

## BcePred Prediction Server

The server displays 1.[GRAPHICAL RESULT](#) 2.[TABULAR RESULT](#) 3.[Overlap Display](#)

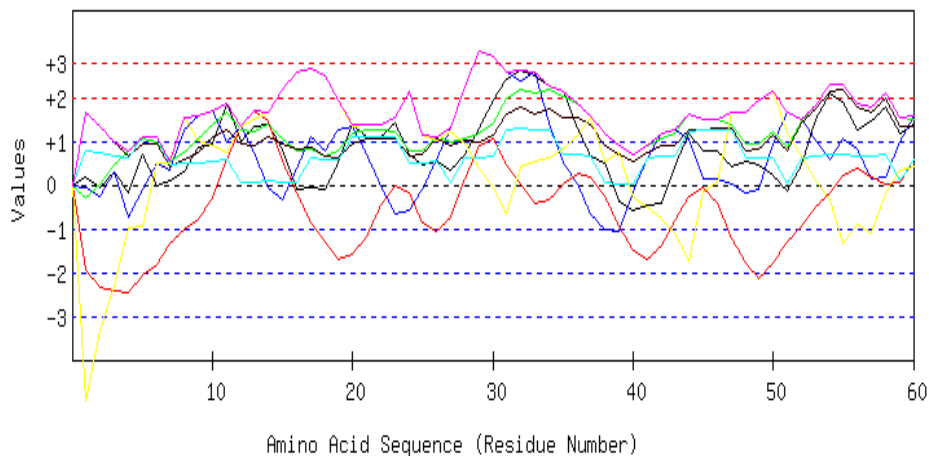
seqname=

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Seq=MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVDR  
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QIAGLNVLRIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLIIGEGVVEVRATSGDNHLGGDD  
WDQRVVDWLVDKFKGTSGIDLTDKMAMQRLREAAEKAKIELSSSQSTSINLPYITVDADKNPLFLDE  
QLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPAVTDLVKELTGGKEPNKGVN  
PDEVVAVGAALQAGVLKGEVKDVL LLDVTPSLGIETKGGVMTRLIERNTTIPTKRSETFTTADDNQPS  
VQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDIDANGIVHVTAKDKGTGKENTIRIQEGSG  
LSKEDIDRMIKDAEAHAEEDRKRREEADVRNQAETLVYQTEKFVKEQREAEGGSKVPEDTLNKVDAA  
VAEAKAALGGSDISAIKSAMEKLGQESQALGQAIYEAQAASQATGAAHPGGEPGGAHPGSADDVVD  
AEVVDDGREAK
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Length=625

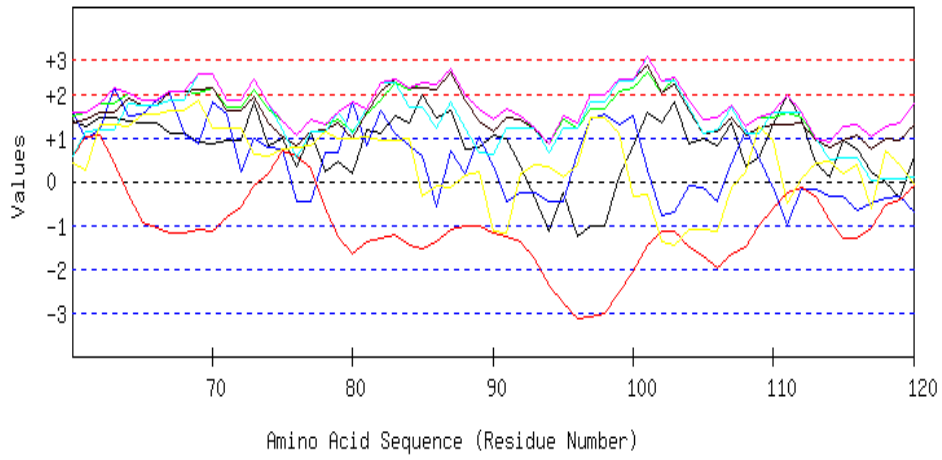
### GRAPHICAL RESULT

GRAPHICAL RESULT :: SEQ 1 to 60



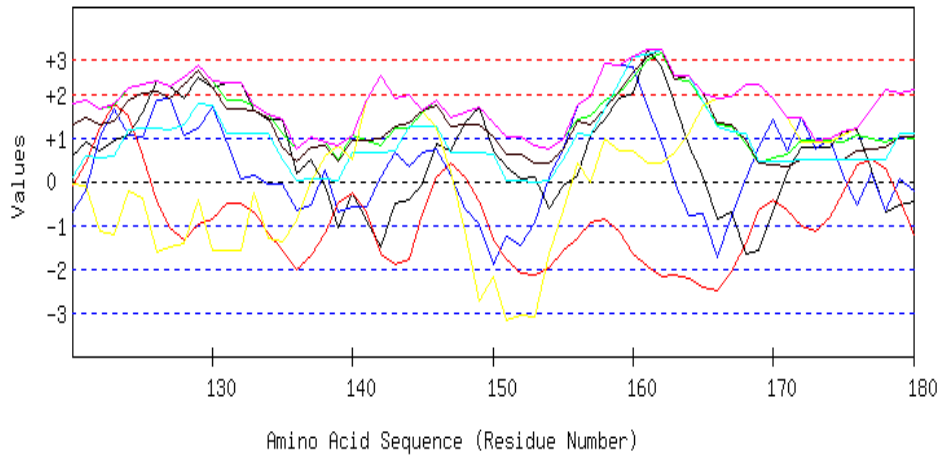
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 61 to 120



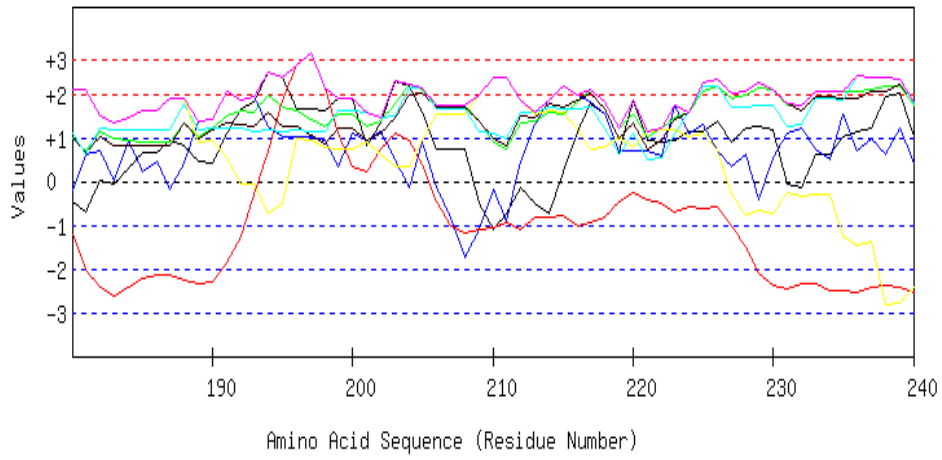
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180



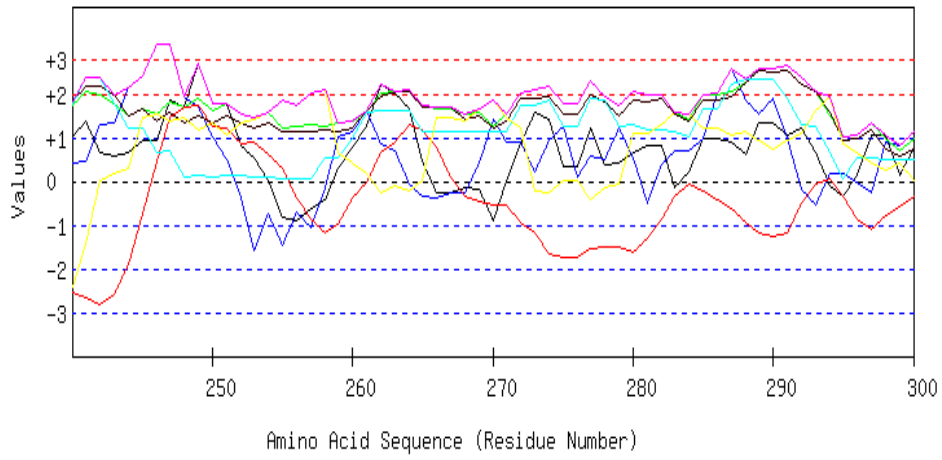
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 181 to 240



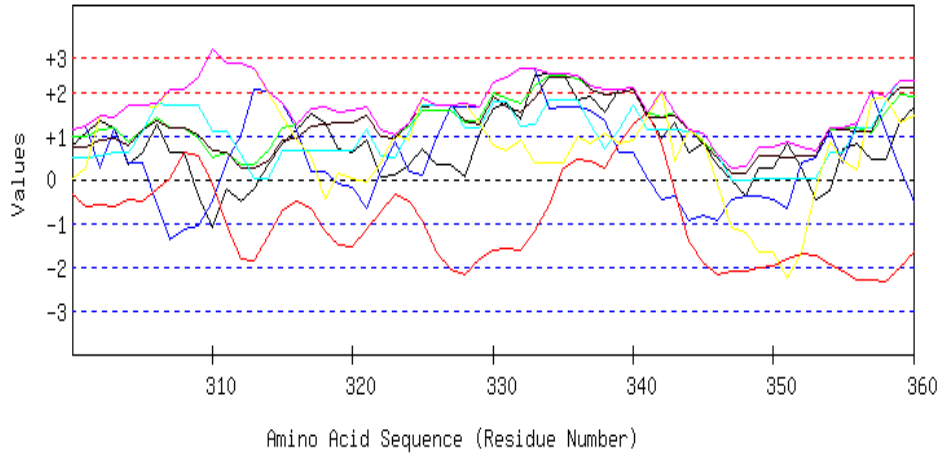
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 241 to 300



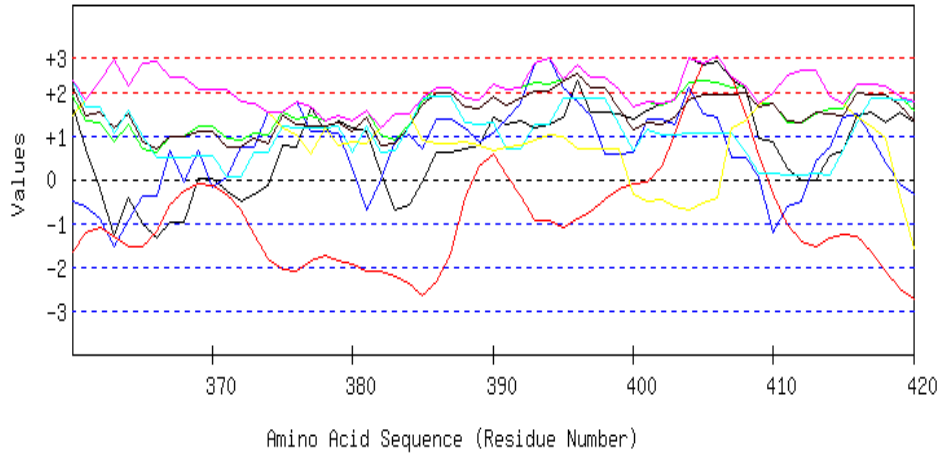
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 301 to 360



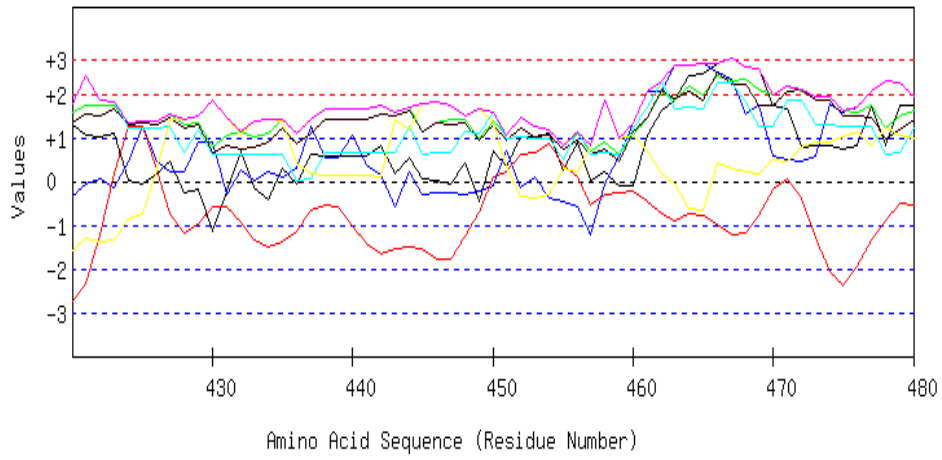
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 361 to 420



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

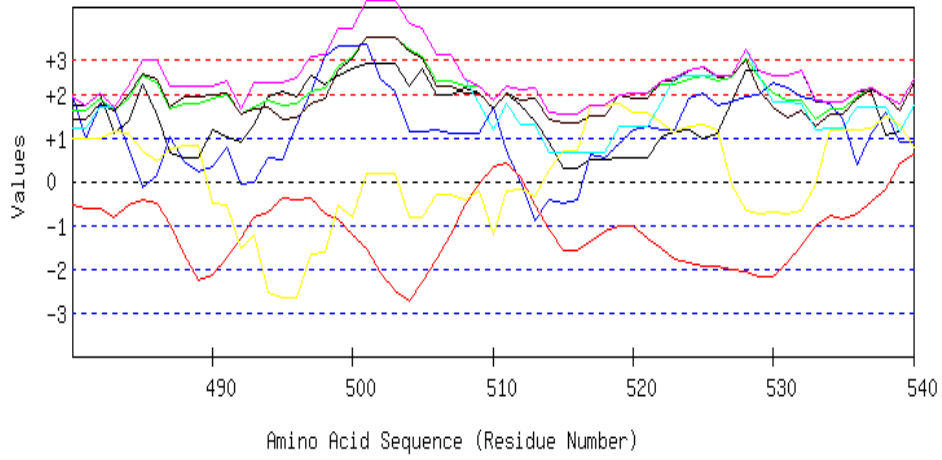
GRAPHICAL RESULT :: SEQ 421 to 480



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

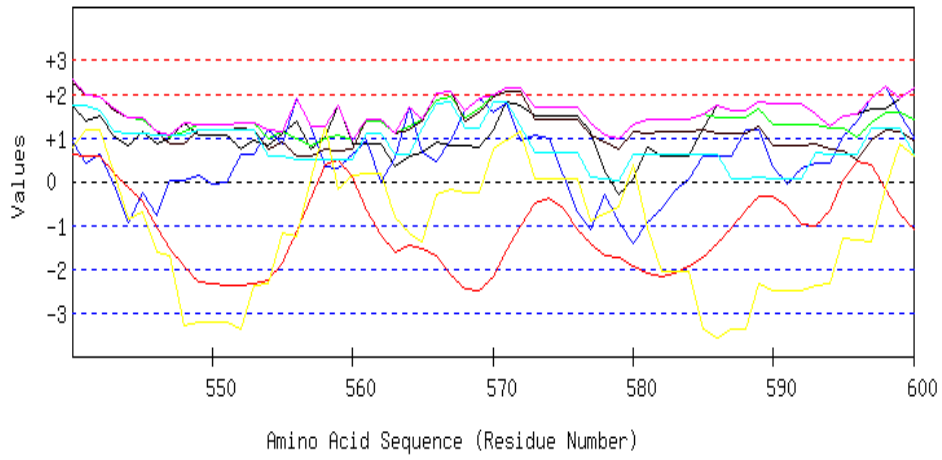


GRAPHICAL RESULT :: SEQ 481 to 540



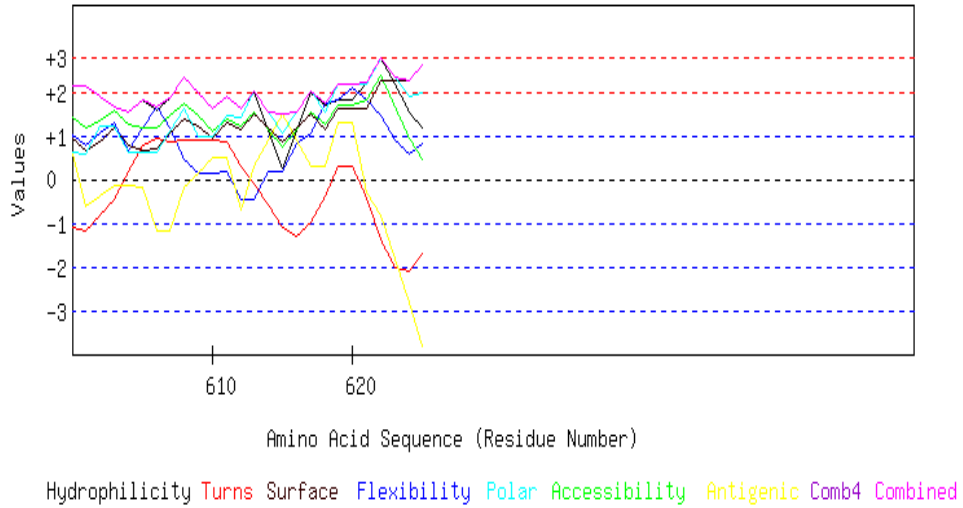
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 541 to 600



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 601 to 660



[TOP](#)

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## 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

MARAVGIDLGTTNSVSVLEGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVT  
NVDRTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLGEDITDAVITPA  
YFNDAQRQATKDAGQIAGLNVL RIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVS  
LEIGEGVVEVRATSGDNHLGGDDWDQRVVDWLVDKFKGTSGIDLT KDKMAMQRLREAAEK  
AKIELSSSQSTSINLPYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADT  
GISVSEIDHVVLVGGSTRMPAVTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEV  
KDVLLLDVTPLSLGIETKGGVMTRLIERNTTIPTKRSETFTTADDNQPSVQIQVYQGERE  
IAAHNKLLGSFELTGIPPAPRGIPQIEVTFDIDANGIVHVTAKDKGTGKENTIRIQEGSG  
LSKEDIDRMIKDAEAHAEE DRKRREEADVRNQAETLVYQTEKFVKEQREAE GGSKVPEDT  
LNKVDAVAEAKAALGGSDISA IKSAMEKLGQESQALGQAIYEAQAASQATGAAHPGGE

PGGAHPGSADDVVDAEVVDDGREAK

Length=625

A.A.	Parameter							Combined		
	Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX	MIN	AVG
1 M	0.187	-0.044	-0.308	-1.952	1.677	0.792	-4.925	1.677	-4.925	-0.653
2 A	-0.047	-0.254	0.029	-2.351	1.349	0.733	-3.326	1.349	-3.326	-0.553
3 R	0.313	0.285	0.477	-2.434	0.984	0.673	-2.316	0.984	-2.434	-0.288
4 A	-0.193	-0.733	0.795	-2.465	0.647	0.615	-0.984	0.795	-2.465	-0.331
5 V	0.705	-0.106	1.075	-2.069	0.920	1.087	-0.938	1.087	-2.069	0.096
6 G	-0.009	0.481	0.991	-1.802	0.929	1.092	0.508	1.092	-1.802	0.313
7 I	0.085	0.345	0.552	-1.340	0.410	0.468	0.509	0.552	-1.340	0.147
8 D	0.281	1.279	0.748	-1.020	0.565	0.487	1.560	1.560	-1.020	0.557
9 L	0.844	1.595	1.066	-0.765	0.729	0.506	1.012	1.595	-0.765	0.712
10 G	0.926	1.704	1.375	-0.297	1.084	0.546	0.898	1.704	-0.297	0.891
11 T	1.843	0.980	1.664	0.575	1.257	0.565	0.736	1.843	0.565	1.089
12 T	0.977	1.345	1.272	1.322	0.929	0.077	1.334	1.345	0.077	1.037
13 N	1.325	0.758	1.234	1.718	0.911	0.074	1.488	1.718	0.074	1.072
14 S	1.375	-0.056	1.393	1.447	1.112	0.094	1.647	1.647	-0.056	1.002
15 V	0.813	-0.336	1.075	0.548	0.948	0.075	2.195	2.195	-0.336	0.760
16 V	-0.098	0.387	0.795	-0.181	0.802	0.061	2.590	2.590	-0.181	0.622
17 S	-0.047	1.111	0.823	-0.855	0.856	0.620	2.676	2.676	-0.855	0.741
18 V	-0.098	0.794	0.664	-1.300	0.656	0.600	2.517	2.517	-1.300	0.548
19 L	0.496	1.249	0.776	-1.685	0.619	0.598	1.928	1.928	-1.685	0.569
20 E	1.363	1.357	1.169	-1.597	0.948	1.085	1.331	1.363	-1.597	0.808
21 G	1.084	0.686	1.262	-1.196	1.066	1.084	1.391	1.391	-1.196	0.768
22 G	1.084	-0.038	1.262	-0.440	1.066	1.084	1.391	1.391	-0.440	0.773
23 D	1.432	-0.665	1.225	-0.005	1.048	1.080	1.545	1.545	-0.665	0.809
24 P	0.705	-0.595	0.776	-0.166	0.674	0.482	2.160	2.160	-0.595	0.577
25 V	0.477	-0.098	0.786	-0.840	0.720	0.482	1.149	1.149	-0.840	0.382
26 V	0.560	0.574	1.094	-1.056	1.075	0.523	1.036	1.094	-1.056	0.544
27 V	0.338	1.297	0.973	-0.737	0.911	0.054	1.205	1.297	-0.737	0.577
28 A	0.699	2.249	1.057	0.154	1.002	0.635	0.958	2.249	0.154	0.965
29 N	1.293	3.062	1.169	0.889	0.966	0.633	0.370	3.062	0.370	1.197
30 S	1.938	2.944	1.440	1.052	1.130	0.652	-0.059	2.944	-0.059	1.300
31 E	2.437	2.579	1.991	0.459	1.613	1.275	-0.649	2.579	-0.649	1.387
32 G	2.633	2.363	2.188	0.001	1.768	1.295	0.402	2.633	0.001	1.521
33 S	2.520	2.591	2.085	-0.402	1.613	1.274	0.556	2.591	-0.402	1.462
34 R	2.241	1.411	2.178	-0.334	1.731	1.273	0.616	2.241	-0.334	1.302
35 T	2.159	0.501	2.001	0.017	1.522	0.694	0.802	2.159	0.017	1.099
36 T	1.293	0.011	1.870	0.250	1.549	0.695	1.124	1.870	0.011	0.970
37 P	0.648	-0.655	1.599	0.165	1.385	0.677	1.553	1.599	-0.655	0.767
38 S	0.515	-1.013	1.169	-0.261	0.911	0.052	0.543	1.169	-1.013	0.274
39 I	-0.395	-1.055	0.907	-0.936	0.711	0.036	0.754	0.907	-1.055	0.003
40 V	-0.591	-0.122	0.711	-1.510	0.556	0.016	-0.297	0.711	-1.510	-0.177
41 A	-0.458	0.602	0.898	-1.709	0.756	0.622	-0.518	0.898	-1.709	0.028
42 F	-0.427	1.177	1.047	-1.368	0.911	0.643	-0.791	1.177	-1.368	0.170
43 A	0.440	1.255	1.178	-0.819	0.884	0.641	-1.112	1.255	-1.112	0.352
44 R	1.167	1.050	1.627	-0.259	1.257	1.239	-1.727	1.627	-1.727	0.622
45 N	0.800	0.141	1.505	-0.068	1.248	1.240	-0.128	1.505	-0.128	0.677

46 G	0.800	0.159	1.487	-0.439	1.303	1.242	0.056	1.487	-0.439	0.658
47 E	0.433	0.023	1.365	-1.209	1.294	1.243	1.654	1.654	-1.209	0.686
48 V	0.528	-0.194	0.926	-1.789	0.774	0.619	1.656	1.656	-1.789	0.360
49 L	0.465	-0.098	0.954	-2.143	0.838	0.620	1.932	1.932	-2.143	0.367
50 V	0.237	0.938	1.206	-1.773	1.157	0.639	2.151	2.151	-1.773	0.651
51 G	-0.123	1.644	0.879	-1.297	0.793	0.040	1.168	1.644	-1.297	0.443
52 Q	0.471	1.507	1.449	-0.953	1.440	0.633	0.644	1.507	-0.953	0.742
53 P	1.495	1.016	1.832	-0.500	1.741	0.668	0.096	1.832	-0.500	0.907
54 A	2.109	0.562	2.281	-0.195	2.123	0.709	-0.329	2.281	-0.329	1.037
55 K	1.881	1.052	2.290	0.223	2.169	0.709	-1.340	2.290	-1.340	0.998
56 N	1.268	0.830	1.842	0.375	1.786	0.668	-0.914	1.842	-0.914	0.836
57 Q	1.464	0.125	1.795	0.161	1.668	0.669	-1.094	1.795	-1.094	0.684
58 A	1.774	0.173	2.094	0.003	1.977	0.710	-0.197	2.094	-0.197	0.933
59 V	1.179	0.986	1.524	0.061	1.330	0.117	0.327	1.524	0.061	0.789
60 T	1.369	1.573	1.496	0.590	1.339	0.565	0.431	1.573	0.431	1.052
61 N	1.255	0.986	1.599	1.001	1.440	1.147	0.267	1.599	0.267	1.099
62 V	1.451	1.191	1.795	1.075	1.595	1.167	1.318	1.795	1.075	1.370
63 D	1.451	2.142	1.795	0.436	1.595	1.167	1.318	2.142	0.436	1.415
64 R	1.388	1.507	2.029	-0.300	1.914	1.772	1.276	2.029	-0.300	1.369
65 T	1.356	1.525	1.879	-0.940	1.759	1.751	1.549	1.879	-0.940	1.269
66 V	1.356	1.848	1.879	-1.068	1.759	1.751	1.549	1.879	-1.068	1.296
67 R	1.084	2.034	2.057	-1.168	2.078	1.857	1.623	2.078	-1.168	1.366
68 S	1.084	1.107	2.057	-1.181	2.078	1.857	1.623	2.078	-1.181	1.232
69 V	0.888	0.878	2.019	-1.088	2.096	2.457	1.850	2.457	-1.088	1.300
70 K	0.857	1.830	2.132	-1.128	2.151	2.472	1.206	2.472	-1.128	1.360
71 R	0.952	1.537	1.692	-0.807	1.631	1.848	1.207	1.848	-0.807	1.151
72 H	0.952	0.221	1.692	-0.573	1.631	1.848	1.207	1.848	-0.573	0.997
73 M	1.818	0.986	2.085	-0.089	1.959	2.335	0.609	2.335	-0.089	1.386
74 G	0.825	0.776	1.655	0.166	1.339	1.766	0.566	1.766	0.166	1.013
75 S	0.971	0.724	1.375	0.711	1.020	1.161	0.727	1.375	0.711	0.956
76 D	0.332	-0.456	1.075	0.563	0.829	0.543	0.782	1.075	-0.456	0.524
77 W	1.091	-0.456	1.412	0.292	1.148	1.125	0.810	1.412	-0.456	0.775
78 S	0.225	0.674	1.281	-0.625	1.175	1.127	1.132	1.281	-0.625	0.713
79 I	0.446	0.650	1.403	-1.264	1.339	1.596	0.963	1.596	-1.264	0.733
80 E	0.174	1.806	1.122	-1.671	0.975	1.107	0.972	1.806	-1.671	0.641
81 I	1.167	0.824	1.552	-1.378	1.595	1.677	1.015	1.677	-1.378	0.922
82 D	1.116	1.639	1.851	-1.295	2.078	2.251	0.920	2.251	-1.295	1.223
83 G	1.502	1.101	2.244	-1.233	2.333	2.269	0.931	2.333	-1.233	1.306
84 K	1.337	0.832	2.113	-1.476	2.123	1.689	0.998	2.123	-1.476	1.088
85 K	1.976	0.576	2.253	-1.540	2.142	1.687	-0.334	2.253	-1.540	0.966
86 Y	1.476	-0.581	2.225	-1.381	2.096	1.217	-0.105	2.225	-1.381	0.707
87 T	1.609	0.682	2.561	-1.080	2.506	1.817	-0.132	2.561	-1.080	1.138
88 A	0.743	0.191	1.973	-1.013	1.850	1.224	0.125	1.973	-1.013	0.727
89 P	0.794	1.004	1.674	-1.029	1.367	0.650	0.220	1.674	-1.029	0.668
90 E	1.046	0.321	1.421	-1.194	1.130	0.630	-1.123	1.421	-1.194	0.319
91 I	0.983	-0.458	1.655	-1.276	1.449	1.235	-1.164	1.655	-1.276	0.346
92 S	0.345	-0.248	1.515	-1.396	1.431	1.237	0.168	1.515	-1.396	0.436
93 A	-0.370	-0.272	1.188	-1.775	1.166	1.223	0.383	1.223	-1.775	0.220
94 R	-1.128	-0.476	0.851	-2.363	0.847	0.641	0.354	0.851	-2.363	-0.182
95 I	-0.262	-0.458	1.440	-2.794	1.504	1.234	0.097	1.504	-2.794	0.109
96 L	-1.255	0.680	1.206	-3.151	1.358	1.219	0.372	1.358	-3.151	0.061
97 M	-1.027	1.423	1.655	-3.104	1.996	1.814	1.447	1.996	-3.104	0.600
98 K	-1.027	1.537	1.655	-3.003	1.996	1.814	1.447	1.996	-3.003	0.631

99 L	0.111	1.281	2.066	-2.542	2.333	2.301	1.117	2.333	-2.542	0.952
100K	0.825	1.485	2.150	-2.072	2.324	2.295	-0.328	2.324	-2.072	0.954
101R	1.584	0.247	2.487	-1.443	2.643	2.878	-0.299	2.878	-1.443	1.157
102D	1.356	-0.771	2.038	-1.137	2.005	2.283	-1.375	2.283	-1.375	0.629
103A	1.818	-0.683	2.374	-1.146	2.233	2.297	-1.477	2.374	-1.477	0.774
104E	0.876	-0.108	1.842	-1.507	1.604	1.708	-1.107	1.842	-1.507	0.472
105A	0.971	-0.144	1.403	-1.718	1.084	1.083	-1.106	1.403	-1.718	0.225
106Y	0.832	-0.468	1.459	-1.980	1.130	1.194	-1.124	1.459	-1.980	0.149
107L	1.331	0.429	1.730	-1.680	1.449	1.683	-0.123	1.730	-1.680	0.688
108G	0.332	1.173	1.262	-1.482	1.066	1.085	0.225	1.262	-1.482	0.523
109E	0.528	0.546	1.459	-1.033	1.221	1.105	1.276	1.459	-1.033	0.729
110D	1.280	-0.126	1.477	-0.605	1.303	1.574	0.935	1.574	-0.605	0.834
111I	1.995	-0.989	1.561	-0.252	1.294	1.569	-0.510	1.995	-0.989	0.667
112T	1.401	-0.174	1.449	-0.135	1.330	1.571	0.079	1.571	-0.174	0.789
113D	0.402	-0.174	0.982	-0.332	0.948	0.973	0.427	0.982	-0.332	0.461
114A	0.098	-0.354	0.907	-0.904	0.784	0.504	0.476	0.907	-0.904	0.216
115V	0.933	-0.354	1.244	-1.314	0.957	0.522	0.195	1.244	-1.314	0.312
116I	0.737	-0.665	1.290	-1.313	1.075	0.521	0.375	1.290	-1.313	0.289
117T	0.237	-0.514	1.019	-1.051	0.756	0.032	-0.627	1.019	-1.051	-0.021
118T	-0.016	-0.396	1.272	-0.552	0.993	0.051	0.716	1.272	-0.552	0.295
119P	-0.363	-0.348	1.328	-0.427	0.957	0.054	0.378	1.328	-0.427	0.225
120A	0.585	-0.707	1.767	-0.097	1.285	0.093	-0.057	1.767	-0.707	0.410
121Y	0.888	-0.216	1.842	0.427	1.449	0.562	-0.106	1.842	-0.216	0.692
122F	0.692	1.004	1.646	1.233	1.294	0.542	-1.157	1.646	-1.157	0.751
123N	0.939	1.670	1.730	1.762	1.394	0.565	-1.214	1.762	-1.214	0.978
124D	1.072	1.060	2.160	1.484	1.868	1.190	-0.205	2.160	-0.205	1.233
125A	1.571	1.012	2.234	0.580	2.005	1.213	-0.373	2.234	-0.373	1.177
126Q	2.286	1.844	2.300	-0.460	2.050	1.209	-1.635	2.300	-1.635	1.085
127R	2.172	1.892	2.197	-1.076	1.895	1.188	-1.481	2.197	-1.481	0.970
128Q	1.900	1.078	2.374	-1.340	2.214	1.294	-1.407	2.374	-1.407	0.874
129A	2.399	1.215	2.646	-0.996	2.533	1.783	-0.406	2.646	-0.996	1.311
130T	2.153	1.706	2.318	-0.845	2.160	1.740	-1.579	2.318	-1.579	1.093
131K	2.248	0.890	1.879	-0.519	1.640	1.116	-1.578	2.248	-1.578	0.811
132D	2.248	0.059	1.879	-0.492	1.640	1.116	-1.578	2.248	-1.578	0.696
133A	1.609	0.147	1.739	-0.688	1.622	1.118	-0.246	1.739	-0.688	0.757
134G	1.413	-0.058	1.543	-1.177	1.467	1.098	-1.297	1.543	-1.297	0.427
135Q	1.413	-0.076	1.085	-1.574	0.784	0.503	-1.362	1.413	-1.574	0.110
136I	0.199	-0.663	0.730	-2.039	0.474	0.019	-0.918	0.730	-2.039	-0.314
137A	0.509	-0.542	1.029	-1.712	0.784	0.060	-0.021	1.029	-1.712	0.015
138G	-0.085	0.271	0.917	-1.195	0.820	0.062	0.568	0.917	-1.195	0.194
139L	-1.046	-0.681	0.505	-0.510	0.455	0.025	0.839	0.839	-1.046	-0.059
140N	-0.275	-0.572	1.075	-0.252	0.948	0.647	0.517	1.075	-0.572	0.298
141V	-0.913	-0.572	0.935	-0.716	0.929	0.649	1.849	1.849	-0.913	0.309
142L	-1.508	0.099	0.823	-1.665	0.966	0.651	2.437	2.437	-1.665	0.257
143R	-0.484	0.662	1.206	-1.887	1.267	0.686	1.889	1.889	-1.887	0.477
144I	-0.433	0.339	1.234	-1.796	1.321	1.245	1.976	1.976	-1.796	0.555
145V	-0.066	0.664	1.599	-0.725	1.604	1.262	1.607	1.607	-0.725	0.849
146N	0.844	0.760	1.879	0.106	1.750	1.277	1.213	1.879	0.106	1.118
147E	0.711	0.151	1.449	0.418	1.276	0.652	0.203	1.449	0.151	0.694
148P	1.350	-0.629	1.589	0.087	1.294	0.650	-1.128	1.589	-1.128	0.459
149T	1.717	-0.987	1.711	-0.479	1.303	0.649	-2.727	1.717	-2.727	0.170
150A	0.692	-1.885	1.328	-1.323	1.002	0.614	-2.179	1.328	-2.179	-0.250
151A	0.332	-1.258	1.001	-1.766	0.638	0.014	-3.163	1.001	-3.163	-0.600

152A	0.079	-1.462	1.010	-2.083	0.601	0.015	-3.051	1.010	-3.051	-0.699
153L	0.111	-0.923	0.804	-2.124	0.401	-0.005	-3.091	0.804	-3.091	-0.690
154A	-0.604	0.113	0.720	-1.996	0.410	0.000	-1.646	0.720	-1.996	-0.429
155Y	-0.104	0.740	0.991	-1.594	0.729	0.489	-0.645	0.991	-1.594	0.087
156G	0.123	1.722	1.440	-1.292	1.367	1.084	0.430	1.722	-1.292	0.696
157L	1.065	1.926	1.515	-0.922	1.312	1.078	-0.005	1.926	-0.922	0.853
158D	1.426	2.705	1.842	-0.879	1.677	1.678	0.979	2.705	-0.879	1.347
159K	1.906	2.657	2.038	-1.140	2.078	2.253	0.712	2.657	-1.140	1.501
160G	2.039	2.639	2.374	-1.666	2.488	2.853	0.686	2.853	-1.666	1.630
161E	3.000	1.688	2.786	-1.937	2.852	2.890	0.414	3.000	-1.937	1.670
162K	2.633	0.908	2.945	-2.194	3.007	3.025	0.422	3.025	-2.194	1.535
163E	1.767	-0.019	2.356	-2.126	2.351	2.432	0.679	2.432	-2.126	1.063
164Q	0.825	-0.769	2.281	-2.215	2.406	2.438	1.113	2.438	-2.215	0.868
165R	0.098	-0.721	1.832	-2.412	2.032	1.840	1.728	2.032	-2.412	0.628
166I	-0.844	-1.739	1.318	-2.495	1.349	1.249	1.914	1.914	-2.495	0.108
167L	-0.705	-0.787	1.262	-2.064	1.303	1.139	1.932	1.932	-2.064	0.297
168V	-1.666	0.045	0.851	-1.433	0.938	1.102	2.203	2.203	-1.666	0.292
169F	-1.571	0.768	0.412	-0.678	0.419	0.477	2.205	2.205	-1.571	0.290
170D	-0.705	1.433	0.543	-0.415	0.392	0.475	1.883	1.883	-0.705	0.515
171L	0.237	0.720	0.618	-0.659	0.337	0.470	1.449	1.449	-0.659	0.453
172G	0.800	1.463	0.935	-1.033	0.501	0.488	0.901	1.463	-1.033	0.579
173G	0.800	0.740	0.935	-1.147	0.501	0.488	0.901	0.935	-1.147	0.460
174G	0.800	0.968	0.935	-0.808	0.501	0.488	0.901	0.968	-0.808	0.541
175T	1.148	0.137	0.898	-0.252	0.483	0.484	1.054	1.148	-0.252	0.565
176F	1.198	-0.558	1.057	0.370	0.683	0.505	1.214	1.214	-0.558	0.638
177D	0.256	0.191	0.982	0.486	0.738	0.510	1.649	1.649	0.191	0.687
178V	-0.686	-0.673	0.907	0.284	0.793	0.515	2.083	2.083	-0.686	0.461
179S	-0.521	0.051	1.038	-0.407	1.002	1.095	2.016	2.016	-0.521	0.611
180L	-0.446	-0.230	0.963	-1.212	1.030	1.093	2.087	2.087	-1.212	0.469
181L	-0.717	0.602	0.683	-2.038	0.665	0.604	2.096	2.096	-2.038	0.271
182E	0.010	0.710	1.132	-2.427	1.039	1.202	1.481	1.481	-2.427	0.449
183I	-0.041	0.039	0.973	-2.602	0.838	1.182	1.321	1.321	-2.602	0.244
184G	0.307	0.938	0.935	-2.438	0.820	1.178	1.475	1.475	-2.438	0.459
185E	0.655	0.215	0.898	-2.235	0.802	1.174	1.629	1.629	-2.235	0.448
186G	0.655	0.453	0.898	-2.159	0.802	1.174	1.629	1.629	-2.159	0.493
187V	0.926	-0.174	0.917	-2.130	0.811	1.174	1.896	1.896	-2.130	0.488
188V	0.832	0.413	1.356	-2.265	1.330	1.798	1.895	1.895	-2.265	0.766
189E	0.471	1.365	1.029	-2.346	0.966	1.199	0.911	1.365	-2.346	0.514
190V	0.440	1.417	1.234	-2.297	1.166	1.219	0.951	1.417	-2.297	0.590
191R	1.084	2.052	1.505	-1.864	1.330	1.237	0.523	2.052	-1.864	0.838
192A	1.679	1.848	1.617	-1.248	1.294	1.236	-0.066	1.848	-1.248	0.908
193T	1.818	1.938	1.561	-0.314	1.248	1.125	-0.049	1.938	-0.314	1.047
194S	2.494	1.243	1.982	0.707	1.567	1.164	-0.750	2.494	-0.750	1.201
195G	2.362	1.014	1.711	1.865	1.267	1.159	-0.482	2.362	-0.482	1.271
196D	1.647	1.014	1.627	2.673	1.276	1.165	0.963	2.673	0.963	1.481
197N	1.679	1.014	1.421	2.939	1.075	1.145	0.923	2.939	0.923	1.457
198H	1.628	0.944	1.262	2.144	0.875	1.125	0.763	2.144	0.763	1.249
199L	1.900	0.351	1.543	1.120	1.239	1.614	0.754	1.900	0.351	1.217
200G	1.900	1.095	1.543	0.336	1.239	1.614	0.754	1.900	0.336	1.211
201G	0.825	0.958	1.262	0.236	0.948	1.598	0.889	1.598	0.236	0.960
202D	1.325	1.145	1.375	0.729	1.093	1.467	0.613	1.467	0.613	1.107
203D	2.286	0.509	1.786	1.112	1.458	1.504	0.341	2.286	0.341	1.285
204W	2.191	-0.126	2.225	0.941	1.977	2.129	0.340	2.225	-0.126	1.383

205D	1.597	0.916	2.113	0.379	2.014	2.130	0.928	2.130	0.379	1.440
206Q	0.730	-0.126	1.720	-0.448	1.686	1.643	1.526	1.720	-0.448	0.962
207R	0.730	-0.821	1.720	-1.013	1.686	1.643	1.526	1.720	-1.013	0.782
208V	0.730	-1.731	1.720	-1.175	1.686	1.643	1.526	1.720	-1.731	0.629
209V	-0.484	-1.095	1.365	-1.110	1.376	1.160	1.970	1.970	-1.110	0.454
210D	-1.097	-0.168	0.917	-1.049	0.993	1.119	2.395	2.395	-1.097	0.444
211W	-0.730	-0.881	0.758	-0.933	0.838	0.983	2.387	2.387	-0.933	0.346
212L	-0.136	0.453	1.328	-1.087	1.485	1.576	1.864	1.864	-1.087	0.783
213V	-0.484	1.285	1.384	-0.832	1.449	1.579	1.526	1.579	-0.832	0.844
214D	-0.755	1.872	1.561	-0.823	1.768	1.684	1.600	1.872	-0.823	0.987
215K	0.237	2.188	1.533	-0.779	1.704	1.659	1.578	2.188	-0.779	1.160
216F	1.148	1.984	1.814	-1.024	1.850	1.674	1.184	1.984	-1.024	1.233
217K	1.793	1.834	2.085	-0.952	2.014	1.692	0.755	2.085	-0.952	1.317
218G	1.521	1.541	1.804	-0.811	1.649	1.203	0.764	1.804	-0.811	1.096
219T	0.655	0.710	1.216	-0.441	0.993	0.610	1.021	1.216	-0.441	0.680
220S	1.868	0.710	1.552	-0.249	1.358	1.095	0.761	1.868	-0.249	1.014
221G	0.926	0.686	1.019	-0.413	0.729	0.506	1.131	1.131	-0.413	0.655
222I	0.895	0.598	1.225	-0.513	0.929	0.526	1.171	1.225	-0.513	0.690
223D	0.926	1.754	1.477	-0.692	1.412	1.101	1.195	1.754	-0.692	1.025
224L	1.148	1.101	1.599	-0.571	1.576	1.569	1.027	1.599	-0.571	1.064
225T	1.148	1.305	2.057	-0.603	2.260	2.164	1.091	2.260	-0.603	1.346
226K	1.388	0.700	2.188	-0.571	2.324	2.179	0.714	2.324	-0.571	1.275
227D	0.888	0.359	1.917	-1.007	2.005	1.691	-0.287	2.005	-1.007	0.795
228K	1.205	0.634	1.991	-1.510	2.041	1.702	-0.777	2.041	-1.510	0.755
229M	1.255	-0.402	2.122	-2.110	2.260	1.725	-0.654	2.260	-2.110	0.599
230A	1.160	0.525	2.103	-2.383	2.096	1.755	-0.720	2.103	-2.383	0.648
231M	-0.054	1.101	1.748	-2.461	1.786	1.271	-0.276	1.786	-2.461	0.445
232Q	-0.148	1.215	1.730	-2.353	1.622	1.301	-0.342	1.730	-2.353	0.432
233R	0.610	0.724	2.066	-2.336	1.941	1.884	-0.313	2.066	-2.336	0.654
234L	0.610	0.485	2.066	-2.493	1.941	1.884	-0.313	2.066	-2.493	0.597
235R	1.009	1.521	2.075	-2.509	1.895	1.867	-1.268	2.075	-2.509	0.656
236E	1.122	0.708	2.075	-2.525	1.886	2.424	-1.458	2.424	-2.525	0.605
237A	1.217	0.964	2.094	-2.423	2.050	2.394	-1.392	2.394	-2.423	0.701
238A	1.932	0.640	2.178	-2.383	2.041	2.388	-2.837	2.388	-2.837	0.566
239E	2.026	1.215	2.197	-2.415	2.205	2.358	-2.771	2.358	-2.771	0.688
240K	1.028	0.435	1.730	-2.539	1.823	1.760	-2.423	1.823	-2.539	0.259
241A	1.388	0.459	2.057	-2.671	2.187	2.360	-1.439	2.360	-2.671	0.620
242K	0.673	1.315	1.973	-2.810	2.196	2.365	0.006	2.365	-2.810	0.817
243I	0.591	1.339	1.795	-2.581	1.987	1.786	0.192	1.987	-2.581	0.730
244E	0.642	2.154	1.496	-1.910	1.504	1.211	0.287	2.154	-1.910	0.769
245L	0.920	2.435	1.646	-0.724	1.658	1.231	1.457	2.435	-0.724	1.232
246S	0.939	3.130	1.524	0.471	1.394	0.679	1.555	3.130	0.471	1.385
247S	1.856	3.130	1.814	1.447	1.567	0.697	1.393	3.130	0.697	1.701
248S	1.691	1.950	1.683	1.700	1.358	0.118	1.460	1.950	0.118	1.423
249Q	2.684	1.704	1.917	1.741	1.504	0.133	1.185	2.684	0.133	1.552
250S	1.767	1.008	1.627	1.264	1.330	0.114	1.347	1.767	0.114	1.208
251T	1.799	0.511	1.776	1.207	1.485	0.135	1.074	1.799	0.135	1.141
252S	0.806	-0.386	1.543	0.856	1.339	0.120	1.349	1.543	-0.386	0.804
253I	0.560	-1.566	1.459	0.900	1.239	0.097	1.406	1.459	-1.566	0.585
254N	0.029	-0.751	1.561	0.624	1.321	0.096	1.578	1.578	-0.751	0.637
255L	-0.806	-1.456	1.225	0.290	1.148	0.078	1.859	1.859	-1.456	0.334
256P	-0.888	-0.713	1.272	-0.373	1.148	0.078	1.740	1.740	-0.888	0.323
257Y	-0.616	-1.071	1.290	-0.864	1.157	0.077	2.007	2.007	-1.071	0.283



258I	-0.427	-0.126	1.262	-1.171	1.166	0.526	2.111	2.111	-1.171	0.477
259T	0.288	1.030	1.346	-0.968	1.157	0.520	0.666	1.346	-0.968	0.577
260V	0.787	1.149	1.375	-0.369	1.203	0.990	0.437	1.375	-0.369	0.796
261D	1.268	1.603	1.571	-0.019	1.604	1.566	0.170	1.604	-0.019	1.109
262A	2.216	0.860	2.010	0.654	1.932	1.604	-0.265	2.216	-0.265	1.287
263D	2.020	0.686	2.057	0.915	2.050	1.603	-0.086	2.057	-0.086	1.321
264K	1.672	-0.058	2.094	1.295	2.069	1.607	-0.239	2.094	-0.239	1.206
265N	0.459	-0.350	1.758	1.183	1.704	1.123	0.021	1.758	-0.350	0.842
266P	-0.256	-0.384	1.674	0.772	1.713	1.128	1.466	1.713	-0.384	0.873
267L	-0.256	-0.252	1.674	0.097	1.713	1.128	1.466	1.713	-0.256	0.796
268F	-0.123	-0.252	1.552	-0.325	1.440	1.133	1.375	1.552	-0.325	0.686
269L	-0.186	0.413	1.580	-0.476	1.504	1.135	1.651	1.651	-0.476	0.803
270D	-0.901	1.431	1.253	-0.535	1.239	1.121	1.866	1.866	-0.901	0.782
271E	0.010	0.892	1.533	-0.522	1.385	1.136	1.472	1.533	-0.522	0.844
272Q	0.857	0.892	2.029	-0.948	1.905	1.756	1.220	2.029	-0.948	1.102
273L	1.571	0.227	2.113	-1.185	1.895	1.751	-0.225	2.113	-1.185	0.878
274T	1.432	0.922	2.169	-1.641	1.941	1.861	-0.243	2.169	-1.641	0.920
275R	0.357	1.245	1.776	-1.722	1.531	1.266	0.035	1.776	-1.722	0.641
276A	0.357	0.107	1.776	-1.755	1.531	1.266	0.035	1.776	-1.755	0.474
277E	1.205	0.598	2.290	-1.541	1.996	1.885	-0.401	2.290	-1.541	0.862
278F	0.370	0.513	1.954	-1.502	1.823	1.867	-0.120	1.954	-1.502	0.701
279Q	0.433	1.227	1.720	-1.485	1.504	1.262	-0.079	1.720	-1.485	0.655
280R	0.680	0.532	2.047	-1.628	1.877	1.305	1.095	2.047	-1.628	0.844
281I	0.819	-0.486	1.991	-1.317	1.832	1.194	1.112	1.991	-1.317	0.735
282T	0.819	0.377	1.973	-0.851	1.886	1.195	1.296	1.973	-0.851	0.956
283Q	-0.142	0.700	1.561	-0.350	1.522	1.158	1.568	1.568	-0.350	0.860
284D	0.225	0.700	1.403	-0.065	1.367	1.023	1.560	1.560	-0.065	0.887
285L	0.996	0.974	1.973	-0.232	1.859	1.646	1.237	1.973	-0.232	1.207
286L	0.996	2.010	1.973	-0.420	1.859	1.646	1.237	2.010	-0.420	1.329
287D	0.882	2.573	2.075	-0.611	1.959	2.228	1.073	2.573	-0.611	1.454
288R	0.610	1.860	2.253	-0.923	2.278	2.333	1.147	2.333	-0.923	1.366
289T	1.325	1.537	2.580	-1.175	2.543	2.347	0.932	2.580	-1.175	1.441
290R	1.325	1.902	2.599	-1.266	2.488	2.346	0.748	2.599	-1.266	1.449
291K	1.072	0.992	2.655	-1.179	2.543	1.899	0.920	2.655	-1.179	1.272
292P	1.217	-0.164	2.374	-0.504	2.224	1.295	1.081	2.374	-0.504	1.075
293F	0.655	-0.522	2.057	-0.071	2.060	1.276	1.629	2.060	-0.522	1.012
294Q	-0.117	0.191	1.487	0.049	1.567	0.654	1.951	1.951	-0.117	0.826
295S	-0.344	0.191	1.038	-0.350	0.929	0.059	0.876	1.038	-0.350	0.343
296V	0.155	-0.038	1.066	-0.858	0.975	0.529	0.647	1.066	-0.858	0.354
297I	1.065	-0.266	1.328	-1.094	1.175	0.545	0.437	1.328	-1.094	0.456
298A	1.046	0.914	0.991	-0.789	0.756	0.502	0.274	1.046	-0.789	0.528
299D	0.130	0.818	0.702	-0.564	0.583	0.484	0.436	0.818	-0.564	0.370
300T	0.775	1.135	0.973	-0.348	0.747	0.502	0.007	1.135	-0.348	0.542
301G	1.046	1.219	0.991	-0.634	0.756	0.502	0.274	1.219	-0.634	0.594
302I	1.325	0.267	1.141	-0.599	0.911	0.522	1.444	1.444	-0.599	0.716
303S	1.186	1.131	1.197	-0.600	0.957	0.633	1.427	1.427	-0.600	0.847
304V	0.351	0.365	0.860	-0.470	0.784	0.615	1.708	1.708	-0.470	0.602
305S	0.623	0.365	1.141	-0.484	1.148	1.104	1.698	1.698	-0.484	0.799
306E	1.261	-0.587	1.440	-0.238	1.339	1.722	1.644	1.722	-0.587	0.940
307I	0.617	-1.366	1.169	0.013	1.175	1.703	2.073	2.073	-1.366	0.769
308D	0.617	-1.138	1.169	0.618	1.175	1.703	2.073	2.073	-1.138	0.888
309H	-0.376	-1.049	0.935	0.546	1.030	1.689	2.348	2.348	-1.049	0.732
310V	-1.103	-0.512	0.487	-0.110	0.656	1.091	2.963	2.963	-1.103	0.496

311V	-0.237	0.439	0.618	-1.066	0.629	1.089	2.642	2.642	-1.066	0.588
312L	-0.509	1.026	0.337	-1.815	0.264	0.600	2.651	2.651	-1.815	0.365
313V	-0.231	2.044	0.328	-1.855	0.246	0.000	2.543	2.543	-1.855	0.439
314G	0.332	2.026	0.646	-1.284	0.410	0.018	1.995	2.026	-1.284	0.592
315G	0.832	1.758	1.197	-0.702	0.893	0.641	1.406	1.758	-0.702	0.861
316S	1.148	1.131	1.272	-0.505	0.929	0.653	0.916	1.272	-0.505	0.792
317T	1.514	0.179	1.636	-0.660	1.212	0.671	0.547	1.636	-0.660	0.728
318R	1.287	0.179	1.646	-1.179	1.257	0.671	-0.464	1.646	-1.179	0.485
319M	0.692	-0.096	1.533	-1.483	1.294	0.672	0.125	1.533	-1.483	0.391
320P	0.610	-0.186	1.580	-1.552	1.294	0.672	0.006	1.580	-1.552	0.346
321A	0.914	-0.641	1.655	-1.148	1.458	1.141	-0.044	1.655	-1.148	0.476
322V	0.067	0.191	1.141	-0.741	0.993	0.522	0.392	1.141	-0.741	0.366
323T	0.098	0.862	1.029	-0.338	0.938	0.506	1.036	1.036	-0.338	0.590
324D	0.326	0.167	1.234	-0.486	1.303	1.082	0.881	1.303	-0.486	0.644
325L	0.686	0.119	1.561	-0.951	1.668	1.681	1.865	1.865	-0.951	0.947
326V	0.338	0.950	1.599	-1.675	1.686	1.685	1.711	1.711	-1.675	0.899
327K	0.338	1.674	1.599	-2.070	1.686	1.685	1.711	1.711	-2.070	0.946
328E	0.067	1.674	1.318	-2.178	1.321	1.196	1.720	1.720	-2.178	0.731
329L	1.009	1.674	1.393	-1.822	1.267	1.191	1.286	1.674	-1.822	0.857
330T	1.603	2.237	1.963	-1.606	1.914	1.784	0.762	2.237	-1.606	1.237
331G	1.736	2.355	1.842	-1.579	1.640	1.789	0.671	2.355	-1.579	1.208
332G	1.375	2.559	1.758	-1.636	1.549	1.208	0.917	2.559	-1.636	1.104
333K	2.399	2.559	2.141	-1.195	1.850	1.244	0.369	2.559	-1.195	1.338
334E	2.431	1.631	2.393	-0.585	2.333	1.818	0.393	2.431	-0.585	1.488
335P	2.431	1.666	2.393	0.261	2.333	1.818	0.393	2.431	0.261	1.614
336N	1.837	1.666	2.281	0.450	2.369	1.820	0.982	2.369	0.450	1.629
337K	1.919	1.595	2.132	0.428	2.041	1.266	0.803	2.132	0.428	1.455
338G	1.559	1.339	2.047	0.251	1.950	0.685	1.050	2.047	0.251	1.269
339V	2.058	0.616	2.075	0.810	1.996	1.155	0.821	2.075	0.616	1.362
340N	2.109	0.616	2.103	1.248	2.050	1.714	0.908	2.109	0.616	1.535
341P	1.514	0.007	1.533	1.538	1.403	1.121	1.431	1.538	0.007	1.221
342D	0.920	-0.448	1.421	0.801	1.440	1.123	2.020	2.020	-0.448	1.039
343E	1.287	-0.360	1.543	-0.249	1.449	1.121	0.421	1.543	-0.360	0.745
344V	0.610	-0.935	1.122	-1.423	1.130	1.082	1.123	1.130	-1.423	0.387
345V	0.838	-0.839	0.870	-1.916	0.811	1.063	0.903	1.063	-1.916	0.247
346A	0.338	-0.947	0.599	-2.163	0.492	0.574	-0.098	0.599	-2.163	-0.172
347V	-0.022	-0.456	0.272	-2.090	0.127	-0.025	-1.082	0.272	-2.090	-0.468
348G	-0.370	-0.360	0.309	-2.087	0.146	-0.022	-1.236	0.309	-2.087	-0.517
349A	0.244	-0.360	0.758	-2.014	0.528	0.019	-1.661	0.758	-2.014	-0.355
350A	0.244	-0.456	0.758	-1.966	0.528	0.019	-1.661	0.758	-1.966	-0.362
351L	0.838	-0.661	0.870	-1.803	0.492	0.018	-2.250	0.870	-2.250	-0.357
352Q	0.244	0.375	0.758	-1.717	0.528	0.019	-1.661	0.758	-1.717	-0.208
353A	-0.471	0.511	0.674	-1.724	0.537	0.025	-0.216	0.674	-1.724	-0.095
354G	-0.243	1.087	1.122	-1.925	1.175	0.619	0.859	1.175	-1.925	0.385
355V	0.699	0.363	1.197	-2.104	1.121	0.614	0.424	1.197	-2.104	0.331
356L	0.813	1.291	1.197	-2.309	1.112	1.171	0.235	1.291	-2.309	0.501
357K	0.446	2.034	1.075	-2.316	1.103	1.173	1.834	2.034	-2.316	0.764
358G	0.446	1.107	1.533	-2.324	1.786	1.767	1.898	1.898	-2.324	0.888
359E	1.312	0.275	1.926	-2.005	2.114	2.255	1.301	2.255	-2.005	1.025
360V	1.660	-0.504	1.889	-1.674	2.096	2.251	1.454	2.251	-1.674	1.024
361K	0.718	-0.613	1.356	-1.217	1.467	1.662	1.824	1.824	-1.217	0.742
362D	-0.224	-0.905	1.281	-1.086	1.522	1.667	2.259	2.259	-1.086	0.645
363V	-1.299	-1.540	0.870	-1.298	1.166	1.073	2.720	2.720	-1.540	0.242

364L	-0.433	-0.953	1.262	-1.524	1.494	1.560	2.123	2.123	-1.524	0.504
365L	-1.027	-0.390	0.692	-1.532	0.847	0.967	2.646	2.646	-1.532	0.315
366L	-1.331	-0.390	0.618	-1.175	0.683	0.498	2.696	2.696	-1.331	0.228
367D	-0.964	0.670	0.982	-0.569	0.966	0.515	2.327	2.327	-0.964	0.561
368V	-0.964	-0.074	0.982	-0.254	0.966	0.515	2.327	2.327	-0.964	0.500
369T	0.029	0.650	1.216	-0.081	1.112	0.530	2.052	2.052	-0.081	0.787
370P	0.029	-0.166	1.216	-0.135	1.112	0.530	2.052	2.052	-0.166	0.662
371L	-0.243	0.051	0.935	-0.345	0.747	0.041	2.061	2.061	-0.345	0.464
372S	-0.515	0.746	0.917	-0.706	0.738	0.041	1.794	1.794	-0.706	0.431
373L	-0.351	0.722	1.047	-1.261	0.948	0.621	1.727	1.727	-1.261	0.493
374G	-0.155	1.553	1.001	-1.828	0.829	0.622	1.548	1.553	-1.828	0.510
375I	0.787	1.553	1.533	-2.049	1.458	1.211	1.178	1.553	-2.049	0.810
376E	0.737	1.782	1.375	-2.083	1.257	1.191	1.019	1.782	-2.083	0.754
377T	1.679	1.093	1.449	-1.844	1.203	1.186	0.584	1.679	-1.844	0.764
378K	1.084	1.093	1.337	-1.758	1.239	1.187	1.172	1.337	-1.758	0.765
379G	1.325	1.074	1.468	-1.863	1.303	1.203	0.795	1.468	-1.863	0.758
380G	1.160	0.243	1.337	-1.930	1.093	0.623	0.862	1.337	-1.930	0.484
381V	1.097	-0.709	1.571	-2.114	1.412	1.228	0.821	1.571	-2.114	0.472
382M	0.155	-0.038	1.038	-2.083	0.784	0.639	1.191	1.191	-2.083	0.241
383T	-0.711	0.890	0.907	-2.206	0.811	0.640	1.512	1.512	-2.206	0.263
384R	-0.578	1.008	1.244	-2.368	1.221	1.240	1.486	1.486	-2.368	0.465
385L	-0.079	0.686	1.795	-2.672	1.704	1.863	0.896	1.863	-2.672	0.599
386I	0.629	1.381	2.103	-2.320	1.968	1.887	0.838	2.103	-2.320	0.927
387E	0.629	1.381	2.103	-1.685	1.968	1.887	0.838	2.103	-1.685	1.017
388R	0.692	1.165	1.870	-0.437	1.649	1.282	0.880	1.870	-0.437	1.014
389N	0.768	0.842	1.814	0.311	1.622	1.278	0.766	1.814	0.311	1.057
390T	1.407	1.064	2.197	0.568	1.914	1.295	0.665	2.197	0.568	1.301
391T	1.242	1.387	2.066	0.084	1.704	0.716	0.732	2.066	0.084	1.133
392I	1.337	1.752	2.085	-0.372	1.868	0.686	0.798	2.085	-0.372	1.165
393P	1.160	2.651	2.216	-0.923	2.032	1.270	0.910	2.651	-0.923	1.331
394T	1.242	2.784	2.169	-0.936	2.032	1.270	1.029	2.784	-0.936	1.370
395K	1.407	2.118	2.300	-1.111	2.242	1.850	0.962	2.300	-1.111	1.395
396R	2.241	1.778	2.636	-0.914	2.415	1.868	0.681	2.636	-0.914	1.529
397S	1.527	1.455	2.328	-0.758	2.096	1.853	0.712	2.328	-0.758	1.316
398E	1.527	0.600	2.328	-0.460	2.096	1.853	0.712	2.328	-0.460	1.236
399T	1.495	0.564	2.075	-0.225	1.613	1.278	0.688	2.075	-0.225	1.070
400F	1.363	0.612	1.646	-0.112	1.139	0.654	-0.321	1.646	-0.321	0.711
401T	1.584	1.395	1.767	-0.049	1.303	1.122	-0.490	1.767	-0.490	0.948
402T	1.723	1.395	1.711	0.281	1.257	1.012	-0.473	1.723	-0.473	0.987
403A	1.837	1.263	1.814	1.032	1.412	1.032	-0.627	1.837	-0.627	1.109
404D	2.798	2.118	2.206	1.886	1.832	1.071	-0.714	2.798	-0.714	1.599
405D	2.602	1.483	2.253	2.662	1.950	1.070	-0.535	2.662	-0.535	1.641
406N	2.684	1.435	2.206	2.804	1.950	1.070	-0.416	2.804	-0.416	1.676
407Q	2.317	0.501	2.085	2.339	1.941	1.071	1.183	2.339	0.501	1.634
408P	2.064	0.501	2.141	1.489	1.996	0.625	1.355	2.141	0.501	1.453
409S	0.926	0.047	1.730	0.530	1.658	0.138	1.686	1.730	0.047	0.959
410V	0.863	-1.216	1.758	-0.339	1.722	0.139	1.962	1.962	-1.216	0.699
411Q	0.250	-0.629	1.309	-1.034	1.339	0.099	2.387	2.387	-1.034	0.532
412I	-0.003	-0.492	1.318	-1.408	1.303	0.099	2.499	2.499	-1.408	0.474
413Q	-0.035	0.407	1.496	-1.545	1.522	0.121	2.503	2.503	-1.545	0.639
414V	0.560	0.730	1.608	-1.334	1.485	0.120	1.914	1.914	-1.334	0.726
415Y	0.673	1.401	1.608	-1.275	1.476	0.677	1.725	1.725	-1.275	0.898
416Q	1.445	1.483	2.178	-1.296	1.968	1.300	1.402	2.178	-1.296	1.211

417G	1.559	0.992	2.178	-1.646	1.959	1.857	1.213	2.178	-1.646	1.159
418E	1.287	0.365	2.160	-2.104	1.950	1.857	0.946	2.160	-2.104	0.923
419R	1.540	-0.120	1.907	-2.502	1.713	1.838	-0.397	1.907	-2.502	0.569
420E	1.293	-0.324	1.580	-2.756	1.339	1.795	-1.570	1.795	-2.756	0.194
421I	1.065	-0.068	1.748	-2.328	1.558	2.415	-1.303	2.415	-2.328	0.441
422A	1.015	0.053	1.720	-1.212	1.504	1.856	-1.390	1.856	-1.390	0.507
423A	1.110	-0.152	1.739	0.194	1.668	1.826	-1.324	1.826	-1.324	0.723
424H	0.035	0.475	1.328	1.257	1.312	1.232	-0.862	1.328	-0.862	0.682
425N	-0.041	1.241	1.384	1.272	1.339	1.236	-0.749	1.384	-0.749	0.812
426K	0.187	0.457	1.375	0.261	1.294	1.236	0.261	1.375	0.187	0.724
427L	0.465	0.201	1.524	-0.729	1.449	1.256	1.431	1.524	-0.729	0.800
428L	-0.250	0.201	1.300	-1.170	1.230	0.640	1.415	1.415	-1.170	0.481
429G	-0.199	0.896	1.328	-0.971	1.285	1.199	1.502	1.502	-0.971	0.720
430S	-1.141	0.896	0.795	-0.574	0.656	0.610	1.872	1.872	-1.141	0.445
431F	-0.231	-0.284	1.075	-0.575	0.802	0.624	1.477	1.477	-0.575	0.413
432E	0.711	0.249	1.150	-0.944	0.747	0.619	1.043	1.150	-0.944	0.511
433L	-0.155	0.033	1.019	-1.336	0.774	0.621	1.364	1.364	-1.336	0.332
434T	-0.433	0.237	1.113	-1.509	0.893	0.620	1.424	1.424	-1.509	0.335
435G	0.281	0.105	1.421	-1.384	1.212	0.635	1.393	1.421	-1.384	0.523
436I	-0.079	0.291	1.094	-1.123	0.847	0.035	0.409	1.094	-1.123	0.211
437P	0.636	1.243	1.421	-0.680	1.112	0.049	0.194	1.421	-0.680	0.568
438P	0.572	0.560	1.655	-0.534	1.431	0.653	0.153	1.655	-0.534	0.641
439A	0.572	0.560	1.655	-0.584	1.431	0.653	0.153	1.655	-0.584	0.634
440P	0.572	1.050	1.655	-1.010	1.431	0.653	0.153	1.655	-1.010	0.644
441R	0.572	0.367	1.655	-1.416	1.431	0.653	0.153	1.655	-1.416	0.488
442G	0.819	0.129	1.739	-1.653	1.531	0.677	0.096	1.739	-1.653	0.477
443I	0.180	-0.595	1.599	-1.541	1.513	0.678	1.428	1.599	-1.541	0.466
444P	0.541	0.221	1.683	-1.498	1.604	1.259	1.182	1.683	-1.498	0.713
445Q	0.041	-0.312	1.132	-1.553	1.121	0.636	1.771	1.771	-1.553	0.405
446I	0.010	-0.264	1.337	-1.779	1.321	0.656	1.812	1.812	-1.779	0.442
447E	-0.066	-0.264	1.412	-1.763	1.294	0.658	1.741	1.741	-1.763	0.430
448V	0.433	-0.300	1.440	-1.263	1.339	1.128	1.512	1.512	-1.263	0.613
449T	-0.452	-0.204	0.973	-0.693	0.948	1.088	1.671	1.671	-0.693	0.476
450F	0.686	-0.086	1.384	0.096	1.285	1.575	1.340	1.575	-0.086	0.897
451D	0.326	0.716	1.057	0.232	0.920	0.975	0.356	1.057	0.232	0.655
452I	1.002	-0.148	1.477	0.603	1.239	1.014	-0.346	1.477	-0.346	0.692
453D	1.034	0.081	1.272	0.671	1.039	0.994	-0.386	1.272	-0.386	0.672
454A	1.110	-0.368	1.197	0.848	1.066	0.992	-0.316	1.197	-0.368	0.647
455N	0.244	-0.464	0.804	0.387	0.738	0.505	0.282	0.804	-0.464	0.356
456G	0.882	-0.583	1.103	0.116	0.929	1.123	0.228	1.123	-0.583	0.543
457I	0.016	-1.210	0.711	-0.524	0.601	0.635	0.825	0.825	-1.210	0.151
458V	0.212	-0.054	0.907	-0.292	0.756	0.655	1.876	1.876	-0.292	0.580
459H	-0.098	0.582	0.608	-0.251	0.446	0.615	0.979	0.979	-0.251	0.412
460V	-0.098	1.323	1.066	-0.239	1.130	1.209	1.044	1.323	-0.239	0.776
461T	1.040	2.046	1.477	-0.464	1.467	1.696	0.713	2.046	-0.464	1.140
462A	1.634	2.046	2.047	-0.753	2.114	2.289	0.190	2.289	-0.753	1.367
463K	1.862	2.673	1.879	-0.919	1.895	1.670	-0.077	2.673	-0.919	1.283
464D	2.425	2.673	2.197	-0.754	2.060	1.688	-0.625	2.673	-0.754	1.380
465K	2.456	2.709	1.991	-0.797	1.859	1.668	-0.666	2.709	-0.797	1.317
466G	2.684	2.487	2.440	-0.989	2.497	2.263	0.409	2.684	-0.989	1.684
467T	2.817	2.351	2.318	-1.213	2.224	2.268	0.318	2.817	-1.213	1.583
468G	2.627	1.535	2.346	-1.187	2.214	1.819	0.214	2.627	-1.187	1.367
469K	2.595	1.722	2.094	-0.768	1.731	1.245	0.190	2.595	-0.768	1.258

470E	1.729	0.566	1.963	-0.174	1.759	1.246	0.511	1.963	-0.174	1.086
471N	1.666	0.481	2.197	0.059	2.078	1.851	0.469	2.197	0.059	1.257
472T	0.800	0.447	2.066	-0.400	2.105	1.853	0.791	2.105	-0.400	1.095
473I	0.819	0.584	1.945	-1.303	1.841	1.301	0.889	1.945	-1.303	0.868
474R	0.819	1.764	1.945	-2.062	1.841	1.301	0.889	1.945	-2.062	0.928
475I	0.737	1.577	1.636	-2.382	1.485	1.260	1.002	1.636	-2.382	0.759
476Q	0.819	1.698	1.589	-1.936	1.485	1.260	1.121	1.698	-1.936	0.862
477E	1.685	2.062	1.720	-1.326	1.458	1.258	0.800	2.062	-1.326	1.094
478G	0.838	2.319	1.206	-0.891	0.993	0.639	1.236	2.319	-0.891	0.906
479S	1.755	2.267	1.496	-0.488	1.166	0.657	1.074	2.267	-0.488	1.132
480G	1.736	1.950	1.617	-0.529	1.431	1.210	0.976	1.950	-0.529	1.199
481L	1.736	0.998	1.617	-0.639	1.431	1.210	0.976	1.736	-0.639	1.047
482S	2.008	1.742	1.898	-0.629	1.795	1.699	0.966	2.008	-0.629	1.354
483K	1.091	1.700	1.608	-0.818	1.622	1.680	1.128	1.700	-0.818	1.144
484E	1.363	0.754	1.889	-0.550	1.987	2.169	1.119	2.169	-0.550	1.247
485D	2.210	-0.146	2.403	-0.424	2.451	2.788	0.683	2.788	-0.424	1.424
486I	1.533	0.147	2.244	-0.513	2.342	2.786	0.468	2.786	-0.513	1.287
487D	0.667	1.010	1.655	-0.974	1.686	2.193	0.725	2.193	-0.974	0.995
488R	0.534	0.471	1.776	-1.663	1.959	2.188	0.816	2.188	-1.663	0.869
489M	0.534	0.233	1.776	-2.249	1.959	2.188	0.816	2.188	-2.249	0.751
490I	1.173	0.347	1.917	-2.144	1.977	2.186	-0.516	2.186	-2.144	0.706
491K	1.034	0.762	1.973	-1.755	2.023	2.297	-0.533	2.297	-1.755	0.829
492D	0.901	-0.070	1.543	-1.281	1.549	1.672	-1.542	1.672	-1.542	0.396
493A	1.299	-0.034	1.711	-0.826	1.677	2.275	-1.220	2.275	-1.220	0.697
494E	1.938	0.542	1.851	-0.692	1.695	2.273	-2.551	2.273	-2.551	0.722
495A	2.071	0.505	1.730	-0.364	1.422	2.278	-2.643	2.278	-2.643	0.714
496H	1.932	1.319	1.786	-0.426	1.467	2.388	-2.660	2.388	-2.660	0.829
497A	2.431	2.060	2.057	-0.396	1.786	2.877	-1.659	2.877	-1.659	1.308
498E	2.203	2.874	2.160	-0.760	1.895	2.902	-1.634	2.902	-1.634	1.377
499E	2.431	3.112	2.608	-0.858	2.533	3.497	-0.558	3.497	-0.858	1.824
500D	2.564	3.112	2.879	-1.211	2.834	3.502	-0.827	3.502	-1.211	1.836
501R	2.697	3.148	3.309	-1.525	3.308	4.127	0.183	4.127	-1.525	2.178
502K	2.697	2.335	3.309	-2.108	3.308	4.127	0.183	4.127	-2.108	1.979
503R	2.697	2.042	3.309	-2.497	3.308	4.127	0.183	4.127	-2.497	1.881
504R	2.197	1.133	3.038	-2.739	2.989	3.638	-0.818	3.638	-2.739	1.348
505E	2.564	1.133	2.879	-2.290	2.834	3.502	-0.827	3.502	-2.290	1.399
506E	1.970	1.167	2.309	-1.776	2.187	2.909	-0.303	2.909	-1.776	1.209
507A	1.970	1.082	2.309	-1.209	2.187	2.909	-0.303	2.909	-1.209	1.278
508D	2.147	1.082	2.178	-0.529	2.023	2.325	-0.415	2.325	-0.529	1.259
509V	2.033	1.119	2.178	-0.071	2.032	1.768	-0.225	2.178	-0.225	1.262
510R	1.672	1.706	1.851	0.323	1.668	1.168	-1.209	1.851	-1.209	1.025
511N	2.033	0.688	2.178	0.439	2.032	1.768	-0.225	2.178	-0.225	1.273
512Q	1.729	-0.017	2.103	0.109	1.868	1.299	-0.176	2.103	-0.176	0.988
513A	1.382	-0.915	2.141	-0.548	1.886	1.302	-0.329	2.141	-0.915	0.703
514E	0.882	-0.424	1.589	-1.082	1.403	0.679	0.260	1.589	-1.082	0.473
515T	0.319	-0.508	1.543	-1.583	1.330	0.658	0.705	1.543	-1.583	0.352
516L	0.319	-0.424	1.543	-1.585	1.330	0.658	0.705	1.543	-1.585	0.364
517V	0.515	0.612	1.739	-1.396	1.485	0.678	1.756	1.756	-1.396	0.770
518Y	0.515	0.534	1.739	-1.134	1.485	0.678	1.756	1.756	-1.134	0.796
519Q	0.547	0.844	1.991	-1.038	1.968	1.253	1.780	1.991	-1.038	1.049
520T	0.547	1.185	2.010	-1.037	1.914	1.252	1.597	2.010	-1.037	1.067
521E	0.547	1.269	2.010	-1.288	1.914	1.252	1.597	2.010	-1.288	1.043
522K	1.028	1.185	2.206	-1.552	2.315	1.827	1.330	2.315	-1.552	1.191

523F	1.141	1.167	2.206	-1.767	2.306	2.384	1.140	2.384	-1.767	1.225
524V	1.192	1.916	2.337	-1.862	2.524	2.406	1.262	2.524	-1.862	1.397
525K	0.964	2.012	2.440	-1.952	2.634	2.432	1.288	2.634	-1.952	1.402
526E	1.097	1.756	2.318	-1.936	2.360	2.436	1.197	2.436	-1.936	1.318
527Q	1.812	1.808	2.384	-2.012	2.406	2.432	-0.065	2.432	-2.012	1.252
528R	2.539	1.944	2.832	-2.078	2.780	3.030	-0.680	3.030	-2.078	1.481
529E	2.539	1.986	2.374	-2.178	2.096	2.436	-0.744	2.539	-2.178	1.215
530A	2.406	2.243	2.038	-2.176	1.686	1.836	-0.718	2.406	-2.176	1.045
531E	2.437	2.146	1.860	-1.870	1.467	1.814	-0.721	2.437	-1.870	1.019
532G	2.532	1.930	1.879	-1.445	1.631	1.784	-0.655	2.532	-1.445	1.094
533G	1.805	1.878	1.431	-1.024	1.257	1.186	-0.040	1.878	-1.024	0.927
534S	1.805	1.790	1.674	-0.793	1.531	1.205	1.190	1.805	-0.793	1.200
535K	1.805	1.425	1.674	-0.850	1.531	1.205	1.190	1.805	-0.850	1.140
536V	2.077	0.389	1.954	-0.754	1.895	1.694	1.180	2.077	-0.754	1.205
537P	2.045	1.095	2.160	-0.469	2.096	1.714	1.221	2.160	-0.469	1.409
538E	1.053	1.567	1.926	-0.186	1.950	1.699	1.496	1.950	-0.186	1.358
539D	1.135	0.896	1.776	0.408	1.622	1.145	1.318	1.776	0.408	1.186
540T	1.729	0.896	2.346	0.610	2.269	1.738	0.794	2.346	0.610	1.483
541L	1.363	0.405	1.982	0.580	1.987	1.720	1.163	1.987	0.405	1.314
542N	1.502	0.610	1.926	0.564	1.941	1.610	1.180	1.941	0.564	1.333
543K	1.002	-0.096	1.655	0.199	1.622	1.121	0.179	1.655	-0.096	0.812
544V	0.806	-0.927	1.459	-0.153	1.467	1.101	-0.872	1.467	-0.927	0.412
545D	1.154	-0.256	1.421	-0.460	1.449	1.097	-0.718	1.449	-0.718	0.527
546A	0.844	-0.795	1.122	-1.074	1.139	1.057	-1.615	1.139	-1.615	0.097
547A	0.977	0.037	1.001	-1.544	0.866	1.061	-1.706	1.061	-1.706	0.099
548V	1.344	0.037	1.122	-1.925	0.875	1.060	-3.305	1.344	-3.305	-0.113
549A	1.072	0.133	1.300	-2.282	1.194	1.166	-3.231	1.300	-3.231	-0.093
550E	1.072	-0.072	1.300	-2.324	1.194	1.166	-3.231	1.300	-3.231	-0.128
551A	1.072	-0.019	1.300	-2.362	1.194	1.166	-3.231	1.300	-3.231	-0.126
552K	0.724	0.608	1.337	-2.380	1.212	1.169	-3.385	1.337	-3.385	-0.102
553A	0.952	0.632	1.328	-2.343	1.166	1.169	-2.375	1.328	-2.375	0.076
554A	0.819	1.171	0.991	-2.250	0.756	0.570	-2.348	1.171	-2.348	-0.042
555L	1.097	0.846	1.141	-1.875	0.911	0.590	-1.178	1.141	-1.875	0.219
556G	1.369	1.906	0.963	-1.137	0.592	0.484	-1.252	1.906	-1.252	0.418
557G	0.730	1.279	0.823	-0.396	0.574	0.486	0.080	1.279	-0.396	0.511
558S	1.009	0.327	0.973	0.369	0.729	0.506	1.250	1.250	0.327	0.737
559D	1.723	0.303	1.057	0.505	0.720	0.501	-0.195	1.723	-0.195	0.659
560I	0.857	0.620	0.926	0.110	0.747	0.503	0.126	0.926	0.110	0.555
561S	0.857	0.944	1.384	-0.653	1.431	1.097	0.191	1.431	-0.653	0.750
562A	0.857	-0.026	1.384	-1.216	1.431	1.097	0.191	1.431	-1.216	0.531
563I	0.357	0.550	1.113	-1.623	1.112	0.608	-0.810	1.113	-1.623	0.187
564K	0.598	1.706	1.244	-1.476	1.175	0.624	-1.187	1.706	-1.476	0.383
565S	0.680	0.670	1.421	-1.534	1.385	1.203	-1.373	1.421	-1.534	0.350
566A	0.907	0.441	1.870	-1.718	2.023	1.798	-0.298	2.023	-1.718	0.718
567M	0.832	0.932	1.926	-2.152	2.050	1.801	-0.185	2.050	-2.152	0.743
568E	0.832	1.621	1.468	-2.449	1.367	1.207	-0.250	1.621	-2.449	0.542
569K	0.800	1.902	1.646	-2.481	1.586	1.229	-0.246	1.902	-2.481	0.633
570L	1.160	1.561	1.973	-2.182	1.950	1.829	0.738	1.973	-2.182	1.004
571G	1.837	1.766	2.132	-1.566	2.060	1.831	0.953	2.132	-1.566	1.287
572Q	1.723	0.934	2.132	-1.015	2.069	1.274	1.142	2.132	-1.015	1.180
573E	1.495	1.070	1.683	-0.517	1.431	0.680	0.067	1.683	-0.517	0.844
574S	1.495	0.986	1.683	-0.386	1.431	0.680	0.067	1.683	-0.386	0.851
575Q	1.495	0.131	1.683	-0.621	1.431	0.680	0.067	1.683	-0.621	0.695

576A	1.495	-0.685	1.683	-1.100	1.431	0.680	0.067	1.683	-1.100	0.510
577L	1.135	-1.091	1.356	-1.414	1.066	0.080	-0.917	1.356	-1.414	0.031
578G	0.218	-0.312	1.066	-1.691	0.893	0.062	-0.755	1.066	-1.691	-0.074
579Q	-0.281	-0.939	0.991	-1.758	0.756	0.039	-0.586	0.991	-1.758	-0.254
580A	0.079	-1.430	1.318	-1.928	1.121	0.638	0.398	1.318	-1.928	0.028
581I	0.794	-0.939	1.403	-2.091	1.112	0.633	-1.047	1.403	-2.091	-0.020
582Y	0.566	-0.615	1.412	-2.189	1.157	0.633	-2.058	1.412	-2.189	-0.156
583E	0.566	-0.208	1.412	-2.091	1.157	0.633	-2.058	1.412	-2.091	-0.084
584A	0.566	0.073	1.412	-1.939	1.157	0.633	-2.058	1.412	-2.058	-0.022
585A	1.205	0.564	1.552	-1.720	1.175	0.631	-3.390	1.552	-3.390	0.002
586Q	1.736	0.564	1.449	-1.432	1.093	0.632	-3.562	1.736	-3.562	0.068
587A	1.622	0.564	1.449	-1.054	1.103	0.075	-3.372	1.622	-3.372	0.055
588A	1.622	1.191	1.449	-0.674	1.103	0.075	-3.372	1.622	-3.372	0.199
589S	1.818	1.191	1.646	-0.337	1.257	0.095	-2.321	1.818	-2.321	0.478
590Q	1.799	0.335	1.309	-0.352	0.838	0.052	-2.484	1.799	-2.484	0.214
591A	1.799	-0.066	1.309	-0.594	0.838	0.052	-2.484	1.799	-2.484	0.122
592T	1.799	0.293	1.309	-0.964	0.838	0.052	-2.484	1.799	-2.484	0.120
593G	1.521	0.429	1.318	-1.009	0.856	0.652	-2.377	1.521	-2.377	0.199
594A	1.274	0.429	1.234	-0.674	0.756	0.629	-2.320	1.274	-2.320	0.190
595A	1.502	1.004	1.225	0.029	0.711	0.629	-1.310	1.502	-1.310	0.541
596H	1.533	1.363	1.019	0.463	0.510	0.609	-1.350	1.533	-1.350	0.592
597P	1.666	1.900	1.356	0.361	0.920	1.208	-1.377	1.900	-1.377	0.862
598G	1.666	2.168	1.599	-0.184	1.194	1.227	-0.147	2.168	-0.184	1.075
599G	1.894	1.541	1.589	-0.748	1.148	1.227	0.864	1.894	-0.748	1.074
600E	2.121	1.004	1.421	-1.103	0.929	0.607	0.597	2.121	-1.103	0.797
601P	2.121	0.788	1.178	-1.165	0.656	0.588	-0.634	2.121	-1.165	0.505
602G	1.894	1.056	1.346	-0.832	0.875	1.208	-0.366	1.894	-0.832	0.740
603G	1.666	1.285	1.599	-0.452	1.194	1.227	-0.147	1.666	-0.452	0.910
604A	1.533	0.658	1.262	0.192	0.784	0.628	-0.120	1.533	-0.120	0.705
605H	1.812	1.197	1.169	0.765	0.665	0.629	-0.180	1.812	-0.180	0.865
606P	1.584	1.646	1.178	0.922	0.711	0.629	-1.191	1.646	-1.191	0.783
607G	1.856	1.191	1.459	0.865	1.075	1.118	-1.200	1.856	-1.200	0.909
608S	2.355	0.467	1.730	0.888	1.394	1.607	-0.199	2.355	-0.199	1.177
609A	1.989	0.151	1.449	0.895	1.212	0.988	0.123	1.989	0.123	0.972
610D	1.622	0.151	1.085	0.915	0.929	0.971	0.491	1.622	0.151	0.881
611D	1.894	0.187	1.365	0.859	1.294	1.460	0.482	1.894	0.187	1.077
612V	1.616	-0.448	1.216	0.281	1.139	1.440	-0.688	1.616	-0.688	0.651
613V	1.976	-0.448	1.543	-0.098	1.504	2.039	0.296	2.039	-0.448	0.973
614D	1.110	0.187	1.150	-0.598	1.175	1.552	0.894	1.552	-0.598	0.781
615A	0.244	0.187	0.758	-1.105	0.847	1.065	1.491	1.491	-1.105	0.498
616E	1.110	0.814	1.150	-1.299	1.175	1.552	0.894	1.552	-1.299	0.771
617V	1.976	1.052	1.543	-0.990	1.504	2.039	0.296	2.039	-0.990	1.060
618V	1.704	1.724	1.262	-0.389	1.139	1.550	0.305	1.724	-0.389	1.042
619D	1.837	1.820	1.692	0.300	1.613	2.175	1.314	2.175	0.300	1.536
620D	1.837	2.112	1.692	0.307	1.613	2.175	1.314	2.175	0.307	1.579
621G	2.203	1.828	1.814	-0.421	1.622	2.173	-0.284	2.203	-0.421	1.276
622R	2.798	1.455	2.384	-1.369	2.269	2.767	-0.808	2.798	-1.369	1.356
623E	2.166	0.896	1.655	-2.010	2.269	2.338	-1.809	2.338	-2.010	0.786
624A	1.533	0.576	0.926	-2.106	2.269	1.909	-2.810	2.269	-2.810	0.328
625K	1.173	0.830	0.477	-1.703	2.634	1.969	-3.821	2.634	-3.821	0.223

**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	<p><b>1</b>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVL RIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVS LLEIGEGVVEVRAT  SGDNHLGGDDWDQRVVDWLVDKFKGTSGIDLTKDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  IERNTTIPTKRSETFTTADDNQPSVQIQVYQGEREIAAHNKL LGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAE GGSKVPEDTLNKVDAAVAEAKAALGGSDISAISAMEKLGQESQALGQ  AIYEEAAQAASQATGA AHPGGEPGGAHPGSADDVVDAEVDDGREAK<sup>625</sup></p>
Hydrophili city	<p><b>1</b>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVL RIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVS LLEIGEGVVEVRAT  SGDNHLGGDDWDQRVVDWLVDKFKGTSGIDLTKDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  IERNTTIPTKRSETFTTADDNQPSVQIQVYQGEREIAAHNKL LGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAE GGSKVPEDTLNKVDAAVAEAKAALGGSDISAISAMEKLGQESQALGQ  AIYEEAAQAASQATGA AHPGGEPGGAHPGSADDVVDAEVDDGREAK<sup>625</sup></p>
Flexibility	<p><b>1</b>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVL RIVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVS LLEIGEGVVEVRAT  SGDNHLGGDDWDQRVVDWLVDKFKGTSGIDLTKDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  IERNTTIPTKRSETFTTADDNQPSVQIQVYQGEREIAAHNKL LGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAE GGSKVPEDTLNKVDAAVAEAKAALGGSDISAISAMEKLGQESQALGQ  AIYEEAAQAASQATGA AHPGGEPGGAHPGSADDVVDAEVDDGREAK<sup>625</sup></p>
Accessib ility	<p><b>1</b>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGQPAKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMKLKRDAEAYLGEDITDAVITTPAYFNDAQRQ</p>



	<p><a href="#">ATKDA</a>GQIAGLNVLRLVNEPTAAALAY<a href="#">GLDKGEKEQRIL</a>VFDLGGGTFDVSLLLEIGEGVVEV<a href="#">RATSGDN</a>HLLGGDDWDQRVVDWLVDKFKGTS<a href="#">GIDLT</a>KDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  <a href="#">IERNTTIPTKRSETFTTADDN</a>QPSVQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGL<a href="#">SKEDIDRM</a>IKDAEAHAEEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAEAGGSKVPEDTLNKVDAVAEAKAALGGSDISAIKSAAMEKLGQESQALGQ  AIYEAAQAASQATGAAHPGGEPGGAHPGSADDVVDAEVVDDGREAK<sup>625</sup></p>
Turns	<p><sup>1</sup>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGPAPKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMMLKLRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVLRLVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLLEIGEGVVEV<a href="#">RATSGDN</a>  HLLGGDDWDQRVVDWLVDKFKGTS<a href="#">GIDLT</a>KDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  <a href="#">IERNTTIPTKRSETFTTADDN</a>QPSVQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAEAGGSKVPEDTLNKVDAVAEAKAALGGSDISAIKSAAMEKLGQESQALGQ  AIYEAAQAASQATGAAHPGGEPGGAHPGSADDVVDAEVVDDGREAK<sup>625</sup></p>
Exposed Surface	<p><sup>1</sup>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGPAPKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMMLKLRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVLRLVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLLEIGEGVVEV<a href="#">RATSGDN</a>  HLLGGDDWDQRVVDWLVDKFKGTS<a href="#">GIDLT</a>KDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  <a href="#">IERNTTIPTKRSETFTTADDN</a>QPSVQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAEAGGSKVPEDTLNKVDAVAEAKAALGGSDISAIKSAAMEKLGQESQALGQ  AIYEAAQAASQATGAAHPGGEPGGAHPGSADDVVDAEVVDDGREAK<sup>625</sup></p>
Polarity	<p><sup>1</sup>MARAVGIDLGTTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGPAPKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMMLKLRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVLRLVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLLEIGEGVVEV<a href="#">RATSGDN</a>  HLLGGDDWDQRVVDWLVDKFKGTS<a href="#">GIDLT</a>KDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  <a href="#">IERNTTIPTKRSETFTTADDN</a>QPSVQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAEAGGSKVPEDTLNKVDAVAEAKAALGGSDISAIKSAAMEKLGQESQALGQ  AIYEAAQAASQATGAAHPGGEPGGAHPGSADDVVDAEVVDDGREAK<sup>625</sup></p>
Antigenic Propensity	<p><sup>1</sup>MARAVGIDLGTNSVSVLEGGDPVVANSEGSRTTPSIVAFARNGEVLVGPAPKNQAVTNVD  RTVRSVKRHMGS DWSIEIDGKKYTAPEISARILMMLKLRDAEAYLGEDITDAVITTPAYFNDAQRQ  ATKDAGQIAGLNVLRLVNEPTAAALAYGLDKGEKEQRILVFDLGGGTFDVSLLLEIGEGVVEV<a href="#">RATSGDN</a>  HLLGGDDWDQRVVDWLVDKFKGTS<a href="#">GIDLT</a>KDKMAMQRLREAAEKAKIELSSSQSTSINL  PYITVDADKNPLFLDEQLTRAEFQRITQDLLDRTRKPFQSVIADTGISVSEIDHVVLVGGSTRMPA  VTDLVKELTGGKEPNKGVNPDEVVAVGAALQAGVLKGEVKDVLLLDVTPLSLGIETKGGVMTRL  <a href="#">IERNTTIPTKRSETFTTADDN</a>QPSVQIQVYQGEREIAAHNKLLGSFELTGIPPAPRGIPQIEVTFDI  DANGIVHVTAKDKGTGKENTIRIQEGSGLSKEDIDRMIKDAEAHAEEEDRKRREEADVRNQAETL  VYQTEKFVKEQREAEAGGSKVPEDTLNKVDAVAEAKAALGGSDISAIKSAAMEKLGQESQALGQ  AIYEAAQAASQATGAAHPGGEPGGAHPGSADDVVDAEVVDDGREAK<sup>625</sup></p>

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