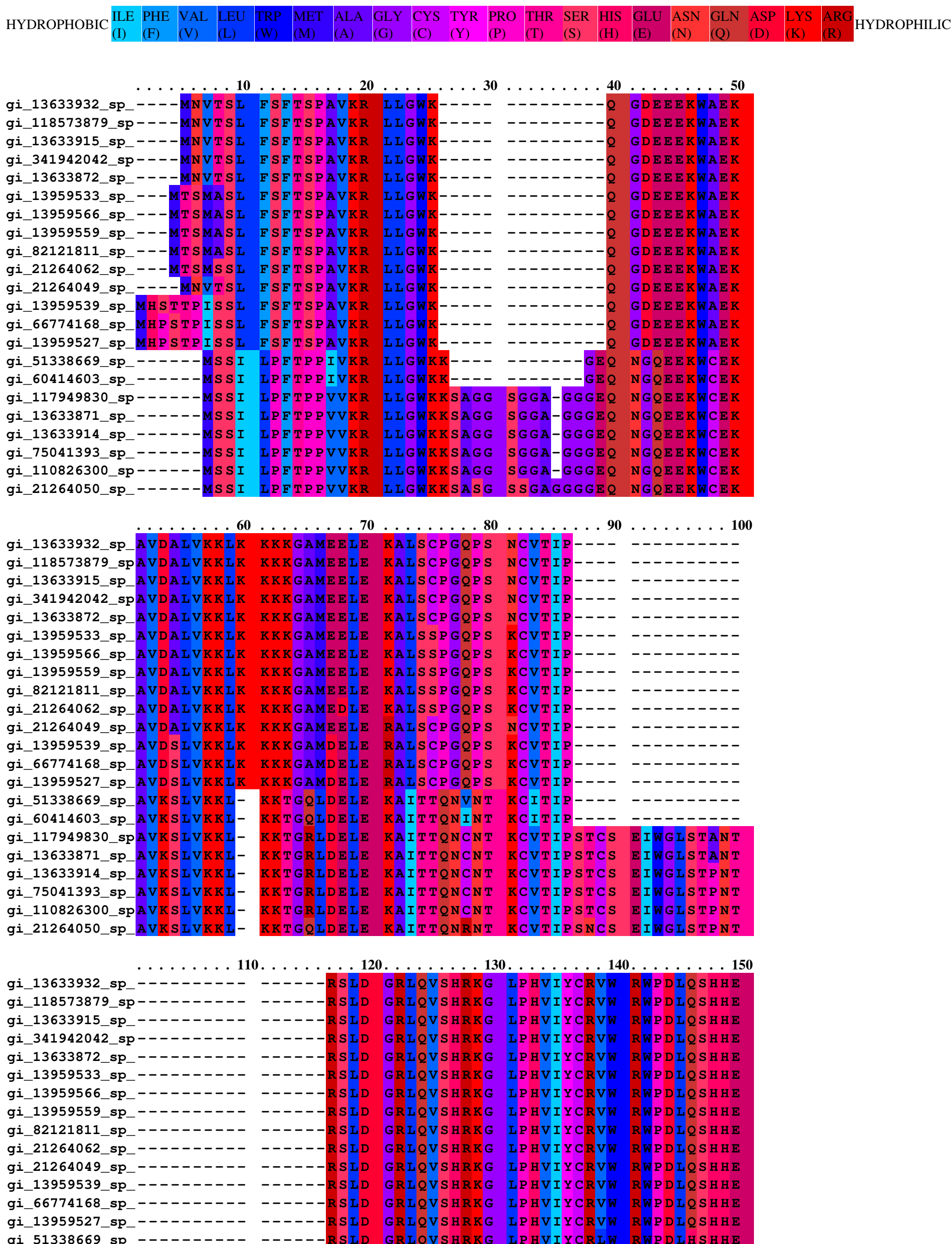# Results colour-coded for hydrophobicity

The current colourscheme of the alignment is for **hydrophobicity**.

The hydrophobicity scale used is from Eisenberg *et al* (1984) Abstract
The colour assignments **from hydrophobic to hydrophilic** are:

HYDROPHOBIC | ILE (I) | PHE (F) | VAL (V) | LEU (L) | TRP (W) | MET (M) | ALA (A) | GLY (G) | CYS (C) | TYR (Y) | PRO (P) | THR (T) | SER (S) | HIS (H) | GLU (E) | ASN (N) | GLN (Q) | ASP (D) | LYS (K) | ARG (R) | HYDROPHILIC

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. . . . . . . . . . 10 . . . . . . . . . 20 . . . . . . . . . 30 . . . . . . . . . 40 . . . . . . . . . 50
gi_13633932_sp_ ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_118573879_sp ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13633915_sp_ ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_341942042_sp ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13633872_sp_ ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13959533_sp_ ---MTSMASL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13959566_sp_ ---MTSMASL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13959559_sp_ ---MTSMASL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_82121811_sp_ ---MTSMASL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_21264062_sp_ ---MTSMSSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_21264049_sp_ ----MNVTSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13959539_sp_ MHSTTPISSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_66774168_sp_ MHPSTPISSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_13959527_sp_ MHPSTPISSL FSFTSPAVKR LLGWK----- ----------Q GDEEEKWAEK
gi_51338669_sp_ ------MSSI LPFTPPIVKR LLGWKK---- --------GEQ NGQEEKWCEK
gi_60414603_sp_ ------MSSI LPFTPPIVKR LLGWKK---- --------GEQ NGQEEKWCEK
gi_117949830_sp ------MSSI LPFTPPVVKR LLGWKKSAGG SGGA-GGGEQ NGQEEKWCEK
gi_13633871_sp_ ------MSSI LPFTPPVVKR LLGWKKSAGG SGGA-GGGEQ NGQEEKWCEK
gi_13633914_sp_ ------MSSI LPFTPPVVKR LLGWKKSAGG SGGA-GGGEQ NGQEEKWCEK
gi_75041393_sp_ ------MSSI LPFTPPVVKR LLGWKKSAGG SGGA-GGGEQ NGQEEKWCEK
gi_110826300_sp ------MSSI LPFTPPVVKR LLGWKKSAGG SGGA-GGGEQ NGQEEKWCEK
gi_21264050_sp_ ------MSSI LPFTPPVVKR LLGWKKSASG SSGAGGGGEQ NGQEEKWCEK

. . . . . . . . . 60 . . . . . . . . . 70 . . . . . . . . . 80 . . . . . . . . . 90 . . . . . . . . . 100
gi_13633932_sp_ AVDALVKKLK KKKGAMEELE KALSCPGQPS NCVTIP---- ----------
gi_118573879_sp AVDALVKKLK KKKGAMEELE KALSCPGQPS NCVTIP---- ----------
gi_13633915_sp_ AVDALVKKLK KKKGAMEELE KALSCPGQPS NCVTIP---- ----------
gi_341942042_sp AVDALVKKLK KKKGAMEELE KALSCPGQPS NCVTIP---- ----------
gi_13633872_sp_ AVDALVKKLK KKKGAMEELE KALSCPGQPS NCVTIP---- ----------
gi_13959533_sp_ AVDALVKKLK KKKGAMEELE KALSSPGQPS KCVTIP---- ----------
gi_13959566_sp_ AVDALVKKLK KKKGAMEELE KALSSPGQPS KCVTIP---- ----------
gi_13959559_sp_ AVDALVKKLK KKKGAMEELE KALSSPGQPS KCVTIP---- ----------
gi_82121811_sp_ AVDALVKKLK KKKGAMEELE KALSSPGQPS KCVTIP---- ----------
gi_21264062_sp_ AVDALVKKLK KKKGAMEDLE KALSSPGQPS KCVTIP---- ----------
gi_21264049_sp_ AVDALVKKLK KKKGAMEELE RALSCPGQPS NCVTIP---- ----------
gi_13959539_sp_ AVDSLVKKLK KKKGAMDELE RALSCPGQPS KCVTIP---- ----------
gi_66774168_sp_ AVDSLVKKLK KKKGAMDELE RALSCPGQPS KCVTIP---- ----------
gi_13959527_sp_ AVDSLVKKLK KKKGAMDELE RALSCPGQPS KCVTIP---- ----------
gi_51338669_sp_ AVKSLVKKL- KKTGQLDELE KAITTQNVNT KCITIP---- ----------
gi_60414603_sp_ AVKSLVKKL- KKTGQLDELE KAITTQNINT KCITIP---- ----------
gi_117949830_sp AVKSLVKKL- KKTGRLDELE KAITTQNCNT KCVTIPSTCS EIWGLSTANT
gi_13633871_sp_ AVKSLVKKL- KKTGRLDELE KAITTQNCNT KCVTIPSTCS EIWGLSTANT
gi_13633914_sp_ AVKSLVKKL- KKTGRLDELE KAITTQNCNT KCVTIPSTCS EIWGLSTPNT
gi_75041393_sp_ AVKSLVKKL- KKTGRLDELE KAITTQNCNT KCVTIPSTCS EIWGLSTPNT
gi_110826300_sp AVKSLVKKL- KKTGRLDELE KAITTQNCNT KCVTIPSTCS EIWGLSTPNT
gi_21264050_sp_ AVKSLVKKL- KKTGQLDELE KAITTQNRNT KCVTIPSNCS EIWGLSTPNT

. . . . . . . . . 110 . . . . . . . . . 120 . . . . . . . . . 130 . . . . . . . . . 140 . . . . . . . . . 150
gi_13633932_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_118573879_sp ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13633915_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_341942042_sp ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13633872_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13959533_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13959566_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13959559_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_82121811_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_21264062_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_21264049_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13959539_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_66774168_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_13959527_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRVW RWPDLQSHHE
gi_51338669_sp_ ---------- ------RSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
```

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gi_60414603_sp_ ----------  -------RSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_117949830_sp VDQWDTTGLY SFSEQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_13633871_sp_ VDQWDTTGLY SFSEQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_13633914_sp_ IDQWDTTGLY SFSEQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_75041393_sp_ IDQWDTTGLY SFSEQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_110826300_sp IDQWDTTGLY SFSEQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE
gi_21264050_sp_ IEQWDTSGLY SYPDQTRSLD GRLQVSHRKG LPHVIYCRLW RWPDLHSHHE


                 . . . . . . . . . 160 . . . . . . . . 170 . . . . . . . . 180 . . . . . . . . 190 . . . . . . . . 200
gi_13633932_sp_ LKPLECCEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEYNPQHSL
gi_118573879_sp LKPLECCEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEYNPQHSL
gi_13633915_sp_ LKPLECCEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEYNPQHSL
gi_341942042_sp LKPLECCEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEYNPQHSL
gi_13633872_sp_ LKPLECCEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEYNPQHSL
gi_13959533_sp_ LKPLDICEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HNEFNPQHSL
gi_13959566_sp_ LKPLDICEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HNEFNPQHSL
gi_13959559_sp_ LKPLDICEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HNEFNPQHSL
gi_82121811_sp_ LKPLDICEFP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEFNPQHSL
gi_21264062_sp_ LKPLEVCEYP FGSKQKEVCI NPYHYKRVES PVLPPVLVPR HSEFNPQHSL
gi_21264049_sp_ LKALECCEFP FGSKQKDVCI NPYHYKRVDS PVLPPVLVPR NSEFNAKLSM
gi_13959539_sp_ LKPLECCEFP FGSKQKEVCI NPYHYRRVET PVLPPVLVPR HSEYNPQLSL
gi_66774168_sp_ LKPLECCEFP FGSKQKEVCI NPYHYRRVET PVLPPVLVPR HSEYNPQLSL
gi_13959527_sp_ LKPLECCEFP FGSKQKEVCI NPYHYRRVET PVLPPVLVPR HSEYNPQLSL
gi_51338669_sp_ LRAMELCEFA FNMKKDEVCV NPYHYQRVET PVLPPVLVPR HTEIPAEFPP
gi_60414603_sp_ LRAMEMCEYA FNMKKDEVCV NPYHYQRVET PVLPPVLVPR HTEIPAEFPP
gi_117949830_sp LKAIENCEYA FNLKKDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP
gi_13633871_sp_ LKAIENCEYA FSLKKDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP
gi_13633914_sp_ LKAIENCEYA FNLKKDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP
gi_75041393_sp_ LKAIENCEYA FNLKEDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP
gi_110826300_sp LKAIENCEYA FNLKKDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP
gi_21264050_sp_ LRAIETCEYA FNLKKDEVCV NPYHYQRVET PVLPPVLVPR HTEILTELPP


                 . . . . . . . . . 210 . . . . . . . . 220 . . . . . . . . 230 . . . . . . . . 240 . . . . . . . . 250
gi_13633932_sp_ LAQFRN-LGQ NEPHMPHNAT FPDSFQQ-P- NSHPF-PHSP NSSYPNSPGS
gi_118573879_sp LAQFRN-LGQ NEPHMPLNAT FPDSFQQ-P- NSHPF-PHSP NSSYPNSPGS
gi_13633915_sp_ LAQFRN-LGQ NEPHMPLNAT FPDSFQQ-P- NSHPF-PHSP NSSYPNSPGS
gi_341942042_sp LAQFRN-LGQ NEPHMPLNAT FPDSFQQ-P- NSHPF-PHSP NSSYPNSPGG
gi_13633872_sp_ LAQFRN-LGQ NEPHMPLNAT FPDSFQQ-P- HSHPF-AQYP NSSYPNSPGS
gi_13959533_sp_ LVQFRN-LSH NEPHMPQNAT FPDSFHQ-P- NSTPF-PLSP NSPYPPSP-A
gi_13959566_sp_ LVQFRN-LSH NEPHMPQNAT FPDSFHQ-P- NNTPF-PLSP NSPYPPSP-A
gi_13959559_sp_ LVQFRN-LSH NEPHMPQNAT FPDSFHQ-P- NNAPF-PLSP NSPYPPSP-A
gi_82121811_sp_ LVQFRN-LSH NEPHMPHNAT FPDSFQQ-P- NSTPF-SISP NSPYPPSP-A
gi_21264062_sp_ LVQFRN-LSH NEPHMPLNAT FPESFQQHS- GGSSF-PISP NSPYPPSP-A
gi_21264049_sp_ LPRFRNPLHQ TEPPMPQNAT FPDSFPQQPA NALPFTPNSP TNSYPSSPNS
gi_13959539_sp_ LAKFRSASLH SEPLMPHNAT YPDSFQQ--- PPCSALPPSP SHAFSQSP--
gi_66774168_sp_ LAKFRSASLH SEPLMPHNAT YPDSFQQ--- SLCPAPPSSP GHVFPQSP--
gi_13959527_sp_ LAKFRSASLH SEPLMPHNAT YPDSFQQ--- SLGPAPPSSP GHVFPQSP--
gi_51338669_sp_ LDDY-----SH S---IPENTN FPAGIE---- ---------P QSN-------
gi_60414603_sp_ LDDY-----SH S---IPENTN FPAGIE---- ---------P QSNY------
gi_117949830_sp LDDY-----TH S---IPENTN FPAGIE---- ---------P QSNY------
gi_13633871_sp_ LDDY-----TH S---IPENTN FPAGIE---- ---------P QSNY------
gi_13633914_sp_ LDDY-----TH S---IPENTN FPAGIE---- ---------P QSNY------
gi_75041393_sp_ LDDY-----TH S---IPENTN FPAGIE---- ---------P QSNY------
gi_110826300_sp LDDY-----TH S---IPENTN FPAGIE---- ---------P QSNY------
gi_21264050_sp_ LDDY-----TN S---IPENTN FPTGIE---- ---------P PNNY------


                 . . . . . . . . . 260 . . . . . . . . 270 . . . . . . . . 280 . . . . . . . . 290 . . . . . . . . 300
gi_13633932_sp_ ---SSSTYPH SPAS-SDPGS PFQMPADTPP PAYLPPE-DQ MTHDTSQPMD
gi_118573879_sp ---SSSTYPH SPTS-SDPGS PFQMPADTPP PAYLPPE-DP MTQDGSQPMD
gi_13633915_sp_ ---SSSTYPH SPTS-SDPGS PFQMPADTPP PAYLPPE-DP MTQDGSQPMD
gi_341942042_sp ---SSSTYPH SPTS-SDPGS PFQMPADTPP PAYLPPE-DP MAQDGSQPMD
gi_13633872_sp_ ---SSSTYPH SPTS-SDPGS PFQMPADTPP PAYLPPE-DP MAQDGSQPMD
gi_13959533_sp_ ---SS-TYPN SPAS-SGPGS PFQLPADTPP PAYMPPD-DQ MGQDNSQPMD
gi_13959566_sp_ ---SS-TYPN SPAS-SGPGS PFQLPADTPP PAYMPPD-DQ MGQDNSQPMD
gi_13959559_sp_ ---SS-TYPN SPAS-SGPGS PFQLPADTPP PAYMPPD-DQ MAPDNSQPMD
gi_82121811_sp_ ---SS-TYPS SPAS-SGPSS PFQLPADTPP PAYMPPD-DQ MGQDNSQSMD
gi_21264062_sp_ ---SSGTYPN SPAS-SGPSS PFQLPADTPP PAYMPPD-EQ MGQDGSQSME
gi_21264049_sp_ GTGSTATFPH SPSS-SDPGS PFQMP-ETPP PAYMPPE-EP MTQDCPQPMD
gi_13959539_sp_ ---CTASYPH SPGSPSEPES PYQHSVDTPP LPYHATE-AS ETQSG-QPVD
gi_66774168_sp_ ---CPTSYPH SPGSPSESDS PYQHS----- ---------- ----------
gi_13959527_sp_ ---CPTSYPQ SPGSPSESDS PYQHS----- ---------- ----------
gi_51338669_sp_ -------IP- ---------- -------ETPP PGYLSEDGET SDHQMNHSMD
gi_60414603_sp_ -------IP- ---------- -------ETPP PGYLSEDGET SDHQMNPSMD
gi_117949830_sp -------IP- ---------- -------ETPP PGYISEDGET SDQQLNQSMD
gi_13633871_sp_ -------IP- ---------- -------ETPP PGYISEDGET SDQQLNQSMD
```

Results colour-coded for hydrophobicity

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gi_13633914_sp_-------IP- ---------- ------ETPP PGYISEDGET SDQQLNQSMD
gi_75041393_sp_-------IP- ---------- ------ETPP PGYISEDGET SDQQLNQSMD
gi_110826300_sp-------IP- ---------- ------ETPP PGYISEDGET SDQQLNQSMD
gi_21264050_sp_-------IP- ---------- ------ETPP PGYISEDGEA SDQQMNQSMD
```

```
.........310.........320.........330.........340.........350
gi_13633932_sp_---TNMMAPG IHPDIHRG-D VQAVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_118573879_sp---TNMMAPS LPSEINRG-D VQAVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_13633915_sp_---TNMMAPP LPSEINRG-D VQAVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_341942042_sp---TNMMAPP LPAEISRG-D VQAVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_13633872_sp_TNMTNMTAPT LPAEINRG-D VQAVAYEEPK HWCSIVYYEL NNRVGERFHA
gi_13959533_sp_T--SNNMIPQ IMPSISSR-D VQPVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_13959566_sp_T--SNNMIPQ IMPSISSR-D VQPVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_13959559_sp_T--SSNMIPQ TMPSISSR-D VQPVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_82121811_sp_T--SNTMIPQ IMPNISTR-D VQPVAYEEPK HWCSIVYYEL NNRVGEAFHA
gi_21264062_sp_T--GSSLAPQ NMPR---G-D VQPVEYQEPS HWCSIVYYEL NNRVGEAYHA
gi_21264049_sp_---TNLLAPN LPLEISNRTD VHPVAYQEPK HWCSIVYYEL NNRVGEAFLA
gi_13959539_sp_ATADRHVVLS IPNG-----D FRPVCYEEPQ HWCSVAYYEL NNRVGETFQA
gi_66774168_sp_---------- ---------D FRPVCYEEPQ HWCSVAYYEL NNRVGETFQA
gi_13959527_sp_---------- ---------D FRPVCYEEPL HWCSVAYYEL NNRVGETFQA
gi_51338669_sp_AGSP-NLSPN PMSPAHNNLD LQPVTYCEPA FWCSISYYEL NQRVGETFHA
gi_60414603_sp_AGSP-NLSPN PMSPAHNNLD LQPVTYCEPA FWCSISYYEL NQRVGETFHA
gi_117949830_spTGSPAELSPT TLSPVNHSLD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
gi_13633871_sp_TGSPAELSPT TLSPVNHSLD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
gi_13633914_sp_TGSPAELSPT TLSPVNHSLD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
gi_75041393_sp_TGSPAELSPT TLSPVNHSLD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
gi_110826300_spTGSPAELSPT TLSPVNHSLD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
gi_21264050_sp_TGSPAELSPS TLSPVNHGMD LQPVTYSEPA FWCSIAYYEL NQRVGETFHA
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.........360.........370.........380.........390.........400
gi_13633932_sp_SSTSILVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_118573879_spSSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13633915_sp_SSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_341942042_spSSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13633872_sp_SSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13959533_sp_SSTSVLVDGF TDPANNKSRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13959566_sp_SSTSVLVDGF TDPSNNKSRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13959559_sp_SSTSVLVDGF TDPSNNKSRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_82121811_sp_SSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_21264062_sp_SSTSVLVDGF TDPSNNKNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_21264049_sp_SSTSVLVDGF TDPSNNRNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13959539_sp_SSRSVLIDGF TDPSNNRNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_66774168_sp_SSRSVLIDGF TDPSNNRNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_13959527_sp_SSRSVLIDGF TDPSNNRNRF CLGLLSNVNR NSTIENTRRH IGKGVHLYYV
gi_51338669_sp_SQPSMTVDGF TDPSNSE-RF CLGLLSNVNR NAAVELTRRH IGRGVRLYYI
gi_60414603_sp_SQPSMTVDGF TDPSNSE-RF CLGLLSNVNR NAAVELTRRH IGRGVRLYYI
gi_117949830_spSQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
gi_13633871_sp_SQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
gi_13633914_sp_SQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
gi_75041393_sp_SQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
gi_110826300_spSQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
gi_21264050_sp_SQPSLTVDGF TDPSNSE-RF CLGLLSNVNR NATVEMTRRH IGRGVRLYYI
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```
.........410.........420.........430.........440.........450
gi_13633932_sp_GGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_118573879_spGGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_13633915_sp_GGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_341942042_spGGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_13633872_sp_GGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_13959533_sp_GGEVYAECLS DSSIFVQSRN CNFHHGFHPT TVCKIPSSCS LKIFNNQEF-
gi_13959566_sp_GGEVYAECLS DSSIFVQSRN CNFHHGFHPT TVCKIPSSCS LKIFNNQEF-
gi_13959559_sp_GGEVYAECLS DSSIFVQSRN CNFHHGFHPT TVCKIPSSCS LKIFNNQEF-
gi_82121811_sp_GGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_21264062_sp_GGEVYAECLS DTSIFVQSRN CNYHHGFHPT TVCKIPSGCS LKIFNNQEF-
gi_21264049_sp_GGEVYAECLS DSSIFVQSRN CNYHHGFHPT TVCKIPSRCS LKIFNNQEF-
gi_13959539_sp_GGEVYAECVS DSSIFVQSRN CNYQHGFHPA TVCKIPSGCS LKVFNNQLF-
gi_66774168_sp_GGEVYAECVS DSSIFVQSRN CNYQHGFHPA TVCKIPSGCS LKVFNNQLF-
gi_13959527_sp_GGEVYAECVS DSSIFVQSRN CNYQHGFHPA TVCKIPSGCS LKVFNNQLFA
gi_51338669_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_60414603_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_117949830_spGGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_13633871_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_13633914_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_75041393_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
gi_110826300_spGGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQGF-
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Results colour-coded for hydrophobicity

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```
gi_21264050_sp_GGEVFAECLS DSAIFVQSPN CNQRYGWHPA TVCKIPPGCN LKIFNNQEF-
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```
                . . . . . . . . . 460 . . . . . . . . . 470 . . . . . . . . . 480 . . . . . . . . . 490 . . . . . . . . . 500
gi_13633932_sp_---AQLLAQS VNHGFETVYE LTKMCTLRMS FVKGWGAEYH RQDVTSTPCW
gi_118573879_sp---AQLLAQS VNHGFETVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13633915_sp_---AQLLAQS VNHGFETVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_341942042_sp---AQLLAQS VNHGFETVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13633872_sp_---AQLLAQS VNHGFETEYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13959533_sp_---AQLLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13959566_sp_---AQLLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13959559_sp_---AQLLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_82121811_sp_---AQLLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_21264062_sp_---AQLLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_21264049_sp_---AELLAQS VNHGFEAVYE LTKMCTIRMS FVKGWGAKYH RQDVTSTPCW
gi_13959539_sp_---AQLLAQS VHHGFEVVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_66774168_sp_---AQLLAQS VHHGFEVVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_13959527_sp_QLLAQLLAQS VHHGFEVVYE LTKMCTIRMS FVKGWGAEYH RQDVTSTPCW
gi_51338669_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_60414603_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_117949830_sp---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_13633871_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_13633914_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_75041393_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_110826300_sp---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
gi_21264050_sp_---AALLAQS VNQGFEAVYQ LTRMCTIRMS FVKGWGAEYR RQTVTSTPCW
```

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                . . . . . . . . . 510 . . . . . . . . . 520 . . . . . . . . . 530
gi_13633932_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_118573879_spIEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_13633915_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_341942042_spIEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_13633872_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_13959533_sp_IEIHLHGPLQ WLDKVLTQMG SPLNPISSVS
gi_13959566_sp_IEIHLHGPLQ WLDKVLTQMG SPLNPISSVS
gi_13959559_sp_IEIHLHGPLQ WLDKVLTQMG SPLNPISSVS
gi_82121811_sp_IEIHLHGPLQ WLDKVLTQMG SPLNPISSVS
gi_21264062_sp_IEVHLHGPLQ WLDKVLTQMG SPLNPISSVS
gi_21264049_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_13959539_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_66774168_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_13959527_sp_IEIHLHGPLQ WLDKVLTQMG SPHNPISSVS
gi_51338669_sp_IELHLNGPLQ WLDKVLTQMG SPSIRCSSVS
gi_60414603_sp_IELHLNGPLQ WLDKVLTQMG SPSIRCSSVS
gi_117949830_spIELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
gi_13633871_sp_IELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
gi_13633914_sp_IELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
gi_75041393_sp_IELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
gi_110826300_spIELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
gi_21264050_sp_IELHLNGPLQ WLDKVLTQMG SPSVRCSSMS
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Results colour-coded for hydrophobicity