```
BcePred Prediction Server
```

```
The server displays  1.GRAPHICAL RESULT  2.TABULAR RESULT       3.Overlap Display
```

seqname=
Seq=VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPVGSLA
PPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVLHALGFDAFG
LPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDVDFYRWTQWIFLQIYNA
WFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGERADVIDEYRLVYRADSLVNWCPGL
GTVLANEEVTADGRSDRGNFPVFRKRLRQWMMRITAYADRLLDDLDVLDWPEQVKTMQRN
WIGRSTGAVALFSARAASDDGFEVDIEVFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVN
PLWTYGGGTPGEAIAAYRRAIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAG
YGTGAIMAVPGHDQRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKR
AIVDRLESAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY
SPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYELRYTDPH
NSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSRFWHKVLYDLGHVS
SREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPGPDGEVEVFQEFGKIGKSLKNS
VSPDEICDAYGADTLRVYEMSMGPLEASRPWATKDVVGAYRFLQRVWRLVVDEHTGETRVAD
GVELDIDTLRALHRTIVGVSEDFAALRNNTATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAP
LAPHIAEELWLRLGNTTSLAHGPFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETL
KAAVLTDEKVQAFLAGATPRKVIVVAGRLVNLVI

Length=969

GRAPHICAL RESULT

GRAPHICAL RESULT :: SEQ 1 to 60
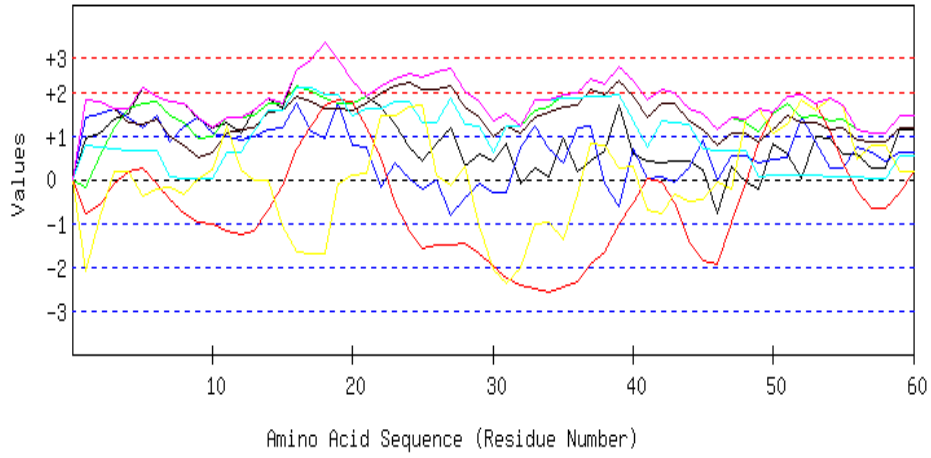
Values

+3
+2
+1
0
-1
-2
-3

10   20   30   40   50   60

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 61 to 120
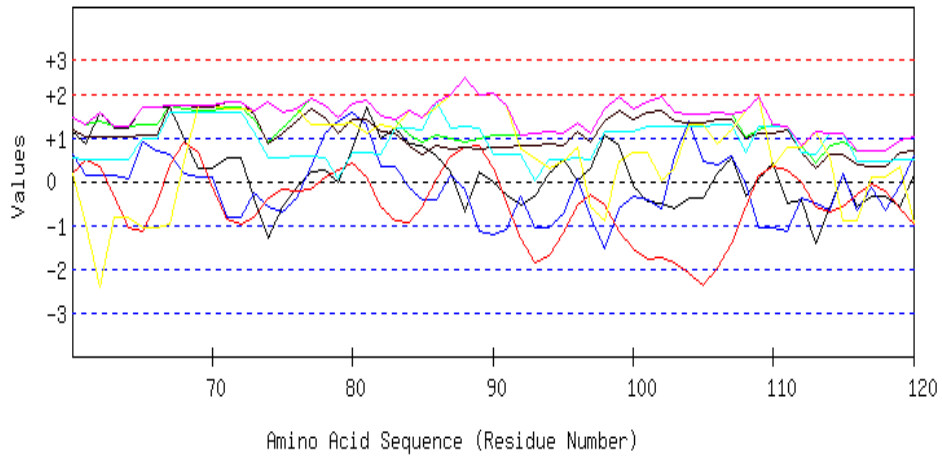
Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 181 to 240

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 241 to 300

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 301 to 360

Amino Acid Sequence (Residue Number)
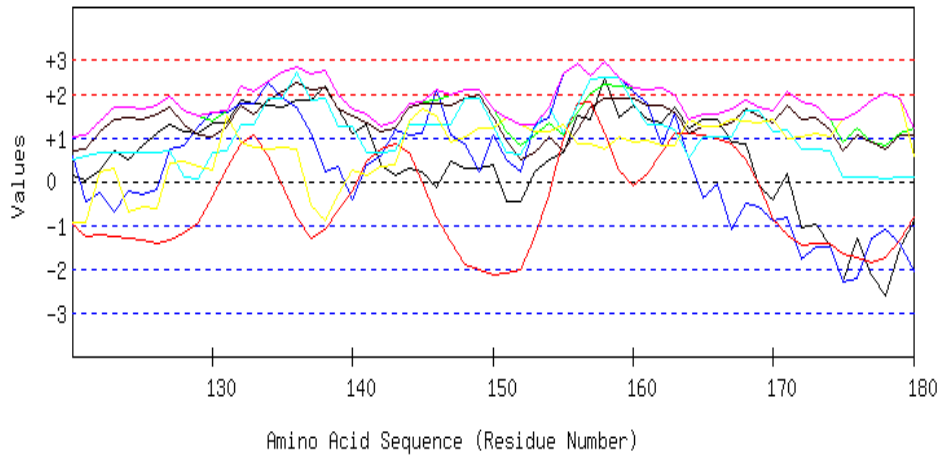
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 361 to 420

Values

+3
+2
+1
0
-1
-2
-3

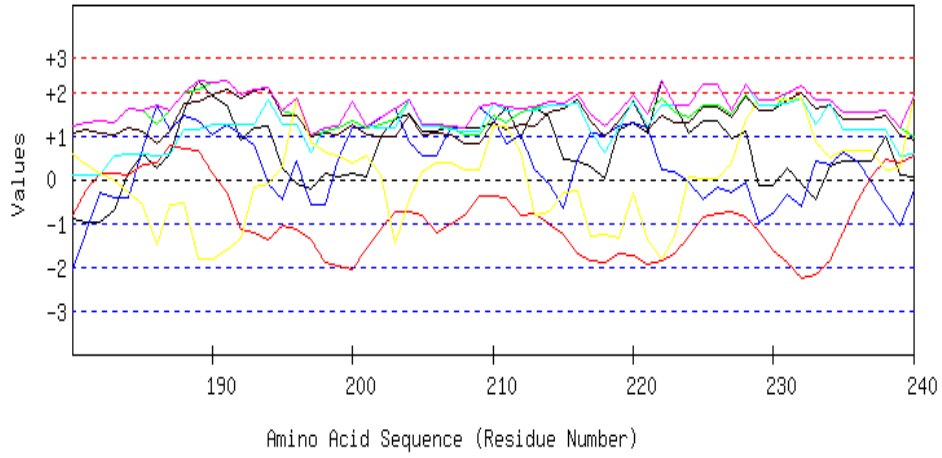370   380   390   400   410   420

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 421 to 480

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 481 to 540

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 541 to 600

Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

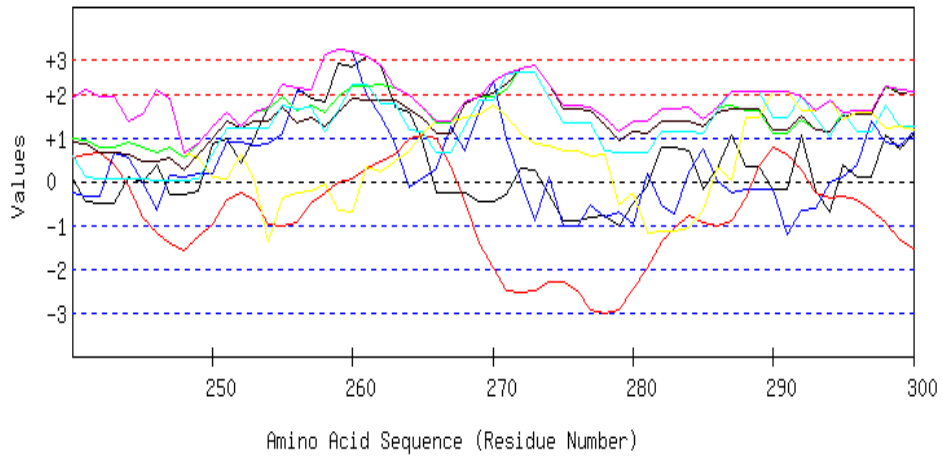# GRAPHICAL RESULT :: SEQ 601 to 660
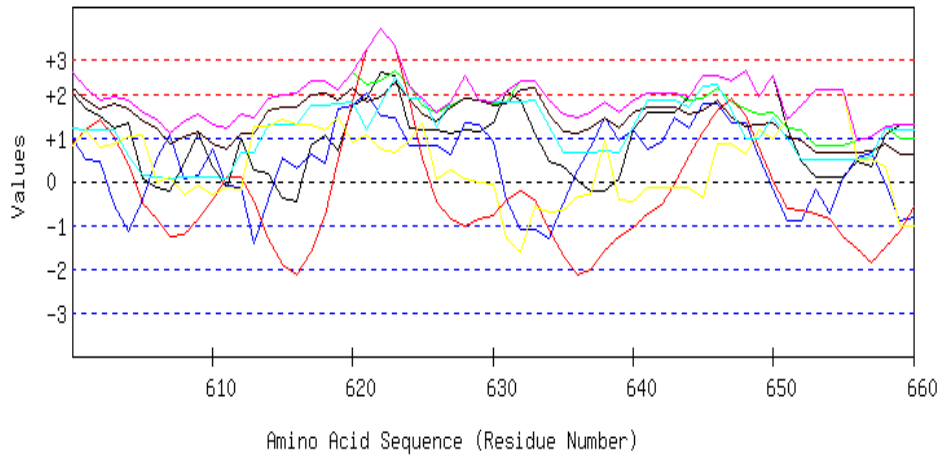
Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 661 to 720
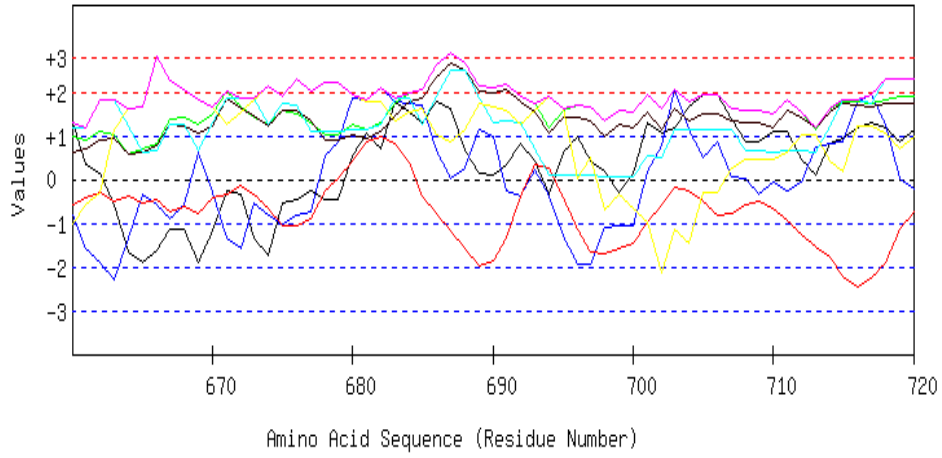
Amino Acid Sequence (Residue Number)
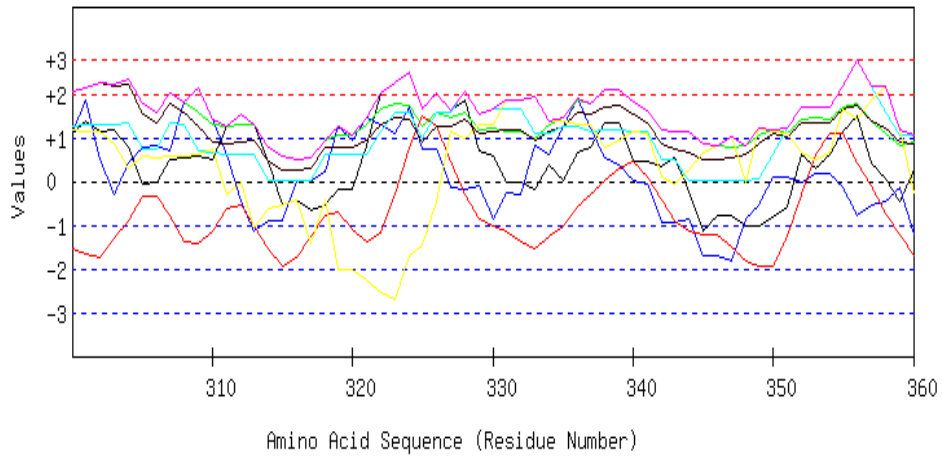
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 721 to 780
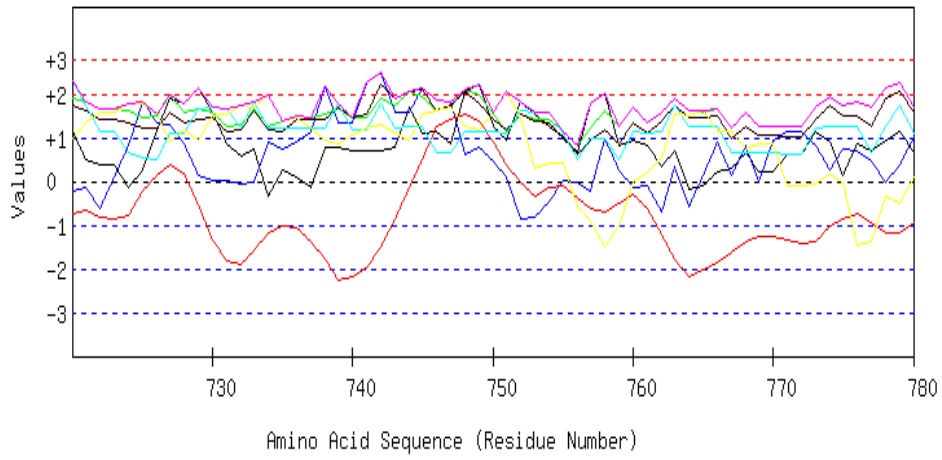
Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 781 to 840
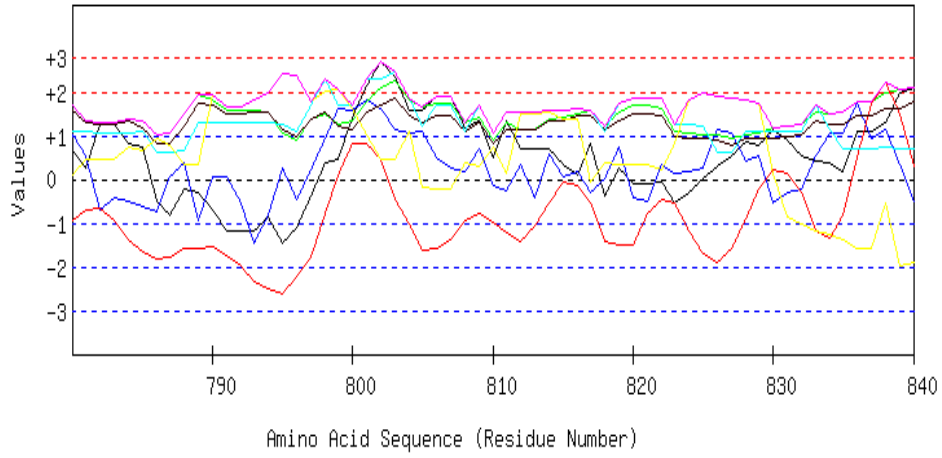
Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 841 to 900
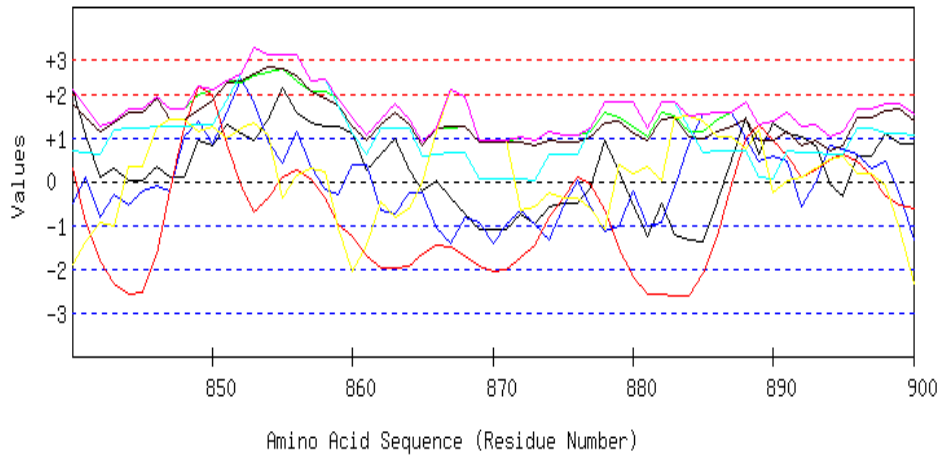
Amino Acid Sequence (Residue Number)
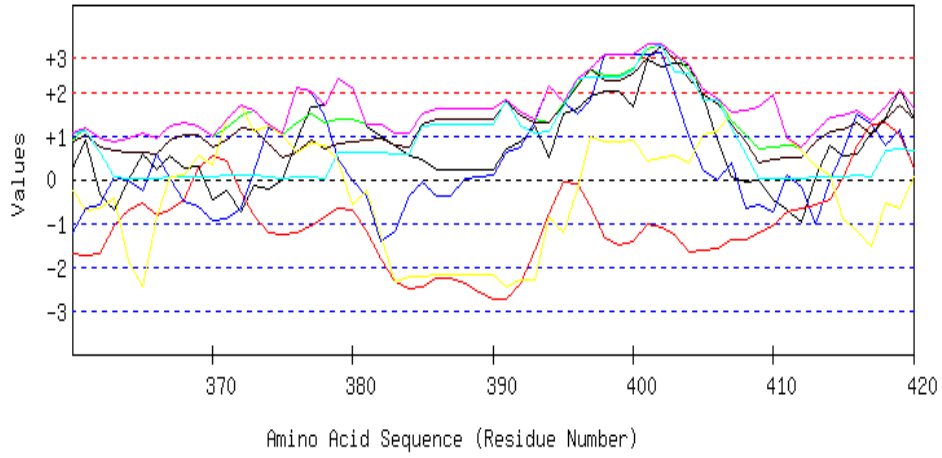
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

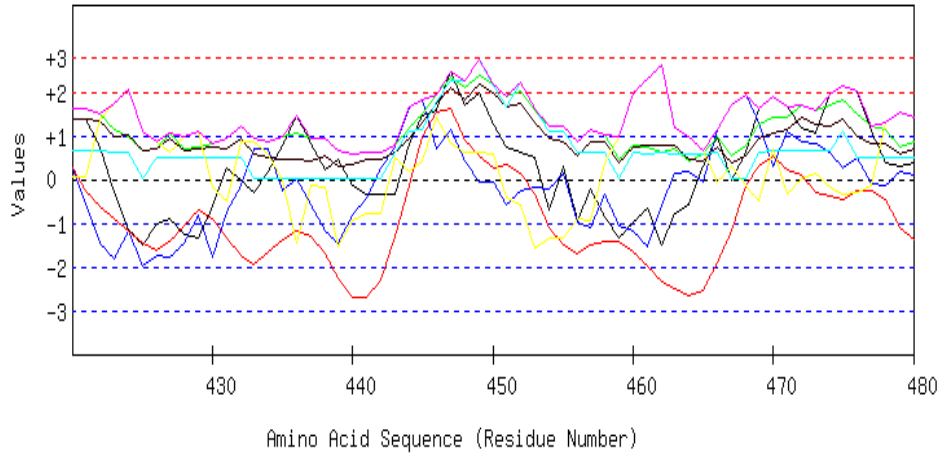# GRAPHICAL RESULT :: SEQ 901 to 960
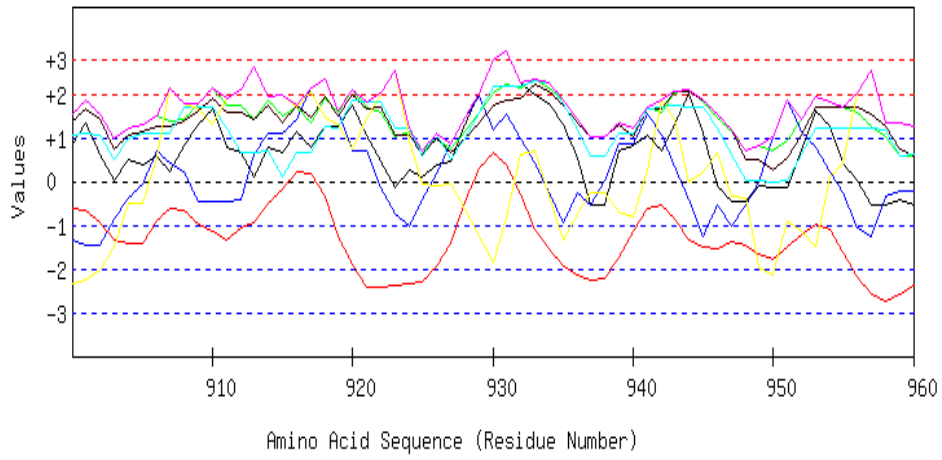
Amino Acid Sequence (Residue Number)

Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 961 to 1020
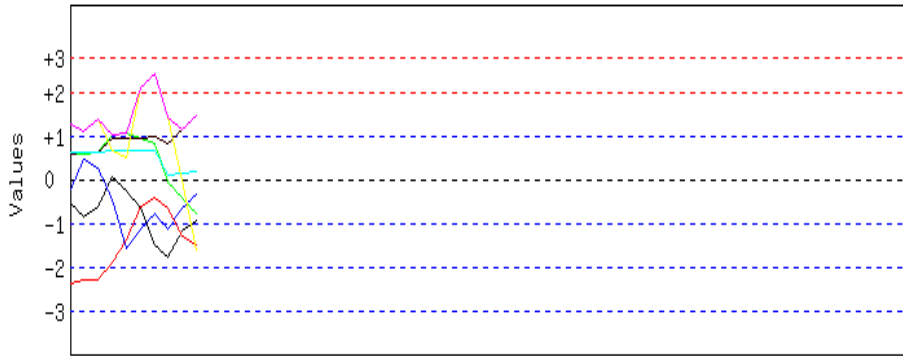
Amino Acid Sequence (Residue Number)
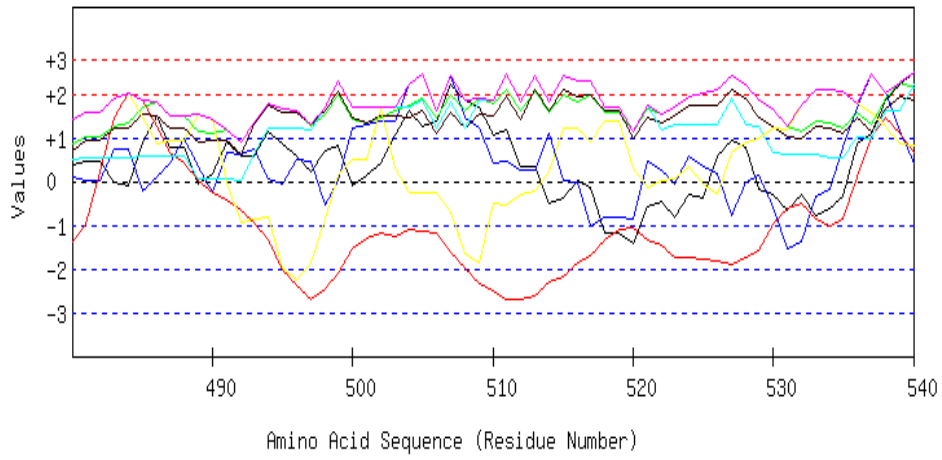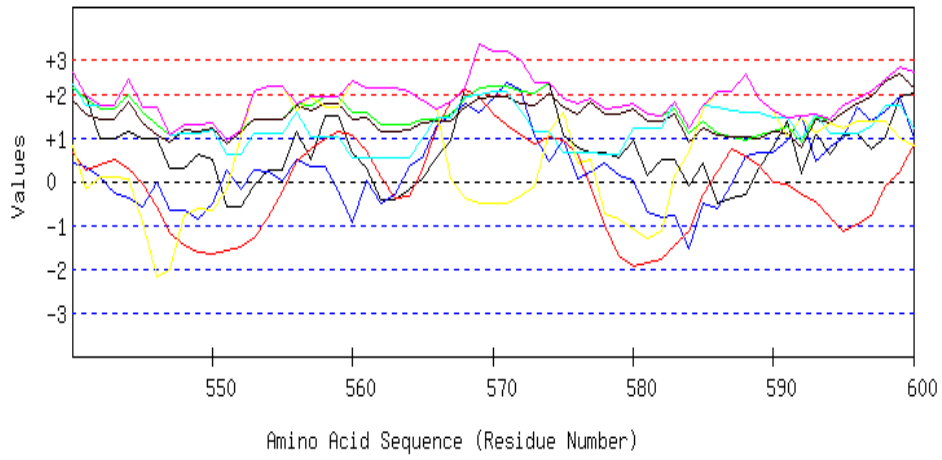
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

[TOP](#)

TABULAR RESULT

Selected Programs: hydro flexi access turns surface polar antipro

Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9

VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPVGSLAP
PDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVLHALGFDAFG
LPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDVDFYRWTQWIFLQI
YNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGERADVIDEYRLVYRADSLV
NWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWMMRITAYADRLLDDLDVLDWPEQV
KTMQRNWIGRSTGAVALFSARAASDDGFEVDIEVFTTRPDTLFGATYLVLAPEHDLVDEL
VAASWPAGVNPLWTYGGGTPGEAIAAYRRAIAAKSDLERQESREKTGVFLGSYAINPANG
EPVPIFIADYVLAGYGTGAIMAVPGHDQRDWDFARAFGLPIVEVIAGGNISESAYTGDGI
LVNSDYLNGMSVPAAKRAIVDRLESAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDG
RPHALDEAALPVELPDVPDYSPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSR
DTNVMPQWAGSSWYELRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAE
HAVLHLLYSRFWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGD

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RFVYPGPDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWAT
KDVVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNNTA
TAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHGPFPKA
DAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLAGATPRKVIVV
AGRLVNLVI
```

Length=969

A.A.		Parameter							
		Combined							
		Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX
MIN	AVG								
1 V		0.920	1.401	-0.177	-0.764	1.823	0.791	-2.086	1.823
-2.086	0.273								
2 T		1.053	1.497	0.524	-0.586	1.777	0.750	-0.855	1.777
-0.855	0.594								
3 E		1.382	1.633	1.178	-0.116	1.613	0.710	0.195	1.633
-0.116	0.942								
4 S		1.514	1.417	1.636	0.190	1.294	0.650	0.195	1.636
0.190	0.985								
5 P		2.109	1.189	1.748	0.250	1.257	0.648	-0.393	2.109
-0.393	0.973								
6 T		1.913	1.457	1.795	-0.101	1.376	0.647	-0.214	1.913
-0.214	0.982								
7 A		1.780	0.870	1.459	-0.475	0.966	0.048	-0.187	1.780
-0.475	0.637								
8 G		1.729	1.229	1.300	-0.795	0.765	0.028	-0.347	1.729
-0.795	0.558								
9 P		1.363	1.415	0.935	-0.961	0.483	0.010	0.022	1.415
-0.961	0.467								
10 G		1.167	1.056	0.982	-1.008	0.601	0.009	0.201	1.167
-1.008	0.430								
11 G		1.299	0.968	1.412	-1.166	1.075	0.634	1.210	1.412
-1.166	0.776								
12 V		1.072	0.880	1.421	-1.248	1.121	0.634	0.200	1.421
-1.248	0.583								
13 P		1.571	0.976	1.449	-1.170	1.166	1.104	-0.029	1.571
-1.170	0.724								
14 R		1.843	1.157	1.730	-0.697	1.531	1.593	-0.038	1.843
-0.697	1.017								
15 A		1.616	1.199	1.739	-0.132	1.576	1.593	-1.049	1.739
-1.049	0.935								
16 D		2.482	1.738	2.132	0.699	1.905	2.080	-1.646	2.482
-1.646	1.341								
17 D		2.760	1.103	2.038	1.202	1.786	2.081	-1.706	2.760
-1.706	1.323								
18 A		3.127	0.922	1.879	1.686	1.631	1.946	-1.714	3.127
-1.714	1.354								
19 D		2.760	1.736	1.758	1.803	1.622	1.947	-0.116	2.760
-0.116	1.644								
20 S		2.260	0.790	1.730	1.772	1.576	1.477	0.113	2.260
0.113	1.388								
21 D		1.894	0.748	1.889	1.170	1.731	1.613	0.121	1.894
0.121	1.309								
22 V		1.641	-0.198	2.141	0.493	1.968	1.632	1.464	2.141
-0.198	1.306								

Residue	1	2	3	4	5	6	7	8	9	10
23 P	1.274	0.389	2.300	-0.543	2.123	1.768	1.472	2.300	-0.543	1.255
24 R	0.743	0.031	2.403	-1.188	2.205	1.767	1.644	2.403	-1.188	1.086
25 Y	0.440	-0.208	2.328	-1.570	2.041	1.298	1.694	2.328	-1.570	0.860
26 R	0.806	-0.005	2.449	-1.515	2.050	1.297	0.095	2.449	-1.515	0.740
27 Y	1.167	-0.819	2.533	-1.481	2.142	1.877	-0.151	2.533	-1.481	0.753
28 T	0.319	-0.412	2.019	-1.446	1.677	1.258	0.284	2.019	-1.446	0.528
29 A	0.572	-0.090	1.767	-1.693	1.440	1.239	-1.058	1.767	-1.693	0.311
30 E	0.440	-0.294	1.337	-1.989	0.966	0.614	-2.067	1.337	-2.067	-0.142
31 L	0.825	-0.294	1.515	-2.261	1.203	1.219	-2.400	1.515	-2.400	-0.028
32 A	-0.085	0.724	1.234	-2.433	1.057	1.205	-2.006	1.234	-2.433	-0.043
33 A	0.275	1.215	1.561	-2.489	1.422	1.804	-1.022	1.804	-2.489	0.395
34 R	0.048	0.712	1.664	-2.572	1.531	1.830	-0.997	1.830	-2.572	0.317
35 L	0.958	0.389	1.945	-2.478	1.677	1.844	-1.391	1.945	-2.478	0.421
36 E	0.193	1.169	1.963	-2.334	1.695	1.869	-0.358	1.963	-2.334	0.600
37 R	0.440	1.203	2.290	-1.957	2.069	1.912	0.815	2.290	-1.957	0.967
38 T	0.667	-0.114	2.188	-1.666	1.959	1.887	0.790	2.188	-1.666	0.816
39 W	1.691	-0.605	2.571	-1.011	2.260	1.922	0.242	2.571	-1.011	1.010
40 Q	0.566	0.712	2.262	-0.555	1.914	1.347	0.290	2.262	-0.555	0.934
41 E	0.433	0.017	1.832	0.015	1.440	0.723	-0.719	1.832	-0.719	0.534
42 N	0.370	0.069	2.066	-0.059	1.759	1.328	-0.761	2.066	-0.761	0.682
43 W	0.421	-0.050	1.963	-0.523	1.750	1.308	-0.348	1.963	-0.523	0.646
44 A	0.402	0.279	1.627	-1.429	1.330	1.265	-0.511	1.627	-1.429	0.423
45 R	0.237	0.888	1.496	-1.844	1.121	0.686	-0.444	1.496	-1.844	0.306
46 L	-0.787	-0.021	1.132	-1.949	0.765	0.649	-0.080	1.132	-1.949	-0.042
47 G	0.288	0.542	1.412	-0.995	1.057	0.665	-0.215	1.412	-0.995	0.393
48 T	-0.079	0.523	1.290	-0.084	1.048	0.666	1.384	1.384	-0.084	0.678
49 F	-0.212	0.391	1.103	0.863	0.847	0.061	1.605	1.605	-0.212	0.665
50 N	0.813	0.469	1.487	1.529	1.148	0.096	1.057	1.529	0.096	0.943
51 V	0.585	0.487	1.739	1.889	1.467	0.115	1.276	1.889	0.115	1.080
52 P	0.022	1.439	1.421	1.930	1.303	0.096	1.824	1.930		

```
0.022     1.148
53 N      0.964     0.876     1.477     1.737     1.303     0.092     1.573     1.737
0.092     1.146
54 P      0.933     0.267     1.328     1.106     1.148     0.072     1.846     1.846
0.072     0.957
55 V      0.585     0.267     1.365     0.374     1.166     0.075     1.693     1.693
0.075     0.789
56 G      0.585     0.722     1.122    -0.242     0.893     0.056     0.462     1.122
-0.242    0.514
57 S      0.275     0.634     1.066    -0.644     0.856     0.035     0.795     1.066
-0.644    0.431
58 L      0.275     0.405     1.066    -0.650     0.856     0.035     0.795     1.066
-0.650    0.398
59 A      1.141     0.610     1.459    -0.288     1.185     0.522     0.198     1.459
-0.288    0.689
60 P      1.141     0.610     1.459     0.192     1.185     0.522     0.198     1.459
0.192     0.758
61 P      0.863     0.155     1.309     0.482     1.030     0.502    -0.972     1.309
-0.972    0.481
62 D      1.578     0.155     1.393     0.347     1.020     0.497    -2.417     1.578
-2.417    0.367
63 G      1.211     0.155     1.272    -0.321     1.011     0.498    -0.818     1.272
-0.818    0.430
64 A      1.211     0.067     1.272    -1.044     1.011     0.498    -0.818     1.272
-1.044    0.314
65 A      1.710     0.898     1.300    -1.125     1.057     0.968    -1.047     1.710
-1.125    0.537
66 V      1.710     0.694     1.300    -0.514     1.057     0.968    -1.047     1.710
-1.047    0.595
67 P      1.710     0.616     1.758     0.383     1.741     1.563    -0.983     1.758
-0.983    0.970
68 D      0.996     0.161     1.674     0.885     1.750     1.568     0.462     1.750
0.161     1.071
69 D      0.281     0.113     1.608     0.643     1.704     1.572     1.724     1.724
0.113     1.092
70 K      0.281     0.113     1.608    -0.155     1.704     1.572     1.724     1.724
-0.155    0.978
71 L      0.528    -0.833     1.692    -0.878     1.804     1.596     1.667     1.804
-0.878    0.797
72 F      0.528    -0.803     1.692    -0.973     1.804     1.596     1.667     1.804
-0.973    0.787
73 V     -0.370    -0.270     1.412    -0.811     1.531     1.124     1.621     1.621
-0.811    0.605
74 Q     -1.312    -0.581     0.898    -0.365     0.847     0.534     1.807     1.807
-1.312    0.261
75 D     -0.597    -0.713     1.225    -0.175     1.112     0.547     1.592     1.592
-0.713    0.427
76 M     -0.136    -0.396     1.543    -0.233     1.394     0.562     1.673     1.673
-0.396    0.630
77 F      0.231     0.345     1.907    -0.188     1.677     0.580     1.304     1.907
-0.188    0.837
78 P      0.263     1.095     1.730     0.085     1.458     0.558     1.301     1.730
0.085     0.927
79 Y     -0.009     1.363     1.449     0.254     1.093     0.069     1.310     1.449
-0.009    0.790
80 P      0.749     1.565     1.786     0.423     1.412     0.651     1.339     1.786
0.423     1.132
81 S      1.691     1.297     1.842     0.101     1.412     0.647     1.088     1.842
0.101     1.154
```

```
82 G        0.977    0.345    1.515   -0.593    1.148    0.633    1.303    1.515
-0.593    0.761
83 E        1.230    0.345    1.421   -0.888    1.084    1.234    1.238    1.421
-0.888    0.809
84 G        0.863   -0.140    1.057   -0.952    0.802    1.216    1.607    1.607
-0.952    0.636
85 L        0.813   -0.408    0.898   -0.572    0.601    1.196    1.447    1.447
-0.572    0.568
86 H        0.585   -0.408    1.066    0.079    0.820    1.816    1.714    1.816
-0.408    0.810
87 V        0.225    0.129    0.982    0.574    0.729    1.236    1.961    1.961
0.129    0.834
88 G       -0.717   -0.182    0.907    0.784    0.784    1.241    2.395    2.395
-0.717    0.745
89 H        0.225   -1.133    0.982    0.833    0.729    1.236    1.961    1.961
-1.133    0.690
90 P       -0.028   -1.224    1.075    0.287    0.793    0.635    2.025    2.025
-1.224    0.509
91 L       -0.300   -1.091    1.057   -0.501    0.784    0.635    1.758    1.758
-1.091    0.334
92 G       -0.528   -0.348    1.066   -1.291    0.829    0.635    0.748    1.066
-1.291    0.159
93 Y       -0.332   -1.071    1.103   -1.873    0.811    0.035    0.521    1.103
-1.873   -0.115
94 I        0.168   -1.071    1.132   -1.700    0.856    0.505    0.293    1.132
-1.700    0.026
95 A        0.515   -0.747    1.094   -1.184    0.838    0.501    0.446    1.094
-1.184    0.209
96 T        0.035    0.067    1.356   -0.522    1.121    0.521    0.778    1.356
-0.522    0.479
97 D        0.288   -0.831    1.103   -0.304    0.884    0.501   -0.564    1.103
-0.831    0.154
98 V        1.059   -1.544    1.674   -0.552    1.376    1.124   -0.887    1.674
-1.544    0.321
99 Y        0.806   -0.635    1.926   -1.146    1.613    1.144    0.456    1.926
-1.146    0.595
100A       -0.104   -0.342    1.664   -1.548    1.412    1.128    0.666    1.664
-1.548    0.411
101R       -0.471   -0.438    1.823   -1.771    1.567    1.264    0.674    1.823
-1.771    0.378
102Y       -0.503   -0.625    1.935   -1.721    1.622    1.279    0.030    1.935
-1.721    0.288
103F       -0.616    0.596    1.561   -1.854    1.376    1.261    0.287    1.561
-1.854    0.373
104R       -0.389    1.379    1.552   -2.111    1.330    1.261    1.297    1.552
-2.111    0.617
105M       -0.389    0.469    1.552   -2.374    1.330    1.261    1.297    1.552
-2.374    0.450
106V        0.174    0.379    1.599   -1.997    1.403    1.283    0.852    1.599
-1.997    0.528
107G        0.522    0.566    1.543   -1.418    1.440    1.280    1.190    1.543
-1.418    0.732
108R       -0.325   -0.062    1.029   -0.589    0.975    0.661    1.625    1.625
-0.589    0.473
109N        0.073   -1.079    1.197    0.139    1.103    1.264    1.948    1.948
-1.079    0.663
110V        0.440   -1.061    1.318    0.348    1.112    1.262    0.349    1.318
-1.061    0.538
111L       -0.503   -1.140    1.244    0.243    1.166    1.267    0.784    1.267
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          -1.140     0.437
112H      -0.408    -0.396     0.804    -0.008     0.647     0.643     0.785     0.804
          -0.408     0.295
113A      -1.432    -0.486     0.440    -0.566     0.291     0.606     1.149     1.149
          -1.432     0.000
114L      -0.566    -0.661     0.832    -0.714     0.619     1.094     0.551     1.094
          -0.714     0.165
115G       0.149     0.171     0.917    -0.595     0.610     1.088    -0.894     1.088
          -0.894     0.207
116F      -0.566    -0.661     0.692    -0.308     0.392     0.473    -0.910     0.692
          -0.910    -0.127
117D      -0.338    -0.128     0.683    -0.040     0.346     0.473     0.101     0.683
          -0.338     0.157
118A      -0.338    -0.667     0.683    -0.223     0.346     0.473     0.101     0.683
          -0.667     0.054
119F      -0.566    -0.092     0.935    -0.616     0.665     0.492     0.320     0.935
          -0.616     0.163
120G       0.149     0.574     1.001    -0.983     0.711     0.487    -0.941     1.001
          -0.983     0.142
121L       0.010    -0.460     1.057    -1.245     0.756     0.598    -0.958     1.057
          -1.245    -0.035
122P       0.256    -0.256     1.384    -1.223     1.130     0.640     0.215     1.384
          -1.223     0.307
123A       0.718    -0.711     1.702    -1.272     1.412     0.656     0.296     1.702
          -1.272     0.400
124E       0.490    -0.220     1.711    -1.310     1.458     0.656    -0.714     1.711
          -1.310     0.296
125Q       0.838    -0.304     1.674    -1.324     1.440     0.652    -0.561     1.674
          -1.324     0.345
126Y       1.084    -0.168     1.758    -1.400     1.540     0.675    -0.617     1.758
          -1.400     0.410
127A       1.280     0.730     1.954    -1.339     1.695     0.695     0.434     1.954
          -1.339     0.778
128V       1.148     0.820     1.617    -1.192     1.285     0.096     0.460     1.617
          -1.192     0.605
129Q       1.097     1.275     1.487    -0.929     1.066     0.073     0.338     1.487
          -0.929     0.630
130T       1.350     1.597     1.393    -0.349     1.002     0.674     0.273     1.597
          -0.349     0.849
131G       1.350     1.597     1.636     0.305     1.276     0.693     1.503     1.636
           0.305     1.194
132T       1.849     1.784     2.188     0.860     1.759     1.316     0.913     2.188
           0.860     1.524
133H       1.799     1.784     2.057     1.075     1.540     1.293     0.791     2.057
           0.791     1.477
134P       1.736     2.269     2.290     0.596     1.859     1.898     0.749     2.290
           0.596     1.628
135R       1.704     1.910     2.496    -0.101     2.060     1.918     0.790     2.496
          -0.101     1.539
136T       1.868     1.706     2.627    -0.839     2.269     2.497     0.723     2.627
          -0.839     1.550
137R       1.868     1.119     2.468    -1.312     2.096     1.878    -0.555     2.468
          -1.312     1.080
138T       2.178     0.209     2.524    -1.097     2.132     1.899    -0.888     2.524
          -1.097     0.994
139E       1.679     0.327     1.973    -0.670     1.649     1.276    -0.298     1.973
          -0.670     0.848
140A       1.116    -0.422     1.655    -0.209     1.485     1.258     0.250     1.655
          -0.422     0.733
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141N	1.293	0.391	1.524	0.443	1.321	0.674	0.138	1.524
0.138	0.826							
142V	0.383	0.596	1.262	0.724	1.121	0.658	0.348	1.262
0.348	0.727							
143V	0.155	1.183	1.365	0.841	1.230	0.683	0.373	1.365
0.155	0.833							
144N	0.288	1.074	1.795	0.666	1.704	1.308	1.383	1.795
0.288	1.174							
145F	0.225	1.093	1.823	-0.013	1.768	1.310	1.659	1.823
-0.013	1.123							
146R	-0.123	2.080	1.860	-0.818	1.786	1.313	1.505	2.080
-0.818	1.086							
147R	0.471	1.062	1.973	-1.394	1.750	1.312	0.917	1.973
-1.394	0.870							
148Q	0.294	0.876	2.103	-1.896	1.914	1.896	1.029	2.103
-1.896	0.888							
149L	0.294	0.211	2.085	-2.008	1.968	1.897	1.213	2.085
-2.008	0.809							
150G	0.389	1.042	1.646	-2.128	1.449	1.272	1.214	1.646
-2.128	0.698							
151R	-0.458	0.505	1.150	-2.106	0.929	0.652	1.466	1.466
-2.106	0.305							
152L	-0.477	0.231	0.814	-2.001	0.510	0.610	1.303	1.303
-2.001	0.141							
153G	0.237	1.291	1.057	-1.260	0.674	1.224	1.135	1.291
-1.260	0.623							
154F	0.509	1.477	1.337	-0.289	1.039	1.713	1.126	1.713
-0.289	0.987							
155G	0.655	2.465	1.057	0.978	0.720	1.108	1.287	2.465
0.655	1.181							
156H	1.502	2.693	1.571	1.765	1.185	1.728	0.851	2.693
0.851	1.613							
157D	1.407	2.429	2.010	1.800	1.704	2.352	0.850	2.429
0.850	1.793							
158S	2.399	2.745	2.225	1.095	1.905	2.368	0.758	2.745
0.758	1.928							
159R	1.457	2.381	2.169	0.264	1.905	2.372	1.009	2.381
0.264	1.651							
160R	1.736	2.058	2.160	-0.106	1.886	1.772	0.902	2.160
-0.106	1.487							
161S	1.432	1.784	2.085	0.172	1.722	1.304	0.951	2.085
0.172	1.350							
162F	1.350	0.832	2.132	0.658	1.722	1.303	0.832	2.132
0.658	1.261							
163S	1.717	1.545	1.973	1.091	1.567	1.168	0.824	1.973
0.824	1.412							
164T	1.217	0.515	1.421	1.115	1.084	0.545	1.414	1.421
0.515	1.044							
165T	1.438	-0.382	1.543	1.064	1.248	1.013	1.245	1.543
-0.382	1.024							
166D	1.438	-0.060	1.543	0.995	1.248	1.013	1.245	1.543
-0.060	1.060							
167V	0.907	-1.101	1.646	0.869	1.330	1.013	1.417	1.646
-1.101	0.869							
168D	0.844	-0.514	1.879	0.502	1.649	1.617	1.376	1.879
-0.514	1.050							
169F	-0.117	-0.562	1.702	-0.071	1.513	1.623	1.357	1.702
-0.562	0.778							
170Y	-0.420	-0.891	1.627	-0.853	1.349	1.154	1.407	1.627

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        -0.891     0.482
171R       0.193    -0.809     2.075    -1.234     1.731     1.195     0.982     2.075
        -1.234     0.590
172W      -1.072    -1.797     1.823    -1.445     1.431     0.731     1.013     1.823
        -1.797     0.098
173T      -0.996    -1.498     1.748    -1.416     1.458     0.728     1.083     1.748
        -1.498     0.158
174Q      -1.457    -1.498     1.431    -1.426     1.175     0.713     1.002     1.431
        -1.498    -0.009
175W      -2.304    -2.314     0.917    -1.675     0.711     0.094     1.438     1.438
        -2.314    -0.448
176I      -1.293    -2.217     1.225    -1.760     1.066     0.111     1.579     1.579
        -2.217    -0.184
177F      -2.127    -1.284     0.889    -1.864     0.893     0.093     1.860     1.860
        -2.127    -0.220
178L      -2.627    -1.109     0.814    -1.760     0.756     0.070     2.029     2.029
        -2.627    -0.261
179Q      -1.552    -1.408     1.094    -1.339     1.048     0.085     1.894     1.894
        -1.552    -0.025
180I      -0.913    -2.073     1.234    -0.808     1.066     0.084     0.562     1.234
        -2.073    -0.121
181Y      -0.964    -1.210     1.318    -0.253     1.130     0.105     0.333     1.318
        -1.210     0.066
182N      -0.964    -0.312     1.337     0.123     1.075     0.103     0.149     1.337
        -0.964     0.216
183A      -0.711    -0.430     1.281     0.151     1.020     0.550    -0.023     1.281
        -0.711     0.263
184W       0.123    -0.430     1.617     0.091     1.194     0.568    -0.304     1.617
        -0.430     0.408
185F       0.572     0.682     1.561     0.326     1.112     0.569    -0.595     1.561
        -0.595     0.604
186D       0.263     1.688     1.262     0.369     0.802     0.528    -1.492     1.688
        -1.492     0.488
187T       0.572     1.149     1.561     0.781     1.112     0.569    -0.595     1.561
        -0.595     0.735
188T       1.565     1.471     1.991     0.703     1.731     1.138    -0.553     1.991
        -0.553     1.150
189A       2.279     1.339     2.057     0.640     1.777     1.134    -1.814     2.279
        -1.814     1.059
190N       1.913     1.014     2.216     0.153     1.932     1.270    -1.806     2.216
        -1.806     0.956
191K       1.717     1.261     2.262    -0.315     2.050     1.269    -1.627     2.262
        -1.627     0.945
192A       0.882     1.004     1.926    -1.128     1.877     1.251    -1.346     1.926
        -1.346     0.638
193R       1.160     0.800     2.075    -1.225     2.032     1.271    -0.176     2.075
        -1.225     0.848
194P       1.211    -0.110     2.103    -1.366     2.087     1.830    -0.089     2.103
        -1.366     0.809
195I       0.269    -0.468     1.571    -1.045     1.458     1.240     0.281     1.571
        -1.045     0.472
196S      -0.098     0.431     1.449    -1.124     1.449     1.242     1.880     1.880
        -1.124     0.747
197E      -0.231    -0.599     1.019    -1.364     0.975     0.617     0.871     1.019
        -1.364     0.184
198L       0.130    -0.599     1.103    -1.886     1.066     1.198     0.624     1.198
        -1.886     0.234
199V       0.054     0.461     1.178    -1.973     1.039     1.200     0.554     1.200
        -1.973     0.359
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200A	0.136	1.185	1.356	-2.070	1.248	1.780	0.368	1.780
-2.070	0.572							
201E	0.054	1.185	1.178	-1.585	1.039	1.200	0.554	1.200
-1.585	0.518							
202F	0.996	1.423	1.253	-1.147	0.984	1.195	0.119	1.423
-1.147	0.689							
203E	1.363	1.633	1.375	-0.739	0.993	1.193	-1.480	1.633
-1.480	0.620							
204S	1.495	0.854	1.804	-0.741	1.467	1.818	-0.470	1.818
-0.741	0.890							
205G	1.091	0.538	1.262	-0.839	1.011	1.236	0.178	1.262
-0.839	0.640							
206A	1.091	0.538	1.244	-1.239	1.066	1.237	0.362	1.244
-1.239	0.614							
207R	1.230	1.165	1.188	-1.022	1.020	1.127	0.379	1.230
-1.022	0.727							
208C	1.179	1.165	1.029	-0.824	0.820	1.107	0.220	1.179
-0.824	0.671							
209L	1.179	1.668	1.029	-0.368	0.820	1.107	0.220	1.668
-0.368	0.808							
210D	1.312	1.369	1.459	-0.398	1.294	1.731	1.229	1.731
-0.398	1.142							
211G	1.679	0.830	1.300	-0.417	1.139	1.596	1.221	1.679
-0.417	1.049							
212G	0.958	1.034	1.533	-0.800	1.248	1.603	0.621	1.603
-0.800	0.885							
213R	1.672	0.203	1.617	-0.772	1.239	1.598	-0.824	1.672
-0.824	0.676							
214D	1.401	-0.120	1.795	-1.021	1.558	1.703	-0.750	1.795
-1.021	0.652							
215W	0.459	-0.659	1.720	-1.279	1.613	1.709	-0.316	1.720
-1.279	0.464							
216A	0.427	0.471	1.926	-1.682	1.813	1.729	-0.275	1.926
-1.682	0.630							
217K	0.294	1.046	1.496	-1.871	1.339	1.104	-1.284	1.496
-1.871	0.304							
218L	0.022	1.028	1.216	-1.902	0.975	0.615	-1.275	1.216
-1.902	0.097							
219T	1.148	1.233	1.524	-1.712	1.321	1.189	-1.324	1.524
-1.712	0.483							
220A	1.280	1.281	1.954	-1.723	1.795	1.814	-0.314	1.954
-1.723	0.870							
221G	1.053	1.185	1.505	-1.929	1.157	1.219	-1.390	1.505
-1.929	0.400							
222E	2.267	0.233	1.860	-1.856	1.467	1.703	-1.834	2.267
-1.856	0.549							
223R	1.704	0.197	1.543	-1.694	1.303	1.685	-1.286	1.704
-1.694	0.493							
224A	1.065	-0.042	1.403	-1.290	1.285	1.686	0.046	1.686
-1.290	0.593							
225D	1.337	-0.448	1.683	-0.862	1.649	2.175	0.037	2.175
-0.862	0.796							
226V	1.337	-0.174	1.683	-0.775	1.649	2.175	0.037	2.175
-0.775	0.848							
227I	0.952	-0.282	1.505	-0.738	1.412	1.570	0.370	1.570
-0.738	0.684							
228D	1.084	-0.054	1.935	-0.852	1.886	2.195	1.379	2.195
-0.852	1.082							
229E	-0.129	-0.999	1.580	-1.174	1.576	1.711	1.823	1.823

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          -1.174    0.627
230Y      -0.129   -0.761    1.580   -1.606    1.576    1.711    1.823    1.823
          -1.606    0.599
231R       0.256   -0.354    1.973   -1.903    1.832    1.729    1.834    1.973
          -1.903    0.767
232L      -0.111   -0.629    2.132   -2.253    1.987    1.864    1.842    2.132
          -2.253    0.690
233V      -0.471    0.431    1.804   -2.182    1.622    1.265    0.858    1.804
          -2.182    0.475
234Y       0.281    0.323    1.823   -1.877    1.704    1.734    0.517    1.823
          -1.877    0.644
235R       0.427    0.634    1.543   -1.231    1.385    1.130    0.677    1.543
          -1.231    0.652
236A       0.427    0.429    1.543   -0.497    1.385    1.130    0.677    1.543
          -0.497    0.728
237D       0.427   -0.074    1.543    0.073    1.385    1.130    0.677    1.543
          -0.074    0.737
238S       0.990   -0.576    1.589    0.464    1.458    1.151    0.232    1.589
          -0.576    0.758
239L       0.092   -1.073    1.178    0.384    1.002    0.552    0.256    1.178
          -1.073    0.341
240V       0.048   -0.242    0.963    0.539    0.911    0.569    1.888    1.888
          -0.242    0.668
241N      -0.452   -0.350    0.935    0.631    0.866    0.099    2.117    2.117
          -0.452    0.549
242W      -0.503   -0.332    0.776    0.676    0.665    0.079    1.957    1.957
          -0.503    0.474
243C      -0.503    0.662    0.776    0.384    0.665    0.079    1.957    1.957
          -0.503    0.574
244P       0.092    0.529    0.889   -0.109    0.629    0.078    1.369    1.369
          -0.109    0.497
245G      -0.022   -0.034    0.786   -0.839    0.474    0.057    1.523    1.523
          -0.839    0.278
246L       0.376   -0.661    0.646   -1.175    0.446    0.034    2.089    2.089
          -1.175    0.251
247G      -0.294    0.153    0.776   -1.425    0.547    0.021    1.902    1.902
          -1.425    0.240
248T      -0.294    0.101    0.533   -1.576    0.273    0.002    0.672    0.672
          -1.576   -0.041
249V      -0.212    0.185    0.842   -1.277    0.629    0.043    0.558    0.842
          -1.277    0.110
250L       0.863    0.185    1.253   -0.963    0.984    0.637    0.097    1.253
          -0.963    0.437
251A       0.996    0.880    1.589   -0.411    1.394    1.236    0.071    1.589
          -0.411    0.822
252N       0.433    0.880    1.272   -0.260    1.230    1.218    0.619    1.272
          -0.260    0.770
253E       0.996    0.810    1.589   -0.412    1.394    1.236    0.071    1.589
          -0.412    0.812
254E       1.710    0.862    1.674   -0.987    1.385    1.231   -1.375    1.710
          -1.375    0.643
255V       2.210    1.101    1.945   -1.006    1.704    1.720   -0.373    2.210
          -1.006    1.043
256T       2.128    2.052    1.636   -0.958    1.349    1.679   -0.260    2.128
          -0.958    1.089
257A       1.900    2.100    1.739   -0.519    1.458    1.705   -0.235    2.100
          -0.519    1.164
258D       1.818    2.914    1.561   -0.267    1.248    1.125   -0.049    2.914
          -0.267    1.193
```

Residue										
259G	2.684	3.002	1.954	-0.033	1.576	1.612	-0.646	3.002	-0.646	1.450
260R	2.621	2.984	2.188	0.049	1.895	2.217	-0.688	2.984	-0.688	1.609
261S	2.848	1.996	2.178	0.285	1.850	2.217	0.323	2.848	0.285	1.671
262D	2.659	1.499	2.206	0.476	1.841	1.769	0.219	2.659	0.219	1.524
263R	1.717	0.864	2.150	0.601	1.841	1.773	0.469	2.150	0.469	1.345
264G	1.584	-0.124	1.963	0.963	1.640	1.167	0.690	1.963	-0.124	1.126
265N	0.939	0.063	1.692	1.071	1.476	1.149	1.119	1.692	0.063	1.073
266F	-0.275	0.285	1.356	0.963	1.112	0.664	1.379	1.379	-0.275	0.783
267P	-0.275	1.273	1.356	0.346	1.112	0.664	1.379	1.379	-0.275	0.836
268V	-0.275	0.710	1.814	-0.445	1.795	1.259	1.444	1.814	-0.445	0.900
269F	-0.452	1.619	1.945	-1.424	1.959	1.843	1.556	1.959	-1.424	1.007
270R	-0.452	2.285	1.926	-1.982	2.014	1.844	1.740	2.285	-1.982	1.053
271K	-0.319	0.968	2.113	-2.488	2.214	2.450	1.519	2.450	-2.488	0.922
272R	0.294	0.023	2.561	-2.549	2.597	2.491	1.094	2.597	-2.549	0.930
273L	0.244	-0.905	2.646	-2.511	2.661	2.512	0.865	2.661	-2.511	0.787
274R	-0.288	0.113	2.206	-2.299	2.233	1.904	0.810	2.233	-2.299	0.669
275Q	-0.913	-1.025	1.748	-2.299	1.640	1.327	0.690	1.748	-2.299	0.167
276W	-0.913	-1.025	1.748	-2.514	1.640	1.327	0.690	1.748	-2.514	0.136
277M	-0.838	-0.522	1.692	-2.932	1.613	1.323	0.577	1.692	-2.932	0.130
278M	-0.774	-0.815	1.459	-3.036	1.294	0.718	0.619	1.459	-3.036	-0.077
279R	-1.021	-0.701	1.132	-2.950	0.920	0.676	-0.555	1.132	-2.950	-0.357
280I	-0.509	-0.975	1.365	-2.445	1.139	0.670	-0.245	1.365	-2.445	-0.143
281T	-0.111	0.163	1.375	-1.980	1.093	0.653	-1.200	1.375	-1.980	-0.001
282A	0.787	-0.532	1.655	-1.374	1.367	1.125	-1.154	1.655	-1.374	0.268
283Y	0.787	-0.737	1.655	-1.075	1.367	1.125	-1.154	1.655	-1.154	0.281
284A	0.711	0.209	1.711	-0.773	1.394	1.128	-1.040	1.711	-1.040	0.477
285D	-0.199	0.748	1.431	-0.952	1.248	1.114	-0.646	1.431	-0.952	0.392
286R	0.300	0.005	1.702	-1.005	1.567	1.603	0.355	1.702	-1.005	0.647
287L	1.053	-0.270	1.720	-0.917	1.649	2.072	0.014	2.072	-0.917	0.760
288L	0.338	-0.162	1.636	-0.388	1.658	2.078	1.459	2.078		

```
-0.388    0.946
289D      0.338   -0.162    1.636    0.359    1.658    2.078    1.459    2.078
-0.162    1.052
290D     -0.161   -0.162    1.085    0.794    1.175    1.454    2.049    2.049
-0.162    0.891
291L     -0.161   -1.204    1.085    0.623    1.175    1.454    2.049    2.049
-1.204    0.717
292D      1.053   -0.641    1.440    0.263    1.485    1.938    1.605    1.938
-0.641    1.020
293V     -0.212   -0.605    1.188   -0.246    1.185    1.474    1.636    1.636
-0.605    0.631
294L     -0.711   -0.017    1.160   -0.379    1.139    1.004    1.865    1.865
-0.711    0.580
295D      0.364    0.091    1.571   -0.348    1.494    1.598    1.403    1.598
-0.348    0.882
296W      0.111    0.383    1.627   -0.420    1.549    1.152    1.576    1.627
-0.420    0.854
297P      0.111    1.377    1.627   -0.643    1.549    1.152    1.576    1.627
-0.643    0.964
298E      1.053    0.904    2.160   -0.920    2.178    1.741    1.206    2.178
-0.920    1.189
299Q      0.749    0.820    2.085   -1.320    2.014    1.272    1.256    2.085
-1.320    0.982
300V      1.116    1.143    2.057   -1.536    2.041    1.264    1.178    2.057
-1.536    1.038
301K      1.363    1.848    2.141   -1.671    2.142    1.288    1.121    2.142
-1.671    1.176
302T      1.135    0.513    2.244   -1.729    2.251    1.313    1.147    2.251
-1.729    0.982
303M      1.198   -0.302    2.216   -1.316    2.187    1.311    0.871    2.216
-1.316    0.881
304Q      0.800    0.439    2.356   -0.893    2.214    1.335    0.304    2.356
-0.893    0.936
305R     -0.066    0.762    1.767   -0.341    1.558    0.742    0.561    1.767
-0.341    0.712
306N     -0.035    0.804    1.561   -0.355    1.358    0.722    0.520    1.561
-0.355    0.654
307W      0.496    0.686    2.001   -0.783    1.786    1.329    0.575    2.001
-0.783    0.870
308I      0.528    1.816    1.823   -1.377    1.567    1.307    0.571    1.823
-1.377    0.891
309G      0.591    2.140    1.589   -1.411    1.248    0.702    0.613    2.140
-1.411    0.782
310R      0.509    1.417    1.281   -1.141    0.893    0.662    0.726    1.417
-1.141    0.621
311S      1.274    0.604    1.262   -0.627    0.875    0.636   -0.306    1.274
-0.627    0.531
312T      1.546   -0.456    1.281   -0.538    0.884    0.636   -0.039    1.546
-0.538    0.473
313G      1.318   -1.121    1.290   -1.007    0.929    0.636   -1.050    1.318
-1.121    0.142
314A      0.471   -0.893    0.776   -1.545    0.465    0.017   -0.614    0.776
-1.545   -0.189
315V     -0.521   -0.893    0.561   -1.931    0.264    0.001   -0.523    0.561
-1.931   -0.434
316A     -0.439    0.017    0.515   -1.729    0.264    0.001   -0.403    0.515
-1.729   -0.254
317L     -0.667    0.017    0.524   -1.257    0.310    0.001   -1.414    0.524
-1.414   -0.355
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318F       -0.534    0.221    0.954   -0.782    0.784    0.626   -0.405    0.954
-0.782     0.123
319S       -0.167    1.251    1.075   -0.703    0.793    0.624   -2.003    1.251
-2.003     0.124
320A       -0.167    0.934    1.075   -1.095    0.793    0.624   -2.003    1.075
-2.003     0.023
321R        0.825    1.473    1.309   -1.400    0.938    0.639   -2.279    1.473
-2.279     0.215
322A        2.039    1.287    1.646   -1.191    1.303    1.124   -2.539    2.039
-2.539     0.524
323A        2.260    1.113    1.767   -0.294    1.467    1.592   -2.707    2.260
-2.707     0.743
324S        2.488    1.688    1.758    0.799    1.422    1.592   -1.697    2.488
-1.697     1.150
325D        1.641    0.736    1.262    1.510    0.902    0.972   -1.445    1.641
-1.445     0.797
326D        2.001    0.736    1.589    1.266    1.267    1.572   -0.461    2.001
-0.461     1.138
327G        1.634   -0.128    1.468    0.471    1.257    1.573    1.138    1.634
-0.128     1.059
328F        1.856   -0.180    1.589   -0.316    1.422    2.042    0.969    2.042
-0.316     1.055
329E        0.718   -0.102    1.178   -0.847    1.084    1.555    1.299    1.555
-0.847     0.698
330V        0.579   -0.851    1.234   -1.014    1.130    1.665    1.282    1.665
-1.014     0.575
331D       -0.016   -0.264    1.122   -1.148    1.166    1.667    1.871    1.871
-1.148     0.628
332I       -0.016   -0.312    1.122   -1.390    1.166    1.667    1.871    1.871
-1.390     0.587
333E       -0.180    0.826    0.991   -1.538    0.957    1.087    1.938    1.938
-1.538     0.583
334V        0.383    0.610    1.309   -1.261    1.121    1.106    1.390    1.390
-1.261     0.665
335F        0.016    1.245    1.468   -1.029    1.276    1.242    1.398    1.468
-1.029     0.802
336T        0.655    1.910    1.851   -0.570    1.567    1.259    1.296    1.910
-0.570     1.138
337T        0.794    1.215    1.795   -0.296    1.522    1.148    1.313    1.795
-0.296     1.070
338R        1.356    0.550    2.113    0.027    1.686    1.166    0.765    2.113
0.027      1.095
339P        1.356    0.363    2.094    0.286    1.741    1.168    0.949    2.094
0.286      1.137
340D        0.446    0.005    1.832    0.442    1.540    1.152    1.160    1.832
0.005      0.939
341T        0.477   -0.044    1.627    0.108    1.339    1.132    1.119    1.627
-0.044     0.823
342L        0.345   -0.941    1.197   -0.413    0.866    0.507    0.110    1.197
-0.941     0.239
343F        0.541   -0.941    1.150   -0.897    0.747    0.508   -0.069    1.150
-0.941     0.148
344G       -0.212   -0.863    1.132   -1.151    0.665    0.039    0.272    1.132
-1.151    -0.017
345A       -1.122   -1.695    0.851   -1.203    0.519    0.024    0.666    0.851
-1.695    -0.280
346T       -0.774   -1.695    0.814   -1.227    0.501    0.020    0.820    0.820
-1.695    -0.220
347Y       -0.774   -1.827    0.795   -1.499    0.556    0.022    1.003    1.003
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-1.827   -0.246

348L	-1.002	-0.845	0.804	-1.833	0.601	0.022	-0.007	0.804
-1.833	-0.323							
349V	-1.002	-0.550	1.047	-1.943	0.875	0.040	1.223	1.223
-1.943	-0.044							
350L	-0.838	0.085	1.178	-1.924	1.084	0.620	1.156	1.178
-1.924	0.195							
351A	-0.585	0.085	1.085	-1.250	1.020	1.221	1.091	1.221
-1.250	0.381							
352P	0.629	-0.011	1.440	-0.291	1.330	1.704	0.647	1.704
-0.291	0.778							
353E	0.281	0.169	1.477	0.633	1.349	1.708	0.494	1.708
0.169	0.873							
354H	0.629	0.169	1.440	1.084	1.330	1.704	0.647	1.704
0.169	1.001							
355D	1.129	-0.126	1.711	1.083	1.649	2.193	1.649	2.193
-0.126	1.327							
356L	1.489	-0.761	1.795	0.402	1.741	2.774	1.402	2.774
-0.761	1.263							
357V	0.414	-0.556	1.384	-0.114	1.385	2.179	1.864	2.179
-0.556	0.937							
358D	0.048	-0.460	1.103	-0.728	1.203	1.561	2.185	2.185
-0.728	0.702							
359E	-0.452	-0.144	0.832	-1.232	0.884	1.072	1.184	1.184
-1.232	0.306							
360L	0.263	-1.222	0.917	-1.700	0.875	1.067	-0.261	1.067
-1.700	-0.009							
361V	0.907	-0.659	1.188	-1.758	1.039	1.085	-0.690	1.188
-1.758	0.159							
362A	-0.357	-0.562	0.935	-1.703	0.738	0.622	-0.659	0.935
-1.703	-0.141							
363A	-0.717	0.065	0.851	-1.073	0.647	0.041	-0.413	0.851
-1.073	-0.086							
364S	-0.003	-0.032	0.935	-0.703	0.638	0.036	-1.858	0.935
-1.858	-0.141							
365W	0.591	-0.278	1.047	-0.554	0.601	0.034	-2.446	1.047
-2.446	-0.143							
366P	0.225	0.584	0.926	-0.826	0.592	0.036	-0.847	0.926
-0.847	0.098							
367A	0.534	0.021	1.225	-0.701	0.902	0.076	0.050	1.225
-0.701	0.301							
368G	0.256	-0.482	1.318	-0.470	1.020	0.075	0.110	1.318
-0.482	0.261							
369V	0.307	-0.619	1.216	0.258	1.011	0.055	0.523	1.216
-0.619	0.393							
370N	-0.458	-0.929	0.991	0.548	0.756	0.062	0.325	0.991
-0.929	0.185							
371P	-0.262	-0.911	1.188	0.407	0.911	0.082	1.376	1.376
-0.911	0.399							
372L	-0.743	-0.643	1.449	-0.307	1.194	0.101	1.708	1.708
-0.743	0.394							
373W	-0.148	0.189	1.561	-0.833	1.157	0.099	1.119	1.561
-0.833	0.449							
374T	-0.231	1.183	1.253	-1.215	0.802	0.059	1.232	1.253
-1.215	0.440							
375Y	-0.003	1.050	1.001	-1.252	0.483	0.040	1.013	1.050
-1.252	0.333							
376G	0.907	2.084	1.281	-1.213	0.629	0.054	0.619	2.084
-1.213	0.623							

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377G        1.672    2.032   1.505   -1.065   0.884   0.048    0.816    2.032
-1.065     0.842
378G        1.704    1.405   1.300   -0.866   0.683   0.028    0.776    1.704
-0.866     0.719
379T        2.317    0.453   1.375   -0.647   0.811   0.608    0.417    2.317
-0.647     0.762
380P        2.090   -0.038   1.384   -0.705   0.856   0.608   -0.593    2.090
-0.705     0.515
381G        1.224   -0.396   1.253   -1.189   0.884   0.610   -0.272    1.253
-1.189     0.302
382E        0.996   -1.430   1.262   -1.801   0.929   0.610   -1.282    1.262
-1.801    -0.102
383A        0.800   -1.192   1.066   -2.333   0.774   0.590   -2.333    1.066
-2.333    -0.375
384I        0.547   -0.378   1.075   -2.516   0.738   0.591   -2.221    1.075
-2.516    -0.309
385A        0.452   -0.054   1.515   -2.443   1.257   1.215   -2.222    1.515
-2.443    -0.040
386A        0.225   -0.378   1.617   -2.277   1.367   1.240   -2.197    1.617
-2.277    -0.058
387Y        0.225   -0.378   1.617   -2.252   1.367   1.240   -2.197    1.617
-2.252    -0.054
388R        0.225    0.029   1.617   -2.386   1.367   1.240   -2.197    1.617
-2.386    -0.015
389R        0.225    0.047   1.617   -2.595   1.367   1.240   -2.197    1.617
-2.595    -0.042
390A        0.225    0.089   1.617   -2.721   1.367   1.240   -2.197    1.617
-2.721    -0.054
391I        0.705    0.628   1.814   -2.749   1.768   1.816   -2.464    1.816
-2.749     0.217
392A        0.850    0.748   1.533   -2.372   1.449   1.211   -2.303    1.533
-2.372     0.159
393A        1.217    1.323   1.375   -1.613   1.294   1.075   -2.311    1.375
-2.311     0.337
394K        0.503    2.136   1.290   -0.761   1.303   1.081   -0.866    2.136
-0.866     0.669
395S        1.502    1.796   1.758   -0.052   1.686   1.678   -1.214    1.796
-1.214     1.022
396D        1.634    1.515   2.188   -0.080   2.160   2.303   -0.205    2.303
-0.205     1.359
397L        1.881    1.832   2.515   -0.627   2.533   2.346    0.969    2.533
-0.627     1.635
398E        2.014    2.850   2.393   -1.342   2.260   2.350    0.877    2.850
-1.342     1.629
399R        2.014    2.850   2.393   -1.519   2.260   2.350    0.877    2.850
-1.519     1.604
400Q        1.647    2.868   2.552   -1.423   2.415   2.486    0.886    2.868
-1.423     1.633
401E        2.722    2.868   2.963   -1.028   2.770   3.080    0.424    3.080
-1.028     1.971
402S        2.589    2.920   3.085   -1.093   3.044   3.075    0.516    3.085
-1.093     2.019
403R        2.652    1.968   2.851   -1.277   2.725   2.471    0.557    2.851
-1.277     1.707
404E        2.633    0.980   2.515   -1.641   2.306   2.428    0.394    2.633
-1.641     1.374
405K        1.906    0.201   2.066   -1.639   1.932   1.830    1.009    2.066
-1.639     1.044
406T        0.914   -0.003   1.851   -1.563   1.731   1.814    1.101    1.851
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-1.563   0.835

| 407G | 0.067 | 0.361 | 1.337 | -1.397 | 1.267 | 1.195 | 1.536 | 1.536 |
-1.397   0.624

| 408V | -0.066 | -0.673 | 1.001 | -1.383 | 0.856 | 0.596 | 1.563 | 1.563 |
-1.383   0.271

| 409F | -0.016 | -0.576 | 0.702 | -1.223 | 0.373 | 0.021 | 1.658 | 1.658 |
-1.223   0.134

| 410L | -0.465 | -0.727 | 0.758 | -1.045 | 0.455 | 0.020 | 1.949 | 1.949 |
-1.045   0.135

| 411G | -0.692 | 0.087 | 0.767 | -0.731 | 0.501 | 0.020 | 0.939 | 0.939 |
-0.731   0.127

| 412S | -0.964 | -0.182 | 0.748 | -0.680 | 0.492 | 0.021 | 0.672 | 0.748 |
-0.964   0.015

| 413Y | 0.060 | -1.037 | 1.113 | -0.578 | 0.847 | 0.057 | 0.308 | 1.113 |
-1.037   0.110

| 414A | 0.775 | -0.021 | 1.440 | -0.453 | 1.112 | 0.071 | 0.093 | 1.440 |
-0.453   0.431

| 415I | 0.547 | 0.606 | 1.449 | 0.010 | 1.157 | 0.071 | -0.918 | 1.449 |
-0.918   0.417

| 416N | 0.579 | 1.505 | 1.599 | 0.763 | 1.312 | 0.091 | -1.191 | 1.599 |
-1.191   0.665

| 417P | 1.059 | 1.255 | 1.337 | 1.266 | 1.030 | 0.072 | -1.523 | 1.337 |
-1.523   0.642

| 418A | 1.420 | 0.800 | 1.664 | 1.289 | 1.394 | 0.671 | -0.539 | 1.664 |
-0.539   0.957

| 419N | 2.058 | 1.159 | 2.047 | 1.022 | 1.686 | 0.689 | -0.640 | 2.058 |
-0.640   1.146

| 420G | 1.382 | 0.225 | 1.627 | 0.259 | 1.367 | 0.650 | 0.061 | 1.627 |
0.061   0.796

| 421E | 1.382 | -0.576 | 1.627 | -0.241 | 1.367 | 0.650 | 0.061 | 1.627 |
-0.576   0.610

| 422P | 0.743 | -1.476 | 1.487 | -0.623 | 1.349 | 0.651 | 1.393 | 1.487 |
-1.476   0.503

| 423V | -0.281 | -1.835 | 1.122 | -0.918 | 0.993 | 0.615 | 1.757 | 1.757 |
-1.835   0.208

| 424P | -1.147 | -1.200 | 0.991 | -1.197 | 1.020 | 0.617 | 2.079 | 2.079 |
-1.200   0.166

| 425I | -1.508 | -1.965 | 0.664 | -1.466 | 0.656 | 0.017 | 1.095 | 1.095 |
-1.965   -0.358

| 426F | -1.008 | -1.737 | 0.692 | -1.640 | 0.701 | 0.487 | 0.866 | 0.866 |
-1.737   -0.234

| 427I | -0.894 | -1.767 | 1.066 | -1.405 | 0.948 | 0.505 | 0.609 | 1.066 |
-1.767   -0.134

| 428A | -1.261 | -1.442 | 0.702 | -1.057 | 0.665 | 0.487 | 0.978 | 0.978 |
-1.442   -0.133

| 429D | -1.337 | -0.815 | 0.758 | -0.714 | 0.692 | 0.491 | 1.091 | 1.091 |
-1.337   0.024

| 430Y | -0.623 | -1.761 | 0.823 | -0.909 | 0.738 | 0.487 | -0.170 | 0.823 |
-1.761   -0.202

| 431V | 0.244 | -0.727 | 0.954 | -1.355 | 0.711 | 0.485 | -0.491 | 0.954 |
-1.355   -0.026

| 432L | -0.009 | -0.140 | 1.206 | -1.734 | 0.948 | 0.504 | 0.851 | 1.206 |
-1.734   0.232

| 433A | -0.281 | 0.692 | 0.926 | -1.935 | 0.583 | 0.015 | 0.860 | 0.926 |
-1.935   0.123

| 434G | 0.168 | 0.692 | 0.870 | -1.663 | 0.501 | 0.016 | 0.569 | 0.870 |
-1.663   0.165

| 435Y | 0.762 | -0.260 | 0.982 | -1.369 | 0.465 | 0.015 | -0.020 | 0.982 |
-1.369   0.082

436G	1.476	0.033	1.066	-1.162	0.455	0.009	-1.465	1.476	-1.465	0.059
437T	0.838	-0.595	0.926	-1.280	0.437	0.011	-0.133	0.926	-1.280	0.029
438G	0.212	-1.182	0.926	-1.691	0.528	0.028	-0.188	0.926	-1.691	-0.195
439A	0.465	-1.450	0.674	-2.268	0.291	0.009	-1.531	0.674	-2.268	-0.544
440I	-0.129	-0.823	0.561	-2.701	0.328	0.010	-0.942	0.561	-2.701	-0.528
441M	-0.325	-0.408	0.608	-2.693	0.446	0.009	-0.763	0.608	-2.693	-0.447
442A	-0.325	0.245	0.608	-2.289	0.446	0.009	-0.763	0.608	-2.289	-0.296
443V	-0.325	0.736	0.767	-1.308	0.619	0.629	0.514	0.767	-1.308	0.233
444P	0.813	1.646	1.178	-0.154	0.957	1.116	0.184	1.646	-0.154	0.820
445G	1.457	1.826	1.515	0.992	1.285	1.142	0.402	1.826	0.402	1.231
446H	1.590	0.696	1.945	1.520	1.759	1.766	1.412	1.945	0.696	1.527
447D	2.456	1.145	2.337	1.625	2.087	2.254	0.814	2.456	0.814	1.817
448Q	1.691	0.431	2.113	0.902	1.832	2.260	0.616	2.260	0.431	1.406
449R	1.963	-0.060	2.393	0.556	2.196	2.749	0.607	2.749	-0.060	1.486
450D	1.249	-0.060	2.169	0.254	1.977	2.133	0.591	2.169	-0.060	1.188
451W	0.749	-0.599	1.898	0.322	1.658	1.644	-0.410	1.898	-0.599	0.752
452D	0.636	-0.270	2.001	0.121	1.759	2.226	-0.575	2.226	-0.575	0.843
453F	0.503	-0.182	1.571	-0.328	1.285	1.602	-1.584	1.602	-1.584	0.409
454A	-0.711	-0.212	1.234	-1.114	0.920	1.117	-1.324	1.234	-1.324	-0.013
455R	0.281	0.147	1.206	-1.501	0.856	1.092	-1.346	1.206	-1.501	0.105
456A	-0.932	-0.991	0.851	-1.719	0.547	0.608	-0.902	0.851	-1.719	-0.363
457F	-0.218	-1.087	1.160	-1.501	0.866	0.623	-0.933	1.160	-1.501	-0.156
458G	-0.857	-0.338	1.019	-1.421	0.847	0.625	0.399	1.019	-1.421	0.039
459L	-1.356	-1.061	0.468	-1.433	0.364	0.002	0.988	0.988	-1.433	-0.290
460P	-0.996	-1.182	0.795	-1.670	0.729	0.601	1.972	1.972	-1.670	0.036
461I	-0.648	-1.540	0.739	-1.976	0.765	0.599	2.310	2.310	-1.976	0.036
462V	-1.514	-0.589	0.608	-2.328	0.793	0.601	2.631	2.631	-2.328	0.029
463E	-0.800	0.135	0.692	-2.493	0.784	0.595	1.186	1.186	-2.493	0.014
464V	-0.572	0.169	0.440	-2.664	0.465	0.576	0.966	0.966	-2.664	-0.089
465I	0.294	-0.060	0.571	-2.529	0.437	0.574	0.645	0.645		

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        -2.529    -0.010
466A       0.971     1.121     0.991    -1.889     0.756     0.613    -0.057     1.121
        -1.889     0.358
467G      -0.028     1.696     0.524    -1.182     0.373     0.016     0.291     1.696
        -1.182     0.241
468G       0.617     1.924     0.795    -0.159     0.537     0.034    -0.138     1.924
        -0.159     0.516
469N       1.616     1.297     1.262     0.305     0.920     0.632    -0.486     1.616
        -0.486     0.792
470I       1.894     0.281     1.412     0.553     1.075     0.652     0.684     1.894
         0.281     0.936
471S       1.666     1.097     1.421     0.239     1.121     0.652    -0.326     1.666
        -0.326     0.839
472E       1.186     0.868     1.683     0.107     1.403     0.671     0.006     1.683
         0.006     0.846
473S       1.072     0.832     1.580    -0.303     1.248     0.651     0.160     1.580
        -0.303     0.748
474A       1.938     0.604     1.711    -0.375     1.221     0.649    -0.162     1.938
        -0.375     0.798
475Y       2.159     0.279     1.832    -0.456     1.385     1.118    -0.331     2.159
        -0.456     0.855
476T       2.026     0.481     1.496    -0.273     0.975     0.518    -0.304     2.026
        -0.304     0.703
477G       1.110    -0.106     1.206    -0.267     0.802     0.500    -0.142     1.206
        -0.267     0.443
478D       0.395    -0.124     1.122    -0.477     0.811     0.505     1.303     1.303
        -0.477     0.505
479G       0.281     0.193     0.748    -1.093     0.565     0.487     1.560     1.560
        -1.093     0.392
480I       0.395     0.105     0.851    -1.396     0.720     0.508     1.406     1.406
        -1.396     0.370
481L       0.446     0.023     1.010    -0.978     0.920     0.528     1.565     1.565
        -0.978     0.502
482V       0.446     0.023     1.010     0.215     0.920     0.528     1.565     1.565
         0.023     0.673
483N      -0.035     0.728     1.272     1.472     1.203     0.548     1.897     1.897
        -0.035     1.012
484S      -0.111     0.746     1.328     2.012     1.230     0.551     2.010     2.012
        -0.111     1.110
485D       0.914    -0.224     1.711     1.853     1.531     0.586     1.462     1.853
        -0.224     1.119
486Y       1.508     0.093     1.823     1.277     1.494     0.585     0.874     1.823
         0.093     1.093
487L       0.800     0.403     1.515     0.655     1.230     0.561     0.932     1.515
         0.403     0.871
488N       0.800     0.966     1.515     0.436     1.230     0.561     0.932     1.515
         0.436     0.920
489G      -0.066     0.357     1.122     0.013     0.902     0.074     1.530     1.530
        -0.066     0.562
490M       0.187    -0.270     1.113    -0.243     0.938     0.074     1.417     1.417
        -0.270     0.459
491S       0.901     0.676     1.197    -0.414     0.929     0.068    -0.028     1.197
        -0.414     0.476
492V       0.591     0.634     0.898    -0.663     0.619     0.028    -0.925     0.898
        -0.925     0.169
493P       0.591     0.730     1.356    -0.941     1.303     0.622    -0.860     1.356
        -0.941     0.400
494A       1.122     0.047     1.795    -1.358     1.731     1.230    -0.806     1.795
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495A	0.844	-0.050	1.646	-2.008	1.576	1.210	-1.976	1.646
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496K	0.572	0.489	1.627	-2.398	1.567	1.210	-2.243	1.627
-2.398	0.118							
497R	0.206	0.471	1.262	-2.696	1.285	1.193	-1.874	1.285
-2.696	-0.022							
498A	0.705	-0.546	1.533	-2.464	1.604	1.681	-0.873	1.681
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499I	0.838	0.029	1.963	-2.095	2.078	2.306	0.136	2.306
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500V	-0.104	1.209	1.431	-1.550	1.449	1.717	0.506	1.717
-1.550	0.665							
501D	0.123	1.305	1.328	-1.293	1.339	1.692	0.481	1.692
-1.293	0.711							
502R	0.402	1.393	1.477	-1.181	1.494	1.712	1.651	1.712
-1.181	0.993							
503L	1.040	1.393	1.617	-1.267	1.513	1.710	0.319	1.710
-1.267	0.904							
504E	1.634	2.225	1.730	-1.096	1.476	1.708	-0.269	2.225
-1.096	1.058							
505S	1.268	2.463	1.889	-1.144	1.631	1.844	-0.261	2.463
-1.144	1.098							
506A	1.363	1.607	1.449	-1.176	1.112	1.220	-0.260	1.607
-1.176	0.759							
507G	2.210	2.421	1.963	-1.614	1.576	1.839	-0.696	2.421
-1.614	1.100							
508R	1.849	1.469	1.636	-1.965	1.212	1.239	-1.680	1.849
-1.965	0.537							
509G	1.704	1.231	1.917	-2.348	1.531	1.844	-1.840	1.917
-2.348	0.577							
510R	1.065	0.429	1.776	-2.503	1.513	1.846	-0.509	1.846
-2.503	0.517							
511A	1.198	0.447	2.113	-2.699	1.923	2.445	-0.535	2.445
-2.699	0.699							
512R	0.351	0.243	1.617	-2.690	1.403	1.825	-0.283	1.825
-2.690	0.352							
513I	0.351	0.243	2.075	-2.608	2.087	2.419	-0.218	2.419
-2.608	0.621							
514E	-0.496	1.107	1.561	-2.320	1.622	1.800	0.217	1.800
-2.320	0.499							
515F	-0.363	0.029	1.991	-2.167	2.096	2.425	1.227	2.425
-2.167	0.748							
516K	0.003	-0.001	1.832	-1.873	1.941	2.289	1.219	2.289
-1.873	0.773							
517L	-0.123	-1.007	1.991	-1.682	1.977	2.312	0.919	2.312
-1.682	0.627							
518R	-1.198	-0.803	1.580	-1.337	1.622	1.718	1.380	1.718
-1.337	0.423							
519D	-1.198	-0.803	1.580	-1.113	1.622	1.718	1.380	1.718
-1.198	0.455							
520W	-1.426	-0.851	1.132	-1.071	0.984	1.124	0.305	1.132
-1.426	0.028							
521L	-0.578	0.465	1.646	-1.331	1.449	1.743	-0.131	1.743
-1.331	0.466							
522F	-0.465	0.263	1.543	-1.469	1.349	1.161	0.034	1.543
-1.469	0.345							
523A	-0.831	-0.066	1.702	-1.756	1.504	1.296	0.042	1.702
-1.756	0.270							
524R	-0.319	0.562	1.935	-1.733	1.722	1.291	0.351	1.935

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-1.733    0.544
525Q     -0.370    0.323    2.038   -1.773    1.731    1.310   -0.061    2.038
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526R      0.572    0.191    2.094   -1.812    1.731    1.306   -0.312    2.094
-1.812    0.539
527Y      0.933   -0.797    2.421   -1.888    2.096    1.906    0.672    2.421
-1.888    0.763
528W      0.800   -0.032    2.234   -1.751    1.895    1.300    0.893    2.234
-1.751    0.763
529G     -0.161    0.147    1.842   -1.570    1.476    1.262    0.980    1.842
-1.570    0.568
530E     -0.294   -0.576    1.655   -0.986    1.276    0.656    1.201    1.655
-0.986    0.419
531P     -0.680   -1.558    1.262   -0.639    1.020    0.639    1.191    1.262
-1.558    0.176
532F     -0.281   -1.378    1.122   -0.492    0.993    0.615    1.757    1.757
-1.378    0.334
533P     -0.762   -0.348    1.384   -0.843    1.276    0.634    2.089    2.089
-0.843    0.490
534I     -0.623   -0.168    1.328   -1.024    1.230    0.524    2.106    2.106
-1.024    0.482
535V     -0.344    0.784    1.234   -0.851    1.112    0.525    2.046    2.046
-0.851    0.644
536Y      0.869    1.694    1.571    0.106    1.476    1.009    1.786    1.786
0.106    1.216
537D      1.097    2.459    1.318    1.007    1.157    0.990    1.566    2.459
0.990    1.371
538S      1.868    2.010    1.889    1.458    1.649    1.613    1.244    2.010
1.244    1.676
539D      2.235    1.155    2.253    1.098    1.932    1.631    0.875    2.253
0.875    1.597
540G      2.488    0.411    2.160    0.644    1.868    2.231    0.810    2.488
0.411    1.516
541R      1.989    0.323    1.889    0.276    1.549    1.742   -0.191    1.989
-0.191    1.082
542P      0.996    0.085    1.655    0.371    1.403    1.728    0.084    1.728
0.084    0.903
543H      0.996   -0.274    1.655    0.515    1.403    1.728    0.084    1.728
-0.274    0.872
544A      1.129   -0.364    1.991    0.308    1.813    2.327    0.058    2.327
-0.364    1.037
545L      0.996   -0.568    1.561   -0.077    1.339    1.703   -0.951    1.703
-0.951    0.572
546D      0.996   -0.005    1.318   -0.581    1.066    1.684   -2.181    1.684
-2.181    0.328
547E      0.281   -0.641    1.075   -1.174    0.902    1.069   -2.014    1.075
-2.014   -0.071
548A      0.281   -0.641    1.318   -1.472    1.175    1.088   -0.784    1.318
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549A      0.629   -0.845    1.281   -1.618    1.157    1.084   -0.630    1.281
-1.618    0.151
550L      0.490   -0.486    1.337   -1.653    1.203    1.195   -0.647    1.337
-1.653    0.205
551P     -0.585    0.257    0.926   -1.566    0.847    0.601   -0.186    0.926
-1.566    0.042
552V     -0.585   -0.198    1.169   -1.510    1.121    0.620    1.044    1.169
-1.510    0.237
553E     -0.085    0.257    1.440   -1.295    1.440    1.109    2.045    2.045
-1.295    0.702
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554L	0.263	0.221	1.403	-0.837	1.422	1.105	2.199	2.199	-0.837	0.825
555P	0.263	0.019	1.403	-0.204	1.422	1.105	2.199	2.199	-0.204	0.886
556D	1.129	0.515	1.795	0.446	1.750	1.592	1.601	1.795	0.446	1.261
557V	0.515	0.335	1.720	0.736	1.622	1.012	1.960	1.960	0.335	1.129
558P	1.508	0.335	1.954	0.998	1.768	1.027	1.684	1.954	0.335	1.325
559D	1.508	-0.228	1.954	1.134	1.768	1.027	1.684	1.954	-0.228	1.264
560Y	0.642	-0.941	1.561	1.040	1.440	0.539	2.282	2.282	-0.941	0.938
561S	0.294	0.005	1.599	0.720	1.458	0.543	2.128	2.128	0.005	0.964
562P	-0.420	-0.492	1.290	0.108	1.139	0.528	2.160	2.160	-0.492	0.616
563V	-0.420	-0.312	1.290	-0.398	1.139	0.528	2.160	2.160	-0.420	0.570
564L	-0.167	0.323	1.281	-0.341	1.175	0.528	2.047	2.047	-0.341	0.692
565F	0.054	0.527	1.403	0.278	1.339	0.997	1.879	1.879	0.054	0.925
566D	0.553	1.241	1.431	1.209	1.385	1.467	1.650	1.650	0.553	1.276
567P	0.920	1.557	1.552	1.825	1.394	1.465	0.051	1.825	0.051	1.252
568D	2.134	1.774	1.907	2.084	1.704	1.949	-0.393	2.134	-0.393	1.594
569D	3.127	1.593	2.122	1.942	1.905	1.965	-0.484	3.127	-0.484	1.738
570A	2.987	1.910	2.178	1.546	1.950	2.075	-0.502	2.987	-0.502	1.735
571D	2.987	2.269	2.178	1.284	1.950	2.075	-0.502	2.987	-0.502	1.749
572S	2.766	2.088	2.057	1.048	1.786	1.606	-0.333	2.766	-0.333	1.574
573E	2.267	1.028	2.029	0.873	1.741	1.136	-0.104	2.267	-0.104	1.281
574P	2.267	0.453	2.272	1.017	2.014	1.155	1.126	2.272	0.453	1.472
575S	1.053	0.926	1.917	0.945	1.704	0.672	1.570	1.917	0.672	1.255
576P	0.775	0.071	1.767	0.614	1.549	0.652	0.400	1.767	0.071	0.832
577P	0.642	0.203	1.889	-0.084	1.823	0.647	0.491	1.889	-0.084	0.801
578L	0.642	0.419	1.646	-1.028	1.549	0.628	-0.739	1.646	-1.028	0.445
579A	0.560	0.121	1.692	-1.697	1.549	0.628	-0.858	1.692	-1.697	0.285
580K	0.920	0.025	1.776	-1.923	1.640	1.208	-1.104	1.776	-1.923	0.363
581A	0.155	-0.717	1.552	-1.878	1.385	1.215	-1.302	1.552	-1.878	0.059
582T	0.503	-0.813	1.515	-1.773	1.367	1.211	-1.148	1.515	-1.773	0.123
583E	0.503	-0.765	1.674	-1.445	1.540	1.831	0.130	1.831		

	−1.445	0.495						
584W	−0.092	−1.544	1.103	−1.138	0.893	1.238	0.653	1.238
	−1.544	0.159						
585V	0.408	−0.502	1.375	−0.297	1.212	1.726	1.654	1.726
	−0.502	0.797						
586H	−0.503	−0.611	1.094	0.207	1.066	1.712	2.049	2.049
	−0.611	0.716						
587V	−0.363	−0.074	1.038	0.759	1.020	1.601	2.066	2.066
	−0.363	0.864						
588D	−0.313	0.562	0.935	0.600	1.011	1.581	2.479	2.479
	−0.313	0.979						
589L	0.281	0.650	1.047	0.397	0.975	1.580	1.890	1.890
	0.281	0.974						
590D	0.781	0.650	1.160	−0.004	1.121	1.449	1.614	1.614
	−0.004	0.967						
591L	1.375	0.942	1.272	−0.076	1.084	1.447	1.025	1.447
	−0.076	1.010						
592G	0.161	1.505	0.917	−0.303	0.774	0.964	1.469	1.505
	−0.303	0.784						
593D	1.103	0.471	1.449	−0.450	1.403	1.553	1.099	1.553
	−0.450	0.947						
594G	0.604	0.788	1.421	−0.838	1.358	1.083	1.328	1.421
	−0.838	0.821						
595L	1.065	0.974	1.758	−1.143	1.586	1.097	1.225	1.758
	−1.143	0.937						
596K	1.116	1.718	1.917	−0.965	1.786	1.117	1.385	1.917
	−0.965	1.153						
597P	0.749	1.377	2.075	−0.762	1.941	1.253	1.393	2.075
	−0.762	1.147						
598Y	1.021	1.627	2.356	−0.103	2.306	1.742	1.384	2.356
	−0.103	1.476						
599S	1.932	1.938	2.636	0.225	2.451	1.756	0.990	2.636
	0.225	1.704						
600R	2.014	0.968	2.487	0.873	2.123	1.202	0.812	2.487
	0.812	1.497						
601D	1.647	0.513	2.122	1.177	1.841	1.185	1.180	2.122
	0.513	1.381						
602T	1.502	0.465	1.860	1.427	1.649	1.183	0.793	1.860
	0.465	1.269						
603N	1.224	−0.528	1.954	1.002	1.768	1.182	0.853	1.954
	−0.528	1.065						
604V	1.337	−1.138	1.851	0.376	1.668	0.599	1.017	1.851
	−1.138	0.816						
605M	0.073	−0.414	1.599	−0.489	1.367	0.136	1.049	1.599
	−0.489	0.474						
606P	−0.123	0.556	1.403	−0.869	1.212	0.116	−0.002	1.403
	−0.869	0.327						
607Q	−0.205	1.052	1.094	−1.243	0.856	0.075	0.111	1.094
	−1.243	0.249						
608W	0.440	0.059	1.365	−1.201	1.020	0.094	−0.318	1.365
	−1.201	0.208						
609A	1.116	0.155	1.524	−0.866	1.130	0.097	−0.103	1.524
	−0.866	0.436						
610G	0.351	0.730	1.300	−0.405	0.875	0.103	−0.301	1.300
	−0.405	0.379						
611S	−0.148	−0.102	1.225	0.110	0.738	0.080	−0.132	1.225
	−0.148	0.253						
612S	0.977	−0.144	1.533	0.109	1.084	0.654	−0.180	1.533
	−0.180	0.576						

613W	0.263	-1.406	1.449	-0.467	1.093	0.660	1.265	1.449
-1.406	0.408							
614Y	0.168	-0.412	1.889	-1.289	1.613	1.284	1.264	1.889
-1.289	0.645							
615E	-0.363	0.534	1.991	-1.917	1.695	1.283	1.436	1.991
-1.917	0.666							
616L	-0.446	0.317	2.038	-2.126	1.695	1.283	1.317	2.038
-2.126	0.583							
617R	0.819	0.612	2.290	-1.603	1.996	1.747	1.286	2.290
-1.603	1.021							
618Y	1.072	0.407	2.281	-0.787	2.032	1.747	1.173	2.281
-0.787	1.132							
619T	0.711	1.670	2.113	0.487	1.841	1.767	1.467	2.113
0.487	1.437							
620D	1.736	1.754	2.496	1.824	2.142	1.802	0.919	2.496
0.919	1.810							
621P	1.881	2.028	2.216	3.002	1.823	1.198	1.080	3.002
1.080	1.889							
622H	2.494	1.495	2.290	3.493	1.950	1.778	0.721	3.493
0.721	2.032							
623N	2.431	1.441	2.524	3.106	2.269	2.383	0.680	3.106
0.680	2.119							
624S	1.217	0.832	2.188	1.844	1.905	1.898	0.940	2.188
0.832	1.546							
625E	1.173	0.808	1.730	0.522	1.540	1.897	1.342	1.897
0.522	1.287							
626R	1.173	0.808	1.571	-0.465	1.367	1.277	0.065	1.571
-0.465	0.828							
627F	1.091	0.604	1.720	-0.841	1.695	1.831	0.243	1.831
-0.841	0.906							
628C	1.173	1.353	1.898	-1.024	1.905	2.410	0.057	2.410
-1.024	1.110							
629A	1.122	1.317	1.870	-0.871	1.850	1.851	-0.030	1.870
-0.871	1.016							
630K	1.350	0.910	1.767	-0.790	1.741	1.826	-0.055	1.826
-0.790	0.964							
631E	2.064	-0.424	1.832	-0.407	1.786	1.822	-1.317	2.064
-1.317	0.765							
632N	1.856	-1.113	2.300	-0.227	2.114	1.824	-1.607	2.300
-1.607	0.735							
633E	1.091	-1.095	2.318	-0.401	2.132	1.849	-0.575	2.318
-1.095	0.760							
634A	0.465	-1.312	1.860	-1.105	1.540	1.271	-0.695	1.860
-1.312	0.289							
635Y	0.332	-0.498	1.524	-1.697	1.130	0.672	-0.668	1.524
-1.697	0.113							
636W	0.022	0.267	1.468	-2.120	1.093	0.650	-0.335	1.468
-2.120	0.149							
637M	-0.205	0.770	1.571	-2.024	1.203	0.675	-0.310	1.571
-2.024	0.240							
638G	-0.205	1.459	1.814	-1.585	1.476	0.694	0.920	1.814
-1.585	0.653							
639P	0.048	0.922	1.561	-1.255	1.239	0.675	-0.422	1.561
-1.255	0.396							
640R	1.173	1.191	1.870	-1.044	1.586	1.249	-0.470	1.870
-1.044	0.793							
641P	1.571	0.736	2.038	-0.751	1.713	1.852	-0.148	2.038
-0.751	1.002							
642A	1.571	0.916	2.038	-0.527	1.713	1.852	-0.148	2.038

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-0.527    1.059
643E       1.571    1.455    2.038   -0.065    1.713    1.852   -0.148    2.038
-0.148    1.202
644H       1.938    1.239    1.879    0.590    1.558    1.716   -0.156    1.938
-0.156    1.252
645G       2.437    1.776    1.907    1.158    1.604    2.186   -0.385    2.437
-0.385    1.526
646P       2.437    1.776    2.150    1.628    1.877    2.205    0.845    2.437
0.845    1.845
647D       2.305    1.321    1.814    1.899    1.467    1.606    0.872    2.305
0.872    1.612
648D       2.532    1.321    1.646    1.514    1.248    0.986    0.605    2.532
0.605    1.407
649P       1.938    0.578    1.533    0.790    1.285    0.987    1.193    1.938
0.578    1.186
650G       2.437   -0.188    1.561    0.021    1.330    1.457    0.964    2.437
-0.188    1.083
651G       1.224   -0.911    1.206   -0.600    1.020    0.974    1.408    1.408
-0.911    0.617
652V       0.471   -0.911    1.188   -0.671    0.938    0.504    1.749    1.749
-0.911    0.467
653D       0.104   -0.188    0.823   -0.721    0.656    0.487    2.118    2.118
-0.721    0.468
654L       0.104   -0.727    0.823   -0.854    0.656    0.487    2.118    2.118
-0.854    0.373
655Y       0.104    0.053    0.823   -1.250    0.656    0.487    2.118    2.118
-1.250    0.427
656V       0.471    0.550    0.945   -1.523    0.665    0.485    0.519    0.945
-1.523    0.302
657G       0.332    0.646    1.001   -1.841    0.711    0.596    0.502    1.001
-1.841    0.278
658G       1.046   -0.078    1.244   -1.486    0.875    1.210    0.334    1.244
-1.486    0.449
659A       1.299   -0.909    0.991   -1.137    0.638    1.191   -1.008    1.299
-1.137    0.152
660E       1.299   -0.819    0.991   -0.566    0.638    1.191   -1.008    1.299
-1.008    0.247
661H       0.357   -1.598    0.917   -0.406    0.692    1.196   -0.573    1.196
-1.598    0.084
662A       0.130   -1.893    1.085   -0.284    0.911    1.816   -0.306    1.816
-1.893    0.208
663V      -0.585   -2.300    1.001   -0.502    0.920    1.822    1.139    1.822
-2.300    0.214
664L      -1.660   -1.348    0.589   -0.391    0.565    1.227    1.600    1.600
-1.660    0.083
665H      -1.912   -0.330    0.683   -0.546    0.629    0.627    1.665    1.665
-1.912    0.116
666L      -1.634   -0.595    0.832   -0.466    0.784    0.647    2.835    2.835
-1.634    0.343
667L      -1.135   -0.893    1.384   -0.722    1.267    1.270    2.245    2.245
-1.135    0.488
668Y      -1.135   -0.599    1.403   -0.606    1.212    1.269    2.061    2.061
-1.135    0.515
669S      -1.900    0.640    1.262   -0.773    1.057    0.674    1.816    1.816
-1.900    0.397
670R      -1.185   -0.312    1.505   -0.417    1.221    1.289    1.649    1.649
-1.185    0.536
671F      -0.243   -1.330    2.038   -0.358    1.850    1.878    1.279    2.038
-1.330    0.730
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672W	-0.357	-1.562	1.664	-0.132	1.604	1.860	1.535	1.860
-1.562	0.659							
673H	-1.350	-0.520	1.431	-0.359	1.458	1.845	1.810	1.845
-1.350	0.616							
674K	-1.735	-0.815	1.253	-0.671	1.221	1.240	2.143	2.143
-1.735	0.377							
675V	-0.521	-1.019	1.589	-1.079	1.586	1.725	1.883	1.883
-1.079	0.595							
676L	-0.471	-0.833	1.487	-1.080	1.576	1.705	2.296	2.296
-1.080	0.669							
677Y	-0.243	-0.725	1.318	-0.912	1.358	1.085	2.029	2.029
-0.912	0.559							
678D	-0.471	0.538	1.029	-0.277	0.893	1.110	2.231	2.231
-0.471	0.722							
679L	-0.471	0.854	1.029	0.004	0.893	1.110	2.231	2.231
-0.471	0.807							
680G	0.522	1.872	1.262	0.430	1.039	1.125	1.956	1.956
0.430	1.172							
681H	1.053	1.820	1.160	0.853	0.957	1.126	1.784	1.820
0.853	1.250							
682V	0.686	2.088	1.318	0.979	1.112	1.261	1.792	2.088
0.686	1.320							
683S	1.761	1.778	1.730	0.820	1.467	1.856	1.331	1.856
0.820	1.535							
684S	1.533	1.736	1.982	0.386	1.786	1.875	1.550	1.982
0.386	1.550							
685R	1.280	1.694	2.075	-0.382	1.850	1.274	1.615	2.075
-0.382	1.344							
686E	1.780	0.676	2.627	-0.786	2.333	1.897	1.025	2.627
-0.786	1.365							
687P	1.634	0.005	2.907	-1.179	2.652	2.502	0.865	2.907
-1.179	1.341							
688Y	0.642	0.255	2.674	-1.585	2.506	2.487	1.140	2.674
-1.585	1.160							
689R	0.142	1.153	2.122	-1.978	2.023	1.864	1.730	2.122
-1.978	1.008							
690R	0.092	0.966	2.094	-1.854	1.968	1.305	1.643	2.094
-1.854	0.888							
691L	0.338	-0.254	2.178	-1.356	2.069	1.329	1.586	2.178
-1.356	0.841							
692V	0.819	-0.374	1.917	-0.364	1.786	1.309	1.254	1.917
-0.374	0.907							
693N	0.433	0.213	1.739	0.339	1.549	0.704	1.587	1.739
0.213	0.938							
694Q	-0.338	-0.396	1.169	0.240	1.057	0.081	1.910	1.910
-0.396	0.532							
695G	0.623	-1.294	1.580	-0.427	1.422	0.118	1.638	1.638
-1.294	0.523							
696Y	0.990	-1.921	1.702	-1.160	1.431	0.116	0.039	1.702
-1.921	0.171							
697I	0.427	-1.921	1.655	-1.664	1.358	0.095	0.484	1.655
-1.921	0.062							
698Q	0.180	-1.105	1.328	-1.718	0.984	0.053	-0.689	1.328
-1.718	-0.138							
699A	-0.300	-1.057	1.589	-1.583	1.267	0.072	-0.357	1.589
-1.583	-0.053							
700Y	0.149	-1.057	1.533	-1.472	1.185	0.073	-0.649	1.533
-1.472	-0.034							
701A	1.287	0.163	1.945	-0.990	1.522	0.560	-0.979	1.945

	1	2	3	4	5	6	7	8	9	10
									-0.990	0.501
702Y	1.040	0.790	1.617	-0.589	1.148	0.517	-2.153	1.617	-2.153	0.339
703T	1.173	2.052	2.047	-0.181	1.622	1.142	-1.143	2.052	-1.143	0.959
704D	1.653	1.155	1.786	-0.264	1.339	1.123	-1.475	1.786	-1.475	0.760
705A	1.932	0.519	1.935	-0.501	1.494	1.143	-0.305	1.935	-0.501	0.888
706R	1.932	0.878	1.935	-0.804	1.494	1.143	-0.305	1.935	-0.804	0.896
707G	1.369	0.065	1.617	-0.760	1.330	1.124	0.243	1.617	-0.760	0.713
708S	0.869	0.013	1.589	-0.579	1.285	0.654	0.472	1.589	-0.579	0.615
709Y	0.869	-0.352	1.589	-0.489	1.285	0.654	0.472	1.589	-0.489	0.576
710V	1.097	-0.042	1.487	-0.677	1.175	0.629	0.446	1.487	-0.677	0.588
711P	1.116	-0.270	1.823	-0.923	1.595	0.672	0.609	1.823	-0.923	0.660
712A	0.471	-0.054	1.552	-1.258	1.431	0.653	1.038	1.552	-1.258	0.548
713E	0.085	0.760	1.160	-1.526	1.175	0.636	1.028	1.175	-1.526	0.474
714Q	0.813	0.812	1.608	-1.789	1.549	1.234	0.413	1.608	-1.789	0.663
715V	0.945	0.860	1.795	-2.220	1.750	1.839	0.192	1.839	-2.220	0.737
716I	1.173	1.770	1.786	-2.480	1.704	1.839	1.202	1.839	-2.480	0.999
717E	1.312	1.920	1.730	-2.277	1.658	1.729	1.220	1.920	-2.277	1.042
718R	1.198	1.249	1.832	-1.887	1.759	2.311	1.056	2.311	-1.887	1.074
719G	0.850	0.029	1.889	-1.151	1.722	2.314	0.718	2.314	-1.151	0.910
720D	1.122	-0.240	1.907	-0.736	1.731	2.313	0.985	2.313	-0.736	1.012
721R	0.509	-0.152	1.832	-0.674	1.604	1.733	1.343	1.832	-0.674	0.885
722F	0.376	-0.607	1.646	-0.807	1.403	1.128	1.564	1.646	-0.807	0.672
723V	0.376	0.107	1.646	-0.861	1.403	1.128	1.564	1.646	-0.861	0.766
724Y	-0.123	0.830	1.617	-0.766	1.358	0.658	1.793	1.793	-0.766	0.767
725P	0.244	1.812	1.459	-0.226	1.203	0.522	1.785	1.812	-0.226	0.971
726G	1.186	1.357	1.515	0.149	1.203	0.518	1.534	1.534	0.149	1.066
727P	1.913	1.305	1.963	0.388	1.576	1.116	0.919	1.963	0.388	1.311
728D	1.799	0.850	1.589	0.164	1.330	1.098	1.176	1.799	0.164	1.144
729G	2.159	0.137	1.674	-0.544	1.422	1.678	0.930	2.159	-0.544	1.065
730E	1.565	0.001	1.561	-1.331	1.458	1.680	1.518	1.680	-1.331	0.922

731V	0.850	0.001	1.253	-1.824	1.139	1.665	1.549	1.665
-1.824	0.662							
732E	0.598	-0.078	1.309	-1.895	1.194	1.219	1.721	1.721
-1.895	0.581							
733V	0.730	-0.026	1.646	-1.580	1.604	1.818	1.695	1.818
-1.580	0.841							
734F	-0.344	0.902	1.253	-1.178	1.194	1.223	1.972	1.972
-1.178	0.717							
735Q	0.250	0.752	1.365	-1.002	1.157	1.221	1.384	1.384
-1.002	0.732							
736E	0.117	0.888	1.487	-1.055	1.431	1.216	1.475	1.487
-1.055	0.794							
737F	-0.155	1.145	1.468	-1.375	1.422	1.217	1.208	1.468
-1.375	0.704							
738G	0.787	2.174	1.524	-1.792	1.422	1.212	0.957	2.174
-1.792	0.898							
739K	0.768	1.343	1.646	-2.259	1.686	1.765	0.859	1.765
-2.259	0.830							
740I	0.686	1.343	1.468	-2.198	1.476	1.185	1.045	1.476
-2.198	0.715							
741G	0.686	2.277	1.449	-1.992	1.531	1.186	1.229	2.277
-1.992	0.909							
742K	0.686	2.505	1.907	-1.516	2.214	1.781	1.294	2.505
-1.516	1.267							
743S	0.768	1.577	1.758	-0.855	1.886	1.227	1.116	1.886
-0.855	1.068							
744L	1.685	1.577	2.047	-0.146	2.060	1.245	0.954	2.060
-0.146	1.346							
745K	1.091	2.140	1.935	0.502	2.096	1.247	1.542	2.140
0.502	1.508							
746N	1.141	1.848	1.636	1.245	1.613	0.672	1.637	1.848
0.672	1.399							
747S	0.863	1.814	1.730	1.430	1.731	0.671	1.697	1.814
0.671	1.420							
748V	2.077	0.634	2.085	1.522	2.041	1.155	1.253	2.085
0.634	1.538							
749S	2.210	0.766	1.963	1.361	1.768	1.160	1.162	2.210
0.766	1.484							
750P	1.261	0.449	1.524	0.903	1.440	1.121	1.597	1.597
0.449	1.185							
751D	0.939	0.091	1.160	0.363	1.194	1.119	2.059	2.059
0.091	0.989							
752E	1.805	-0.855	1.552	-0.028	1.522	1.606	1.461	1.805
-0.855	1.009							
753I	1.527	-0.803	1.403	-0.351	1.367	1.586	0.291	1.586
-0.803	0.717							
754C	1.274	-0.478	1.412	-0.145	1.330	1.586	0.403	1.586
-0.478	0.769							
755D	1.002	0.025	1.132	-0.118	0.966	1.097	0.413	1.132
-0.118	0.645							
756A	0.642	-0.023	0.804	-0.362	0.601	0.498	-0.571	0.804
-0.571	0.227							
757Y	1.780	-0.228	1.216	-0.609	0.938	0.985	-0.902	1.780
-0.902	0.454							
758G	2.020	0.992	1.627	-0.698	1.185	0.987	-1.483	2.020
-1.483	0.661							
759A	0.806	0.269	1.272	-0.502	0.875	0.503	-1.039	1.272
-1.039	0.312							
760D	0.939	-0.138	1.702	-0.308	1.349	1.128	-0.030	1.702

-0.308	0.663							
761T	0.825	-0.102	1.328	-0.608	1.103	1.110	0.227	1.328
-0.608	0.555							
762L	0.345	-0.707	1.589	-1.231	1.385	1.130	0.558	1.589
-1.231	0.438							
763R	0.705	0.353	1.917	-1.764	1.750	1.729	1.542	1.917
-1.764	0.890							
764V	-0.193	-0.574	1.636	-2.162	1.476	1.258	1.496	1.636
-2.162	0.420							
765Y	-0.111	0.149	1.589	-2.014	1.476	1.258	1.615	1.615
-2.014	0.566							
766E	0.206	0.914	1.664	-1.877	1.513	1.269	1.125	1.664
-1.877	0.688							
767M	0.300	0.135	1.225	-1.618	0.993	0.645	1.126	1.225
-1.618	0.401							
768S	0.667	0.824	1.589	-1.375	1.276	0.662	0.757	1.589
-1.375	0.629							
769M	0.206	-0.032	1.253	-1.258	1.048	0.648	0.860	1.253
-1.258	0.389							
770G	0.206	0.938	1.253	-1.258	1.048	0.648	0.860	1.253
-1.258	0.528							
771P	0.604	1.125	1.262	-1.328	1.002	0.631	-0.095	1.262
-1.328	0.457							
772L	0.604	1.125	1.262	-1.423	1.002	0.631	-0.095	1.262
-1.423	0.444							
773E	1.135	0.826	1.702	-1.380	1.431	1.239	-0.040	1.702
-1.380	0.702							
774A	0.907	0.251	1.954	-1.023	1.750	1.258	0.179	1.954
-1.023	0.754							
775S	0.142	0.742	1.730	-0.864	1.494	1.264	-0.018	1.730
-0.864	0.641							
776R	0.857	0.718	1.814	-0.745	1.485	1.258	-1.464	1.814
-1.464	0.561							
777P	0.692	0.443	1.683	-0.922	1.276	0.679	-1.397	1.683
-1.397	0.351							
778W	0.920	-0.011	2.132	-1.164	1.914	1.273	-0.321	2.132
-1.164	0.677							
779A	1.141	0.395	2.253	-1.173	2.078	1.742	-0.490	2.253
-1.173	0.849							
780T	0.642	1.022	1.702	-0.921	1.595	1.119	0.099	1.702
-0.921	0.751							
781K	0.275	0.532	1.337	-0.696	1.312	1.102	0.468	1.337
-0.696	0.619							
782D	1.268	-0.707	1.309	-0.665	1.248	1.076	0.446	1.309
-0.707	0.568							
783V	1.268	-0.432	1.309	-0.925	1.248	1.076	0.446	1.309
-0.925	0.570							
784V	0.819	-0.510	1.365	-1.393	1.330	1.076	0.738	1.365
-1.393	0.489							
785G	0.724	-0.619	1.346	-1.666	1.166	1.106	0.672	1.346
-1.666	0.390							
786A	-0.490	-0.755	1.010	-1.807	0.802	0.621	0.932	1.010
-1.807	0.045							
787Y	-0.838	0.059	1.047	-1.760	0.820	0.625	0.778	1.047
-1.760	0.104							
788R	-0.224	0.369	1.496	-1.582	1.203	0.666	0.353	1.496
-1.582	0.326							
789F	-0.319	-0.947	1.935	-1.565	1.722	1.291	0.351	1.935
-1.565	0.353							

790L	-0.686	0.041	1.814	-1.535	1.713	1.292	1.950	1.950
-1.535	0.656							
791Q	-1.198	0.041	1.580	-1.752	1.494	1.298	1.640	1.640
-1.752	0.443							
792R	-1.198	-0.546	1.580	-1.981	1.494	1.298	1.640	1.640
-1.981	0.327							
793V	-1.198	-1.456	1.561	-2.340	1.549	1.299	1.824	1.824
-2.340	0.177							
794W	-0.850	-0.821	1.524	-2.495	1.531	1.295	1.978	1.978
-2.495	0.309							
795R	-1.464	0.257	1.075	-2.613	1.148	1.255	2.403	2.403
-2.613	0.295							
796L	-1.097	-0.466	0.917	-2.228	0.993	1.119	2.395	2.395
-2.228	0.233							
797V	-0.370	0.229	1.365	-1.772	1.367	1.717	1.780	1.780
-1.772	0.617							
798V	0.395	0.952	1.505	-0.772	1.522	2.311	2.025	2.311
-0.772	1.134							
799D	0.459	1.623	1.272	0.102	1.203	1.707	2.067	2.067
0.102	1.205							
800E	1.401	1.575	1.346	0.804	1.148	1.701	1.632	1.701
0.804	1.373							
801H	2.128	1.814	1.795	0.820	1.522	2.299	1.017	2.299
0.820	1.628							
802T	2.690	1.627	2.113	0.477	1.686	2.318	0.469	2.690
0.469	1.626							
803G	2.324	1.137	2.272	-0.445	1.841	2.453	0.477	2.453
-0.445	1.437							
804E	1.597	1.048	1.823	-1.014	1.467	1.855	1.093	1.855
-1.014	1.124							
805T	1.597	1.101	1.664	-1.624	1.294	1.236	-0.185	1.664
-1.624	0.726							
806R	1.900	0.513	1.739	-1.578	1.458	1.705	-0.235	1.900
-1.578	0.786							
807V	1.900	0.275	1.739	-1.384	1.458	1.705	-0.235	1.900
-1.384	0.780							
808A	1.173	0.167	1.290	-0.937	1.084	1.107	0.380	1.290
-0.937	0.609							
809D	1.337	0.706	1.421	-0.799	1.294	1.686	0.313	1.686
-0.799	0.851							
810G	0.490	-0.158	0.907	-0.965	0.829	1.067	0.749	1.067
-0.965	0.417							
811V	1.356	-0.246	1.300	-1.220	1.157	1.554	0.151	1.554
-1.220	0.579							
812E	0.718	0.341	1.160	-1.408	1.139	1.556	1.483	1.556
-1.408	0.713							
813L	0.718	-0.438	1.160	-1.069	1.139	1.556	1.483	1.556
-1.069	0.650							
814D	0.686	0.580	1.365	-0.521	1.339	1.576	1.524	1.576
-0.521	0.936							
815I	0.338	0.041	1.403	-0.075	1.358	1.580	1.370	1.580
-0.075	0.859							
816D	0.111	0.161	1.505	-0.141	1.467	1.605	1.395	1.605
-0.141	0.872							
817T	0.825	-0.288	1.589	-0.531	1.458	1.600	-0.050	1.600
-0.531	0.658							
818L	-0.389	0.035	1.234	-1.403	1.148	1.116	0.394	1.234
-1.403	0.305							
819R	0.250	0.730	1.533	-1.514	1.339	1.734	0.340	1.734

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        -1.514    0.630
820A     -0.117   -0.408    1.692   -1.495    1.494    1.870    0.348    1.870
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821L     -0.117   -0.504    1.692   -0.795    1.494    1.870    0.348    1.870
        -0.795    0.570
822H     -0.041    0.327    1.636   -0.452    1.467    1.866    0.235    1.866
        -0.452    0.720
823R     -0.540    0.141    1.085   -0.543    0.984    1.243    0.824    1.243
        -0.543    0.456
824T     -0.313    0.183    1.075   -1.191    0.938    1.243    1.835    1.835
        -1.191    0.539
825I      0.035    0.267    1.038   -1.702    0.920    1.239    1.988    1.988
        -1.702    0.541
826V      0.313    1.131    1.029   -1.916    0.902    0.639    1.881    1.881
        -1.916    0.568
827G      0.541    1.052    0.926   -1.569    0.793    0.614    1.856    1.856
        -1.569    0.602
828V      0.844    0.425    1.001   -0.897    0.957    1.083    1.806    1.806
        -0.897    0.746
829S      0.768    0.521    1.075   -0.228    0.929    1.086    1.735    1.735
        -0.228    0.841
830E      1.135   -0.538    1.197    0.208    0.938    1.084    0.136    1.197
        -0.538    0.594
831D      0.907   -0.300    1.206    0.143    0.984    1.084   -0.874    1.206
        -0.874    0.450
832F      0.560   -0.230    1.244   -0.284    1.002    1.088   -1.028    1.244
        -1.028    0.336
833A      0.414    0.554    1.524   -1.165    1.321    1.693   -1.188    1.693
        -1.188    0.450
834A      0.364    1.044    1.496   -1.331    1.267    1.134   -1.275    1.496
        -1.331    0.385
835L      0.174    1.044    1.524   -0.829    1.257    0.685   -1.379    1.524
        -1.379    0.354
836R      1.084    1.740    1.786    0.491    1.458    0.701   -1.590    1.786
        -1.590    0.810
837N      1.084    0.926    1.786    1.754    1.458    0.701   -1.590    1.786
        -1.590    0.874
838N      1.280    1.149    1.982    2.200    1.613    0.721   -0.539    2.200
        -0.539    1.201
839T      1.995    0.335    2.066    1.480    1.604    0.716   -1.984    2.066
        -1.984    0.887
840A      2.090   -0.480    2.085    0.305    1.768    0.686   -1.918    2.090
        -1.918    0.648
841T      1.065    0.095    1.702   -0.929    1.467    0.650   -1.370    1.702
        -1.370    0.383
842A      0.117   -0.803    1.262   -1.813    1.139    0.612   -0.935    1.262
        -1.813   -0.060
843K      0.281   -0.312    1.393   -2.342    1.349    1.191   -1.002    1.393
        -2.342    0.080
844L      0.029   -0.534    1.646   -2.597    1.586    1.211    0.340    1.646
        -2.597    0.240
845I      0.029   -0.240    1.646   -2.532    1.586    1.211    0.340    1.646
        -2.532    0.291
846E      0.338   -0.120    1.945   -1.675    1.895    1.251    1.237    1.945
        -1.675    0.696
847Y      0.111   -0.204    1.655   -0.225    1.431    1.276    1.439    1.655
        -0.225    0.783
848T      0.111    1.034    1.655    1.203    1.431    1.276    1.439    1.655
         0.111    1.164
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849N	0.945	1.375	1.991	2.181	1.604	1.295	1.158	2.181
0.945	1.507							
850H	0.813	0.856	2.113	1.961	1.877	1.290	1.250	2.113
0.813	1.451							
851L	1.293	1.579	2.309	0.860	2.278	1.865	0.983	2.309
0.860	1.595							
852T	1.097	2.323	2.272	-0.083	2.296	2.465	1.209	2.465
-0.083	1.654							
853K	0.920	1.832	2.403	-0.707	2.461	3.049	1.321	3.049
-0.707	1.611							
854K	1.420	0.904	2.515	-0.386	2.606	2.918	1.045	2.918
-0.386	1.575							
855H	2.134	0.431	2.599	0.097	2.597	2.913	-0.400	2.913
-0.400	1.482							
856R	1.571	1.155	2.281	0.261	2.433	2.894	0.148	2.894
0.148	1.535							
857D	1.344	0.341	2.075	0.047	2.069	2.318	0.303	2.318
0.047	1.214							
858A	1.249	-0.198	2.057	-0.368	1.905	2.349	0.237	2.349
-0.368	1.033							
859V	1.249	-0.294	1.898	-0.988	1.731	1.729	-1.040	1.898
-1.040	0.612							
860P	1.116	0.377	1.468	-1.269	1.257	1.104	-2.050	1.468
-2.050	0.286							
861R	0.250	0.377	1.075	-1.704	0.929	0.617	-1.452	1.075
-1.704	0.013							
862A	0.610	-0.641	1.403	-1.978	1.294	1.216	-0.468	1.403
-1.978	0.205							
863A	0.977	-0.737	1.767	-1.965	1.576	1.234	-0.837	1.767
-1.965	0.288							
864V	0.263	-0.246	1.440	-1.929	1.312	1.220	-0.622	1.440
-1.929	0.205							
865E	-0.237	-0.264	0.889	-1.642	0.829	0.597	-0.032	0.889
-1.642	0.020							
866P	0.010	-1.043	1.216	-1.453	1.203	0.639	1.141	1.216
-1.453	0.245							
867L	-0.389	-1.402	1.206	-1.502	1.248	0.657	2.096	2.096
-1.502	0.273							
868V	-0.736	-0.839	1.244	-1.700	1.267	0.660	1.942	1.942
-1.700	0.263							
869Q	-1.097	-0.947	0.917	-1.954	0.902	0.061	0.958	0.958
-1.954	-0.166							
870M	-1.097	-1.438	0.917	-2.076	0.902	0.061	0.958	0.958
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871L	-1.097	-0.965	0.917	-2.003	0.902	0.061	0.958	0.958
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872A	-0.730	-0.671	1.038	-1.730	0.911	0.059	-0.640	1.038
-1.730	-0.252							
873P	-0.977	-0.995	0.954	-1.456	0.811	0.036	-0.584	0.954
-1.456	-0.316							
874L	-0.578	-1.354	1.122	-0.832	0.938	0.638	-0.261	1.122
-1.354	-0.047							
875A	-0.503	-0.574	1.066	-0.381	0.911	0.635	-0.375	1.066
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876P	-0.503	0.001	1.066	0.112	0.911	0.635	-0.375	1.066
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877H	-0.142	-0.562	1.150	-0.052	1.002	1.215	-0.621	1.215
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878I	0.933	-1.156	1.561	-0.649	1.358	1.810	-1.082	1.810

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-1.156    0.396
879A         0.218   -1.035    1.477   -1.544    1.367    1.815    0.363    1.815
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880E        -0.547   -0.222    1.253   -2.162    1.112    1.821    0.165    1.821
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881E        -1.261   -1.001    1.010   -2.563    0.948    1.207    0.333    1.207
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882L        -0.490   -0.949    1.580   -2.564    1.440    1.830    0.010    1.830
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883W        -1.204   -0.136    1.496   -2.639    1.449    1.835    1.456    1.835
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884L        -1.337    0.858    1.160   -2.638    1.039    1.236    1.482    1.482
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885R        -1.388    1.553    1.132   -2.101    0.984    0.677    1.395    1.553
-2.101    0.322
886L        -0.477    1.595    1.412   -1.250    1.130    0.691    1.001    1.595
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887G         0.484    1.595    1.589   -0.048    1.267    0.686    1.020    1.595
-0.048    0.942
888N         1.476    0.968    1.823    0.973    1.412    0.700    0.745    1.823
0.700    1.157
889T         0.629    0.449    1.309    1.299    0.948    0.081    1.180    1.309
0.081    0.842
890T         1.344    0.586    1.393    0.928    0.938    0.076   -0.265    1.393
-0.265    0.714
891S         1.116    0.453    1.561    0.573    1.157    0.696    0.002    1.561
0.002    0.794
892L         1.034   -0.576    1.253    0.087    0.802    0.655    0.116    1.253
-0.576    0.481
893A         0.838   -0.013    1.300    0.268    0.920    0.654    0.295    1.300
-0.013    0.609
894H        -0.073    0.818    1.038    0.494    0.720    0.638    0.505    1.038
-0.073    0.592
895G        -0.351    0.728    1.132    0.639    0.838    0.637    0.565    1.132
-0.351    0.598
896P         0.591    0.640    1.664    0.463    1.467    1.227    0.195    1.664
0.195    0.892
897F         0.591    0.281    1.664    0.126    1.467    1.227    0.195    1.664
0.126    0.793
898P         1.091    0.455    1.776   -0.327    1.613    1.096   -0.081    1.776
-0.327    0.803
899K         0.863   -0.310    1.786   -0.528    1.658    1.096   -1.091    1.786
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900A         0.863   -1.346    1.543   -0.633    1.385    1.077   -2.321    1.543
-2.321    0.081
901D         1.325   -1.442    1.860   -0.672    1.668    1.092   -2.240    1.860
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902A         0.610   -1.442    1.533   -0.944    1.403    1.078   -2.025    1.533
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903A         0.016   -0.867    0.963   -1.332    0.756    0.485   -1.502    0.963
-1.502   -0.211
904Y         0.515   -0.376    1.234   -1.401    1.075    0.974   -0.501    1.234
-1.401    0.217
905L         0.376   -0.066    1.290   -1.414    1.121    1.085   -0.518    1.290
-1.414    0.268
906V         0.572    0.714    1.487   -0.901    1.276    1.105    0.533    1.487
-0.901    0.684
907D         0.206    0.403    1.365   -0.619    1.267    1.106    2.132    2.132
-0.619    0.837
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908E	0.819	0.223	1.440	-0.643	1.394	1.686	1.773	1.773	-0.643	0.956
909T	1.280	-0.448	1.776	-0.971	1.622	1.700	1.671	1.776	-0.971	0.947
910V	1.647	-0.448	2.141	-1.159	1.905	1.718	1.302	2.141	-1.159	1.015
911E	0.781	-0.448	1.748	-1.353	1.576	1.230	1.899	1.899	-1.353	0.776
912Y	0.667	-0.414	1.748	-1.050	1.586	0.673	2.089	2.089	-1.050	0.757
913P	0.104	0.620	1.431	-0.959	1.422	0.655	2.637	2.637	-0.959	0.844
914V	0.781	1.093	1.851	-0.501	1.741	0.694	1.935	1.935	-0.501	1.085
915Q	0.648	1.093	1.515	-0.187	1.330	0.094	1.962	1.962	-0.187	0.922
916V	1.129	1.415	1.711	0.230	1.731	0.670	1.695	1.731	0.230	1.226
917N	0.762	2.138	1.346	0.168	1.449	0.652	2.064	2.138	0.168	1.226
918G	1.261	2.343	1.898	-0.322	1.932	1.275	1.474	2.343	-0.322	1.409
919K	1.242	1.619	1.561	-1.249	1.513	1.233	1.311	1.619	-1.249	1.033
920V	1.742	0.692	2.113	-1.919	1.996	1.856	0.721	2.113	-1.919	1.029
921R	1.065	0.692	1.692	-2.406	1.677	1.817	1.423	1.817	-2.406	0.851
922G	0.471	-0.122	1.580	-2.425	1.713	1.819	2.012	2.012	-2.425	0.721
923R	-0.123	-0.749	1.010	-2.378	1.066	1.225	2.535	2.535	-2.378	0.370
924V	0.244	-1.023	1.132	-2.358	1.075	1.224	0.936	1.224	-2.358	0.176
925V	0.111	-0.436	0.702	-2.289	0.601	0.599	-0.073	0.702	-2.289	-0.112
926V	0.383	0.199	0.982	-1.958	0.966	1.088	-0.082	1.088	-1.958	0.225
927A	0.446	0.870	0.748	-1.404	0.647	0.483	-0.040	0.870	-1.404	0.250
928A	1.312	1.445	1.141	-0.441	0.975	0.971	-0.638	1.445	-0.638	0.681
929D	2.039	1.936	1.589	0.311	1.349	1.569	-1.253	2.039	-1.253	1.077
930T	2.766	1.193	2.038	0.666	1.722	2.167	-1.868	2.766	-1.868	1.241
931D	2.962	1.533	2.234	0.373	1.877	2.187	-0.817	2.962	-0.817	1.479
932E	2.248	0.994	2.150	-0.285	1.886	2.192	0.628	2.248	-0.285	1.402
933E	1.976	0.419	2.328	-1.086	2.205	2.298	0.702	2.328	-1.086	1.263
934T	1.780	-0.252	2.132	-1.551	2.050	2.278	-0.349	2.278	-1.551	0.870
935L	1.280	-0.947	1.860	-1.960	1.731	1.789	-1.350	1.860	-1.960	0.343
936K	0.553	-0.252	1.412	-2.147	1.358	1.191	-0.735	1.412	-2.147	0.197
937A	-0.521	-0.544	1.001	-2.261	1.002	0.597	-0.274	1.002		

```
-2.261   -0.143
938A      -0.521    0.031    1.001   -2.215    1.002    0.597   -0.274    1.002
-2.215   -0.054
939V       0.692    0.862    1.356   -1.731    1.312    1.080   -0.718    1.356
-1.731    0.408
940L       0.825    0.862    1.234   -1.150    1.039    1.085   -0.809    1.234
-1.150    0.441
941T       1.053    1.557    1.683   -0.613    1.677    1.680    0.266    1.683
-0.613    1.043
942D       0.686    1.066    1.561   -0.531    1.668    1.681    1.865    1.865
-0.531    1.142
943E       1.299    0.353    2.010   -0.842    2.050    1.722    1.439    2.050
-0.842    1.147
944K       2.014   -0.426    2.094   -1.343    2.041    1.717   -0.006    2.094
-1.343    0.870
945V       1.103   -1.258    1.832   -1.497    1.841    1.701    0.205    1.841
-1.497    0.561
946Q      -0.111   -0.534    1.477   -1.542    1.531    1.218    0.649    1.531
-1.542    0.384
947A      -0.471   -1.025    1.150   -1.387    1.166    0.618   -0.335    1.166
-1.387   -0.040
948F      -0.471   -0.534    0.692   -1.468    0.483    0.023   -0.400    0.692
-1.468   -0.239
949L      -0.104   -0.001    0.814   -1.651    0.492    0.022   -1.999    0.814
-1.999   -0.347
950A      -0.155    1.016    0.683   -1.761    0.273   -0.001   -2.121    1.016
-2.121   -0.295
951G      -0.155    1.848    0.926   -1.508    0.547    0.018   -0.891    1.848
-1.508    0.112
952A       0.692    1.125    1.421   -1.234    1.066    0.639   -1.143    1.421
-1.234    0.367
953T       1.634    0.800    1.954   -0.977    1.695    1.228   -1.513    1.954
-1.513    0.689
954P       1.268    0.213    1.832   -1.098    1.686    1.230    0.086    1.832
-1.098    0.745
955R       0.402   -0.242    1.702   -1.621    1.713    1.231    0.407    1.713
-1.621    0.513
956K       0.035   -1.055    1.580   -2.178    1.704    1.233    2.006    2.006
-2.178    0.475
957V      -0.528   -1.260    1.262   -2.591    1.540    1.215    2.554    2.554
-2.591    0.313
958I      -0.528   -0.350    1.019   -2.729    1.267    1.196    1.324    1.324
-2.729    0.171
959V      -0.433   -0.230    0.580   -2.563    0.747    0.571    1.325    1.325
-2.563   -0.000
960V      -0.528   -0.230    0.561   -2.388    0.583    0.601    1.259    1.259
-2.388   -0.020
961A      -0.876    0.475    0.599   -2.296    0.601    0.605    1.105    1.105
-2.296    0.031
962G      -0.604    0.271    0.618   -2.281    0.610    0.605    1.372    1.372
-2.281    0.084
963R       0.073   -0.452    1.038   -1.892    0.929    0.644    0.671    1.038
-1.892    0.144
964L      -0.275   -1.590    1.075   -1.394    0.948    0.647    0.517    1.075
-1.590   -0.010
965V      -0.642   -1.131    0.954   -0.630    0.938    0.649    2.116    2.116
-1.131    0.322
966N      -1.508   -0.781    0.823   -0.418    0.966    0.651    2.437    2.437
-1.508    0.310
```

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967L        -1.773    -1.135    -0.065    -0.652     0.811     0.086     1.428     1.428
-1.773    -0.186
968V        -1.192    -0.677    -0.439    -1.288     1.121     0.141    -0.017     1.121
-1.288    -0.336
969I        -0.958    -0.326    -0.775    -1.484     1.449     0.199    -1.616     1.449
-1.616    -0.501
```

Overlap Display

Selected Programs: hydro flexi access turns surface polar antipro

Respective Threshold: 1.9 2 1.9 2.4 2.3 1.8 1.9

The predicted B-cell epitopes are shown in blue colour and underlined.

Sequence	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA GATPRKVIVVAGRLVNLVI[969]
Hydrophilic ity	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER

	ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA GATPRKVIVVAGRLVNLVI[969]
Flexibility	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA GATPRKVIVVAGRLVNLVI[969]
Accessibility	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD

VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN
TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG
PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA
GATPRKVIVVAGRLVNLVI[969]

Turns	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA GATPRKVIVVAGRLVNLVI[969]
Exposed Surface	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIE VFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRR AIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHD QRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLE SAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDY SPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYE LRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSR FWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPG PDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKD VVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNN TATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHG PFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLA GATPRKVIVVAGRLVNLVI[969]
Polarity	[1]VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPV GSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVL HALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDV DFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGER ADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWM

	MRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIEVFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRRAIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHDQRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLESAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDYSPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYELRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSRFWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPGPDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKDVVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNNTATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHGPFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLAGATPRKVIVVAGRLVNLVI⁹⁶⁹
Antigenic Propensity	¹VTESPTAGPGGVPRADDADSDVPRYRYTAELAARLERTWQENWARLGTFNVPNPVGSLAPPDGAAVPDDKLFVQDMFPYPSGEGLHVGHPLGYIATDVYARYFRMVGRNVLHALGFDAFGLPAEQYAVQTGTHPRTRTEANVVNFRRQLGRLGFGHDSRRSFSTTDVDFYRWTQWIFLQIYNAWFDTTANKARPISELVAEFESGARCLDGGRDWAKLTAGERADVIDEYRLVYRADSLVNWCPGLGTVLANEEVTADGRSDRGNFPVFRKRLRQWMMRITAYADRLLDDLDVLDWPEQVKTMQRNWIGRSTGAVALFSARAASDDGFEVDIEVFTTRPDTLFGATYLVLAPEHDLVDELVAASWPAGVNPLWTYGGGTPGEAIAAYRRAIAAKSDLERQESREKTGVFLGSYAINPANGEPVPIFIADYVLAGYGTGAIMAVPGHDQRDWDFARAFGLPIVEVIAGGNISESAYTGDGILVNSDYLNGMSVPAAKRAIVDRLESAGRGRARIEFKLRDWLFARQRYWGEPFPIVYDSDGRPHALDEAALPVELPDVPDYSPVLFDPDDADSEPSPPLAKATEWVHVDLDLGDGLKPYSRDTNVMPQWAGSSWYELRYTDPHNSERFCAKENEAYWMGPRPAEHGPDDPGGVDLYVGGAEHAVLHLLYSRFWHKVLYDLGHVSSREPYRRLVNQGYIQAYAYTDARGSYVPAEQVIERGDRFVYPGPDGEVEVFQEFGKIGKSLKNSVSPDEICDAYGADTLRVYEMSMGPLEASRPWATKDVVGAYRFLQRVWRLVVDEHTGETRVADGVELDIDTLRALHRTIVGVSEDFAALRNNTATAKLIEYTNHLTKKHRDAVPRAAVEPLVQMLAPLAPHIAEELWLRLGNTTSLAHGPFPKADAAYLVDETVEYPVQVNGKVRGRVVVAADTDEETLKAAVLTDEKVQAFLAGATPRKVIVVAGRLVNLVI⁹⁶⁹

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