEME - NVLGEEHVLSKENEQLRRTLQERHNEMRYLR  
CE06355 PEKKERKKAQNRLAATR - YREKKRREKE - EAMTCIEGLSVTNGKLDQVSELEREIRYFK  
CE24037 EEILRRKRIQNNLAAAR - YRKRQREARE - SAESELGDLTRRNDELDRDQVSRMEREIDRLK  
CE21280 - - - - RKRQQNKVAAAR - YRDKQKAKWQ - DLLDQLEAEEDRNQRLKLQAGHLEKEVAEMR  
CE08818\_1 EDDYSTKRKRNNNEAVNR - TRQKKRQEEN - DTAEKVDELKKNENETLERKVEQLQKELSFLK  
Hs4502769 SDEYRQRRERNNMAVKK - SRLKSKQKAQ - DTLQRVNQLKEENERLEAKIKLLTKELSVLK  
Hs22046270 SPEYRQRRERNNIAVRK - SRDKAKRRNQ - EMQOKLVELSAENEKLNHRVEQLTRDLAGLR  
Hs4885131 SPEYRQRRERNNIAVRK - SRDKAKRRNQ - EMQOKLVELSAENEKLNHRVEQLTRDLAGLR  
Hs4757972 SNEYRVRRERNNIAVRK - SRDKAKRRNV - ETQOKVLELTSDNDRLRKRVEQLSRELDTLR  
Hs4885129 SDEYKIRRRERNNIAVRK - SRDKAKMRNL - ETQHKVLELTAENERLQKKVEQLSRELDTLR  
Hs4502767 SLEYRLRRERNNIAVRK - SRDKAKRRIL - ETQOKVLELYMAENERLRSRVEQLTQELDTLR  
7291773 TDEYRRRRERNNIAVRK - SREKAKVRSR - EVEERVKSLLKEKDALIRQLGEMTNELQLHK  
7294768 DPAYKEKRKKNNEAVQR - TREKTKKSAE - ERKKRIDDLRKQNDALKVQIETSEKHISTLR  
7290320 DAAYYERRRKNNAASK - SRDRRIKED - EIAIRAAYLERQNIELLCQIDALKVQLAAFT  
7290774 DTAYYERRRKNNAASK - SRDRRIKED - EIAIRAAYLERQNIELLCRIDALEVQLAAIT  
Hs4504421 DDKYWARRRKNNMAAKR - SRDARRLKEN - QIAIRASFLEKENSALRQEVADLRKELGKCK  
Hs4507431 DEKYWTRRKNNVAAKR - SRDARRLKEN - QITIRAAFLEKENTALRTEVAELRKEVGKCK  
Hs4503263 DEKYWSRRYKNNEAAKR - SRDARRLKEN - QISVRAAFLEKENALLRQEVAVRQELSHYR  
7295189 DDKYWARRRKNNIAAKR - SRDARRQKEN - QIAMRARYLEKENATLHQEVEQLKQENMDLR  
CE15479 DSAYFERRRKNNDAAKR - SRDARRQKEE - QIASKAHALERENMQLRGKVSLEQEAAQLR  
CE19799 DVAYWERRRKNNDAAKR - SRDQRRMKED - EMAHRATSLERENMLLRVELDQLRAETDKLR  
7302966 DAKYFERRRKNNEAAKR - SRDARKIRED - RIAFRAALLEQENSILRAQVLALRDELQTVR  
7296965 DESYWDRRRRKNNEAAKR - SREKRRYNDM - VLEQRVIELTKENHVLAQLDAIRDKFN - - -  
Hs4885517 DAMYWEKRRKNNEAAKR - SREKRRNLNDL - VLENKLIALGEENATLKAELLSLK - - - - -  
CE22330 DEAYLDRRRRKNNEAARK - SRESRKKVDQ - DNSVRVTYLERENQCLRVYVQQLQQLQNESMR  
CE01256 SPKYLEKRMKNNEAASK - SRASRKHREQ - KNQ TENELLKRKNAALEEELKQAKCELAQM  
7291864 RSRDEDCMERRRAAASR - YRNKMRNEHK - DLIKQNAQLQEQENQELHERISRLEKELQOHR

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At3g17610\_1 GMLPLL  
At5g11260 HILKNT  
Hs19745184 - - - - -  
Hs4758054 - - - - -  
Hs8393194 - - - - -  
Hs4885073 - - - - -  
7293451 ND - - - -  
CE24265 - - - - -

CE24266	-----
Hs15298466	SENQRL
Hs6671585	SENQRL
Hs20631977	AENSEL
7302252	-----
7294270	SQLHKL
Hs16418355	QQLQKL
CE01814	QKLHQY
Hs14211949	EQLKKL
Hs18702325	AQLRQL
Hs20127492	DQLRKL
CE11300	SQLKKL
CE01056	-----
Hs14110395	VENQEL
7291250	AKNHKL
CE17828	-----
Hs14775169	SKYEAL
Hs4505073	SKYEAL
Hs4505075	SKYEAL
Hs6912490	GKCEAL
7302350	NKYKAL
Hs14770839	VKCEKL
Hs4885447	VKCEKL
Hs5453736	EKYEKL
Hs5453802	ARCDRL
Hs21361118	RALIDR
HsM4758132	RALIDR
Hs20149576	KQLSTL
Hs5453774	QQLTEL
Hs21918831	QKLHDL
HsM5731347	QKLHDL
Hs4505379	QKVQSL
7300970	NKFAML
Hs13540490	-----
Hs4502353	QNLTGL
Hs10938014	QKVLSH
Hs4758616	QKVMNH
Hs4504809	QKVMTH
7303798	QQVMEH
CE16461	RTVEHH
YEL009c	K-----
Hs4502263	YMLNLH
Hs4755128	Y-----
Hs18497306	LMLNRH
7290135	DMLKSH
Hs5453563	SVLNSH
Hs8924246	EALKEH
Hs4885245	FMLVAH
Hs5803017	FVLVAH
Hs4885241	FILAAH
Hs4885243	LVLEAH
7301826	YLLATH
CE27375	NYLETH
Hs4503033	QLLLAH
Hs5802980	QLLLAH
Hs4758500	QLLLTH
SPAC21E11.03c	SQLLAH

SPBC2F12.09c	NQLLAH
SPAC22F3.02	TLVFAH
SPBC29B5.01	TLLIAH
YER045c	KISRLH
YIL036w	-----
CE19687	ALLTER
Hs13654761	DLIEEV
Hs4502265	DLIEEV
Hs12597625	DLLIEV
7298780	QLIREF
CE06355	KFMTEM
CE24037	Q-----
CE21280	QAFLAK
CE08818_1	EMFMAY
Hs4502769	DLFLEH
Hs22046270	QFFKQL
Hs4885131	QFFKQL
Hs4757972	GIFRQL
Hs4885129	NLFKQL
Hs4502767	NLFRQI
7291773	QIYML
7294768	DLI---
7290320	S-----
7290774	S-----
Hs4504421	NILAKY
Hs4507431	TIVSKY
Hs4503263	AVLSRY
7295189	ARLSKF
CE15479	-----
CE19799	ALILTT
7302966	QLLGAT
7296965	-----
Hs4885517	-----
CE22330	QHL---
CE01256	ITIRDM
7291864	S-----