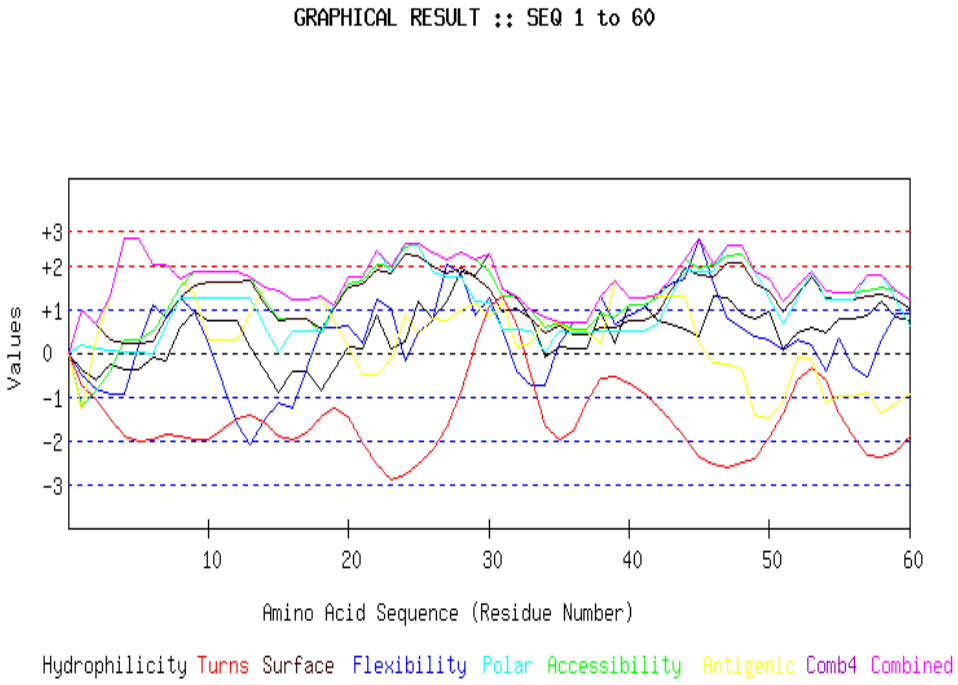
BcePred Prediction Server

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

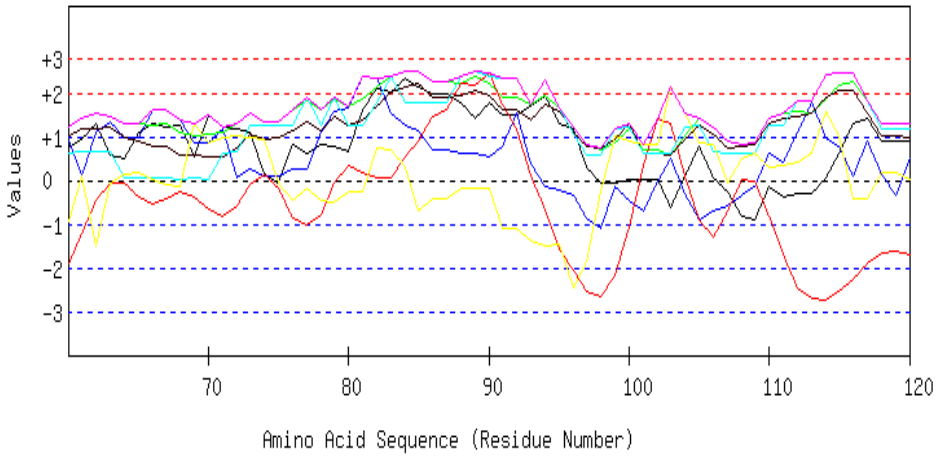
seqname=
Seq=VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTALSGTTG
LGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVAAHLVARAYRHGETA
DDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGSDVAAFIEHTREAVELGQDQAVVI
TADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFMLKEIAEQPAAVADTLLGHFVGGRIVLDEQRLS
DQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLPVEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRH
AKEQKAKVLAICNTNGSQIPRECDAVLYTRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHEL
EAMPDLVARVIAATGPVAELAHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDG
LPVIVVMPSPKGSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVAR
ARGYDVDKPRNLAKSVTVE

Length=624

GRAPHICAL RESULT

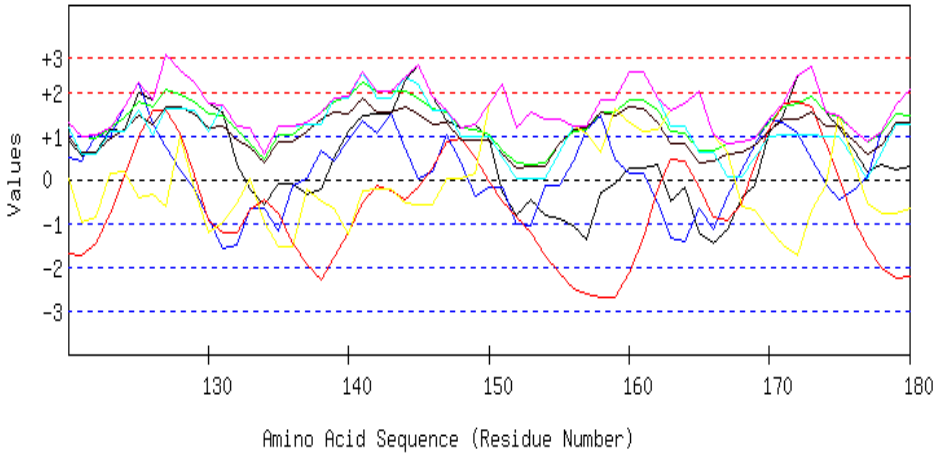


GRAPHICAL RESULT :: SEQ 61 to 120



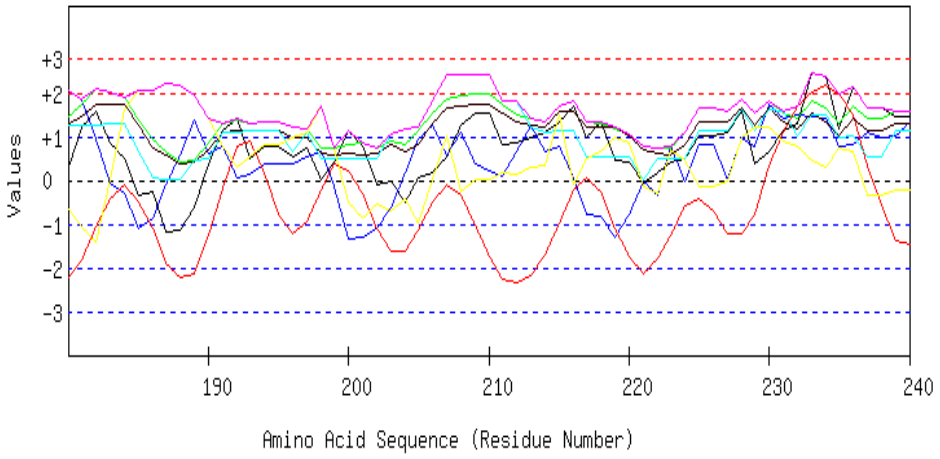
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 121 to 180

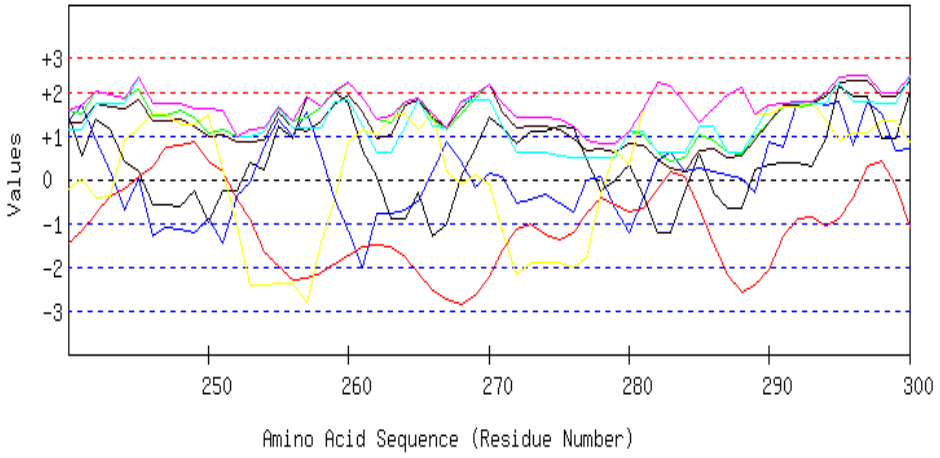


Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

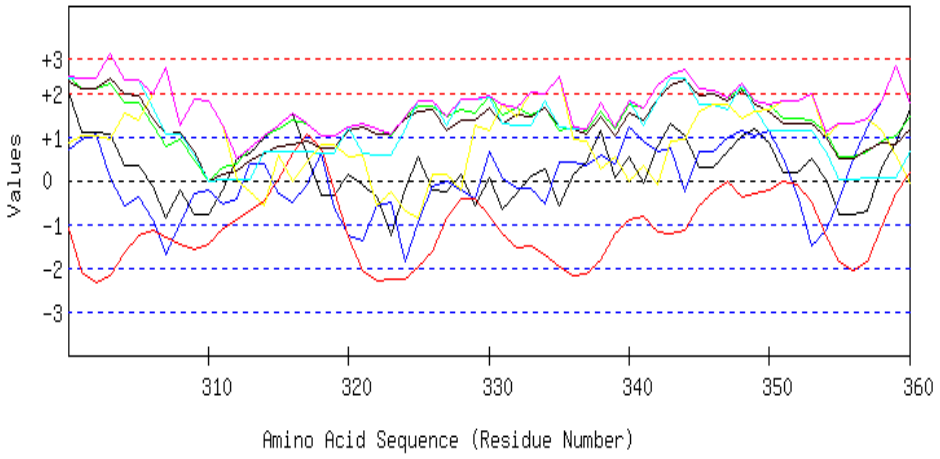
GRAPHICAL RESULT :: SEQ 181 to 240



GRAPHICAL RESULT :: SEQ 241 to 300

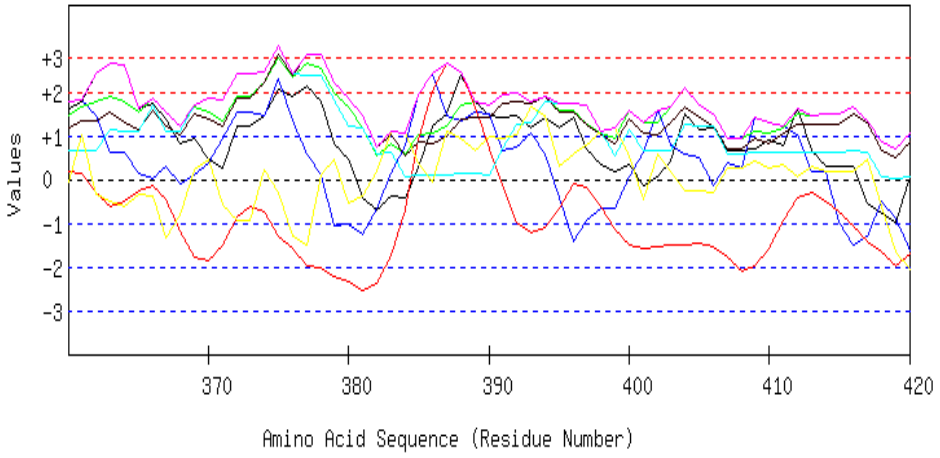


GRAPHICAL RESULT :: SEQ 301 to 360



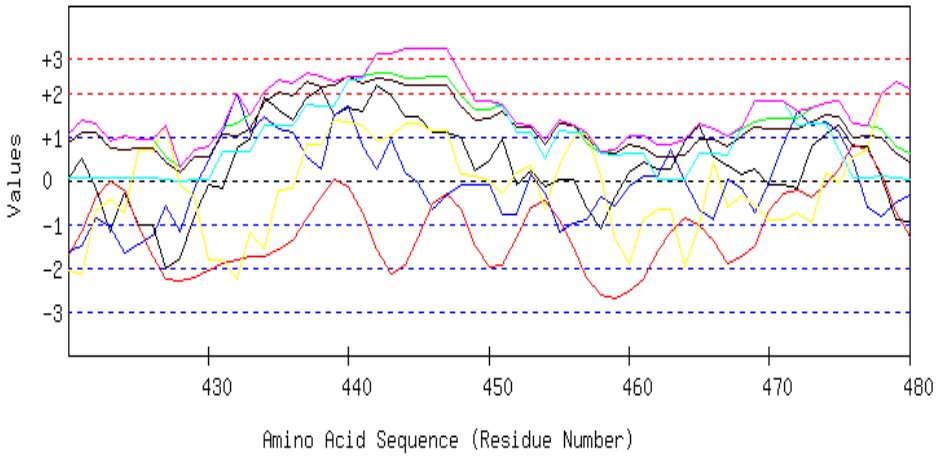
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 361 to 420



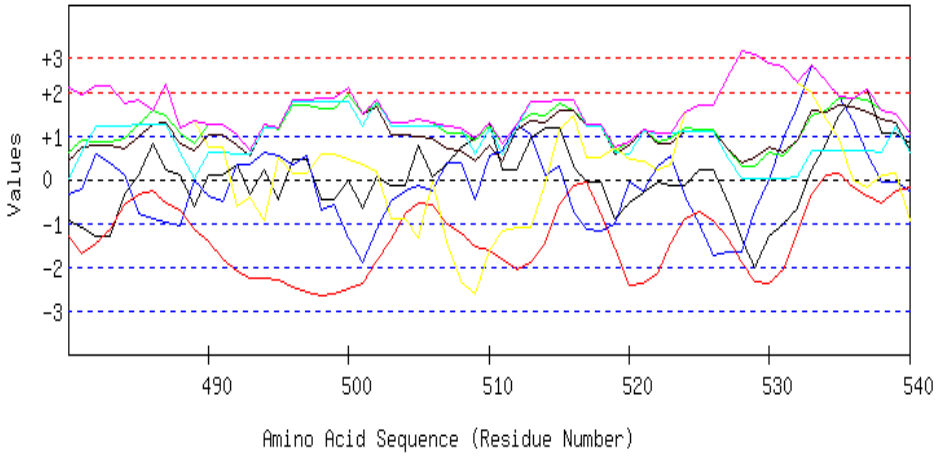
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 421 to 480



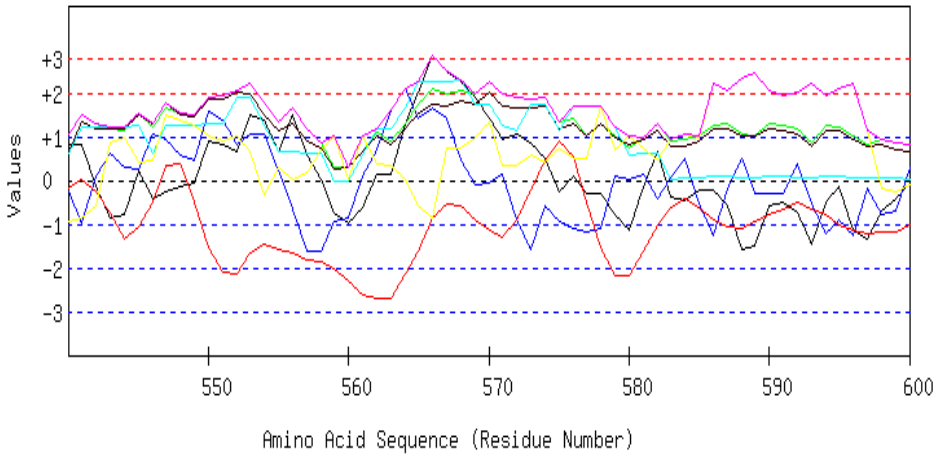
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 481 to 540



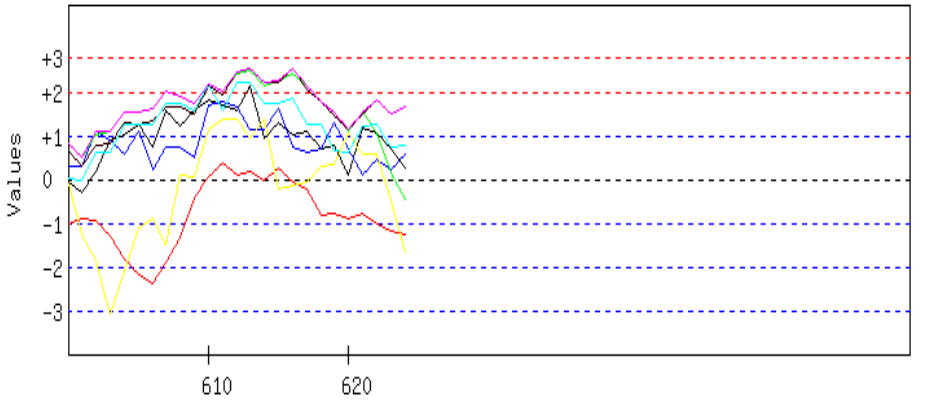
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 541 to 600



Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

GRAPHICAL RESULT :: SEQ 601 to 660



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

**VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAE
MPSTALSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAG
VEFASDTDTEVAAHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAA
RRSTPLVLGIGDNEMFVGSDVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQA
GRDFRPFHIDWDLAAAEKGGYEYFMLKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQE
LREIDKVFVVACGTAYHSGLLAKYAIEHWTRLPVEVELASEFRYRDPVLDRSTLVVAISQ
SGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLYTRAGPEIGVASTKTFLAQI
AANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAELAHRFAQSSTVL
FLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPKGSAT
LHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFA
ASVARARGYDVDKPRNLAKSVTVE**

Length=624

A.A. Combined	Parameter									
	Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX	MIN	AVG
1 V	-0.370	-0.500	-1.214	-0.756	0.993	0.171	-1.316	0.993	-1.316	-0.427
2 C	-0.604	-0.811	-0.878	-1.072	0.665	0.113	0.283	0.665	-1.072	-0.329
3 G	-0.243	-0.943	-0.429	-1.505	0.300	0.053	1.294	1.294	-1.505	-0.211
4 I	-0.363	-0.943	0.281	-1.902	0.218	0.012	2.636	2.636	-1.902	-0.009
5 V	-0.363	0.195	0.281	-2.016	0.218	0.012	2.636	2.636	-2.016	0.137
6 G	-0.092	1.105	0.487	-1.962	0.264	-0.006	2.014	2.014	-1.962	0.258
7 Y	-0.186	0.836	0.926	-1.871	0.784	0.619	2.013	2.013	-1.871	0.446
8 V	0.585	1.243	1.496	-1.912	1.276	1.242	1.690	1.690	-1.912	0.803
9 G	0.952	0.932	1.860	-1.969	1.558	1.259	1.321	1.860	-1.969	0.845
10 R	0.724	0.209	1.870	-1.970	1.604	1.259	0.311	1.870	-1.970	0.572
11 R	0.724	-0.701	1.870	-1.729	1.604	1.259	0.311	1.870	-1.729	0.477
12 P	0.724	-1.610	1.870	-1.488	1.604	1.259	0.311	1.870	-1.610	0.381
13 A	0.130	-2.083	1.758	-1.411	1.640	1.261	0.899	1.758	-2.083	0.313
14 Y	-0.370	-1.544	1.206	-1.578	1.157	0.638	1.489	1.489	-1.578	0.143
15 V	-0.901	-1.138	0.767	-1.884	0.729	0.030	1.435	1.435	-1.884	-0.137
16 V	-0.401	-1.246	0.795	-1.967	0.774	0.500	1.206	1.206	-1.967	-0.048
17 V	-0.401	-0.336	0.795	-1.807	0.774	0.500	1.206	1.206	-1.807	0.104
18 M	-0.863	0.574	0.459	-1.448	0.547	0.486	1.309	1.309	-1.448	0.152
19 D	-0.363	0.574	1.010	-1.276	1.030	1.109	0.719	1.109	-1.276	0.400
20 A	0.136	0.610	1.561	-1.452	1.513	1.732	0.130	1.732	-1.452	0.604
21 L	0.104	0.203	1.674	-2.055	1.567	1.748	-0.514	1.748	-2.055	0.390
22 R	0.863	1.221	2.010	-2.531	1.886	2.330	-0.486	2.330	-2.531	0.756
23 R	0.111	1.034	1.991	-2.883	1.804	1.861	-0.144	1.991	-2.883	0.539
24 M	0.244	-0.186	2.421	-2.798	2.278	2.485	0.865	2.485	-2.798	0.759
25 E	1.186	0.467	2.496	-2.528	2.224	2.480	0.430	2.496	-2.528	0.965
26 Y	0.800	0.748	2.318	-2.220	1.987	1.875	0.763	2.318	-2.220	0.896

27 R	1.167	2.010	2.160	-1.686	1.832	1.739	0.755	2.160	-1.686	1.139
28 G	1.843	1.824	2.318	-0.910	1.941	1.742	0.970	2.318	-0.910	1.390
29 Y	1.761	0.872	2.141	0.188	1.731	1.162	1.156	2.141	0.188	1.287
30 D	2.241	1.279	1.879	1.046	1.449	1.143	0.824	2.241	0.824	1.409
31 S	1.470	0.536	1.309	1.299	0.957	0.520	1.147	1.470	0.520	1.034
32 S	1.242	-0.416	1.318	0.647	1.002	0.520	0.136	1.318	-0.416	0.636
33 G	0.781	-0.733	0.982	-0.517	0.774	0.506	0.239	0.982	-0.733	0.290
34 I	-0.085	-0.733	0.589	-1.672	0.446	0.019	0.837	0.837	-1.672	-0.085
35 A	0.136	0.219	0.711	-1.993	0.610	0.488	0.668	0.711	-1.993	0.120
36 L	0.085	0.710	0.552	-1.777	0.410	0.468	0.509	0.710	-1.777	0.137
37 V	0.085	0.710	0.552	-1.132	0.410	0.468	0.509	0.710	-1.132	0.229
38 D	0.920	1.297	0.889	-0.595	0.583	0.486	0.228	1.297	-0.595	0.544
39 G	0.206	0.662	0.804	-0.539	0.592	0.491	1.673	1.673	-0.539	0.556
40 G	1.116	0.848	1.085	-0.681	0.738	0.506	1.279	1.279	-0.681	0.699
41 T	1.116	1.034	1.085	-0.917	0.738	0.506	1.279	1.279	-0.917	0.692
42 L	0.749	1.357	1.244	-1.238	0.893	0.641	1.287	1.357	-1.238	0.705
43 T	0.655	1.561	1.683	-1.525	1.412	1.266	1.286	1.683	-1.525	0.905
44 V	0.560	1.698	2.122	-1.920	1.932	1.891	1.284	2.122	-1.920	1.081
45 R	0.364	2.607	1.926	-2.379	1.777	1.871	0.234	2.607	-2.379	0.914
46 R	1.306	1.589	2.001	-2.545	1.722	1.865	-0.201	2.001	-2.545	0.820
47 R	1.242	0.776	2.234	-2.610	2.041	2.470	-0.243	2.470	-2.610	0.845
48 A	0.895	0.572	2.272	-2.487	2.060	2.474	-0.397	2.474	-2.487	0.770
49 G	0.762	0.367	1.842	-2.404	1.586	1.849	-1.406	1.849	-2.404	0.371
50 R	0.939	0.315	1.711	-1.924	1.422	1.265	-1.518	1.711	-1.924	0.316
51 L	0.092	0.077	1.197	-1.380	0.957	0.646	-1.082	1.197	-1.380	0.072
52 A	0.452	0.281	1.524	-0.624	1.321	1.245	-0.098	1.524	-0.624	0.586
53 N	0.585	0.185	1.860	-0.353	1.731	1.845	-0.125	1.860	-0.353	0.818
54 L	0.452	-0.424	1.431	-0.619	1.257	1.220	-1.134	1.431	-1.134	0.312
55 E	0.800	0.355	1.393	-1.367	1.239	1.217	-0.980	1.393	-1.367	0.379
56 E	0.800	-0.334	1.393	-1.896	1.239	1.217	-0.980	1.393	-1.896	0.206
57 A	0.850	-0.550	1.421	-2.324	1.294	1.776	-0.894	1.776	-2.324	0.225
58 V	1.167	0.305	1.496	-2.361	1.330	1.787	-1.384	1.787	-2.361	0.334
59 A	0.806	0.892	1.412	-2.272	1.239	1.207	-1.138	1.412	-2.272	0.307
60 E	0.724	0.892	1.234	-1.915	1.030	0.627	-0.951	1.234	-1.915	0.234
61 M	0.920	0.113	1.431	-1.216	1.185	0.647	0.099	1.431	-1.216	0.454
62 P	1.287	1.082	1.552	-0.447	1.194	0.646	-1.499	1.552	-1.499	0.545
63 S	0.572	1.351	1.468	-0.055	1.203	0.651	-0.054	1.468	-0.055	0.734
64 T	0.490	0.986	1.290	-0.071	0.993	0.071	0.132	1.290	-0.071	0.556
65 A	1.116	0.986	1.290	-0.397	0.902	0.054	0.187	1.290	-0.397	0.591
66 L	1.312	1.613	1.244	-0.527	0.784	0.055	0.008	1.613	-0.527	0.641
67 S	1.230	1.613	1.290	-0.436	0.784	0.055	-0.111	1.613	-0.436	0.632
68 G	1.261	1.385	1.085	-0.265	0.583	0.035	-0.151	1.385	-0.265	0.562
69 T	0.547	0.848	1.001	-0.374	0.592	0.041	1.294	1.294	-0.374	0.564
70 T	1.489	0.848	1.075	-0.666	0.537	0.035	0.859	1.489	-0.666	0.597
71 G	1.211	1.171	1.085	-0.830	0.556	0.635	0.966	1.211	-0.830	0.685
72 L	1.179	0.041	1.290	-0.584	0.756	0.655	1.007	1.290	-0.584	0.621
73 G	1.116	0.245	1.524	-0.109	1.075	1.260	0.965	1.524	-0.109	0.868
74 H	0.155	0.109	1.346	0.133	0.938	1.265	0.947	1.346	0.109	0.699
75 T	-0.073	0.109	1.356	-0.181	0.984	1.265	-0.064	1.356	-0.181	0.485
76 R	0.838	0.245	1.636	-0.866	1.130	1.279	-0.458	1.636	-0.866	0.544
77 W	0.610	0.245	1.804	-1.020	1.349	1.899	-0.191	1.899	-1.020	0.671
78 A	0.838	1.107	1.636	-0.770	1.130	1.279	-0.458	1.636	-0.770	0.680
79 T	0.775	1.597	1.870	-0.077	1.449	1.884	-0.499	1.884	-0.499	1.000
80 H	0.642	1.646	1.683	0.338	1.248	1.279	-0.279	1.683	-0.279	0.937
81 G	1.603	2.369	1.860	0.193	1.385	1.273	-0.260	2.369	-0.260	1.203
82 R	2.102	2.351	2.132	0.071	1.704	1.762	0.741	2.351	0.071	1.552
83 P	2.039	1.537	2.365	0.055	2.023	2.367	0.699	2.367	0.055	1.584
84 T	2.349	1.269	2.505	0.549	2.160	1.788	0.319	2.505	0.319	1.563
85 D	2.121	1.137	2.515	0.883	2.205	1.788	-0.691	2.515	-0.691	1.422
86 R	1.989	0.688	2.244	1.462	1.905	1.783	-0.423	2.244	-0.423	1.378
87 N	1.989	0.688	2.244	1.626	1.905	1.783	-0.423	2.244	-0.423	1.401

88 A	1.793	0.618	2.206	2.213	1.923	2.383	-0.197	2.383	-0.197	1.563
89 H	1.426	0.618	2.365	2.199	2.078	2.518	-0.188	2.518	-0.188	1.574
90 P	1.793	0.527	2.206	2.453	1.923	2.383	-0.197	2.453	-0.197	1.584
91 H	1.483	0.796	1.907	1.753	1.613	2.342	-1.094	2.342	-1.094	1.257
92 R	1.483	1.537	1.907	1.177	1.613	2.342	-1.094	2.342	-1.094	1.281
93 D	1.710	0.399	1.739	0.119	1.394	1.722	-1.361	1.739	-1.361	0.818
94 A	1.938	-0.140	1.945	-0.668	1.759	2.298	-1.516	2.298	-1.516	0.802
95 A	1.299	-0.236	1.646	-1.598	1.567	1.680	-1.461	1.680	-1.598	0.414
96 G	1.167	-0.332	1.216	-2.061	1.093	1.055	-2.470	1.216	-2.470	-0.048
97 K	0.300	-0.869	0.823	-2.551	0.765	0.568	-1.873	0.823	-2.551	-0.405
98 I	-0.066	-1.091	0.702	-2.644	0.756	0.569	-0.274	0.756	-2.644	-0.293
99 A	-0.066	-0.140	0.860	-2.169	0.929	1.189	1.003	1.189	-2.169	0.230
100V	0.016	-0.464	1.169	-1.053	1.285	1.230	0.890	1.285	-1.053	0.439
101V	0.016	-0.693	0.711	0.351	0.601	0.635	0.825	0.825	-0.693	0.350
102H	0.016	-0.021	0.711	1.400	0.601	0.635	0.825	1.400	-0.021	0.595
103N	-0.623	0.497	0.571	1.294	0.583	0.637	2.157	2.157	-0.623	0.731
104G	0.104	-0.286	1.019	0.103	0.957	1.235	1.542	1.542	-0.286	0.668
105I	0.781	-0.913	1.440	-0.912	1.276	1.274	0.840	1.440	-0.913	0.541
106I	0.067	-0.685	1.216	-1.281	1.057	0.658	0.824	1.216	-1.281	0.265
107E	-0.243	-0.564	0.917	-0.699	0.747	0.618	-0.073	0.917	-0.699	0.100
108N	-0.838	-0.326	0.804	0.006	0.784	0.619	0.516	0.804	-0.838	0.224
109F	-0.913	-0.122	0.860	-0.011	0.811	0.623	0.629	0.860	-0.913	0.268
110A	-0.142	0.628	1.431	-0.811	1.303	1.246	0.306	1.431	-0.811	0.566
111V	-0.370	0.423	1.533	-1.695	1.412	1.271	0.332	1.533	-1.695	0.415
112L	-0.319	1.095	1.561	-2.462	1.467	1.830	0.419	1.830	-2.462	0.513
113R	-0.319	1.790	1.543	-2.701	1.522	1.831	0.602	1.831	-2.701	0.610
114R	0.041	0.976	1.870	-2.725	1.886	2.431	1.586	2.431	-2.725	0.866
115E	0.604	0.790	2.188	-2.530	2.050	2.449	1.038	2.449	-2.530	0.941
116L	1.318	0.119	2.272	-2.254	2.041	2.444	-0.407	2.444	-2.254	0.790
117E	1.413	0.898	1.832	-1.885	1.522	1.819	-0.406	1.832	-1.885	0.742
118T	0.914	0.149	1.281	-1.660	1.039	1.196	0.184	1.281	-1.660	0.443
119A	0.914	-0.342	1.281	-1.639	1.039	1.196	0.184	1.281	-1.639	0.376
120G	0.914	0.513	1.300	-1.691	0.984	1.195	0.000	1.300	-1.691	0.459
121V	0.553	0.425	0.973	-1.735	0.619	0.595	-0.984	0.973	-1.735	0.064
122E	0.636	1.012	0.926	-1.464	0.619	0.595	-0.865	1.012	-1.464	0.209
123F	1.135	0.976	1.197	-0.791	0.938	1.084	0.136	1.197	-0.791	0.668
124A	1.103	1.641	1.403	0.055	1.139	1.104	0.177	1.641	0.055	0.946
125S	1.970	2.217	1.795	0.991	1.467	1.591	-0.421	2.217	-0.421	1.373
126D	1.805	1.265	1.664	1.593	1.257	1.012	-0.354	1.805	-0.354	1.178
127T	2.880	0.726	2.057	1.574	1.668	1.607	-0.631	2.880	-0.631	1.412
128D	2.513	0.235	1.935	1.063	1.658	1.609	0.968	2.513	0.235	1.426
129T	2.235	-0.214	1.786	0.090	1.504	1.589	-0.202	2.235	-0.214	0.970
130E	1.736	-0.909	1.515	-0.954	1.185	1.100	-1.203	1.736	-1.203	0.353
131V	1.540	-1.580	1.477	-1.240	1.203	1.700	-0.977	1.700	-1.580	0.303
132A	0.326	-1.484	1.122	-1.203	0.893	1.216	-0.533	1.216	-1.484	0.048
133A	-0.237	-0.671	0.804	-0.680	0.729	1.198	0.015	1.198	-0.680	0.165
134H	-0.597	-0.671	0.477	-0.457	0.364	0.598	-0.969	0.598	-0.969	-0.179
135L	-0.098	-1.168	1.029	-0.768	0.847	1.221	-1.558	1.221	-1.558	-0.071
136V	-0.098	-0.150	1.029	-1.474	0.847	1.221	-1.558	1.221	-1.558	-0.026
137A	-0.351	0.037	1.281	-1.936	1.084	1.241	-0.216	1.281	-1.936	0.163
138R	-0.218	0.664	1.552	-2.309	1.385	1.245	-0.484	1.552	-2.309	0.262
139A	0.496	0.425	1.795	-1.787	1.549	1.860	-0.652	1.860	-1.787	0.527
140Y	1.091	0.916	1.907	-1.214	1.513	1.858	-1.240	1.907	-1.240	0.690
141R	1.451	1.323	2.234	-0.537	1.877	2.458	-0.257	2.458	-0.537	1.221
142H	1.514	1.048	2.001	-0.154	1.558	1.853	-0.215	2.001	-0.215	1.087
143G	1.514	1.497	2.001	-0.257	1.558	1.853	-0.215	2.001	-0.257	1.136
144E	2.267	0.696	2.019	-0.446	1.640	2.323	-0.556	2.323	-0.556	1.135
145T	2.633	0.025	1.860	-0.195	1.485	2.187	-0.564	2.633	-0.564	1.062
146A	1.919	0.161	1.636	0.268	1.267	1.571	-0.580	1.919	-0.580	0.892
147D	1.325	1.016	1.524	0.853	1.303	1.573	0.008	1.573	0.008	1.086
148D	1.192	0.381	1.188	0.929	0.893	0.973	0.035	1.192	0.035	0.799

149F	1.274	-0.362	1.141	0.498	0.893	0.974	0.154	1.274	-0.362	0.653
150V	0.907	-0.188	1.019	-0.064	0.884	0.975	1.753	1.753	-0.188	0.755
151G	-0.307	-0.188	0.664	-0.512	0.574	0.492	2.197	2.197	-0.512	0.417
152S	-0.806	-1.019	0.393	-0.852	0.255	0.003	1.195	1.195	-1.019	-0.119
153V	-0.458	-1.061	0.337	-1.226	0.291	0.000	1.533	1.533	-1.226	-0.083
154L	-0.806	-0.152	0.375	-1.728	0.310	0.004	1.379	1.379	-1.728	-0.088
155A	-0.901	-0.152	0.814	-2.136	0.829	0.629	1.378	1.378	-2.136	0.066
156V	-1.046	0.423	1.094	-2.495	1.148	1.233	1.217	1.233	-2.495	0.225
157L	-1.394	1.147	1.132	-2.621	1.166	1.237	1.064	1.237	-2.621	0.247
158R	-0.319	1.441	1.543	-2.715	1.522	1.831	0.602	1.831	-2.715	0.558
159R	-0.092	0.453	1.533	-2.697	1.476	1.831	1.613	1.831	-2.697	0.588
160L	0.275	0.131	1.814	-2.152	1.658	2.449	1.291	2.449	-2.152	0.781
161E	0.275	0.131	1.832	-1.327	1.604	2.448	1.108	2.448	-1.327	0.867
162G	0.338	-0.540	1.599	-0.217	1.285	1.843	1.149	1.843	-0.540	0.780
163H	-0.509	-1.342	1.085	0.441	0.820	1.224	1.585	1.585	-1.342	0.472
164F	-0.161	-1.432	1.047	0.435	0.802	1.220	1.739	1.739	-1.432	0.521
165T	-1.236	-0.649	0.655	-0.172	0.392	0.625	2.016	2.016	-1.236	0.233
166L	-1.464	-1.140	0.664	-0.853	0.437	0.625	1.006	1.006	-1.464	-0.103
167V	-1.154	-0.396	0.804	-0.948	0.574	0.046	0.625	0.804	-1.154	-0.064
168F	-0.439	0.239	0.870	-0.547	0.619	0.042	-0.636	0.870	-0.636	0.021
169A	-0.136	0.772	0.945	0.343	0.784	0.511	-0.686	0.945	-0.686	0.362
170N	1.078	1.399	1.300	1.130	1.093	0.994	-1.129	1.399	-1.129	0.838
171A	1.445	1.281	1.664	1.734	1.376	1.011	-1.498	1.734	-1.498	1.002
172D	2.387	1.076	1.720	1.773	1.376	1.007	-1.749	2.387	-1.749	1.084
173D	2.583	0.441	1.917	1.663	1.531	1.027	-0.698	2.583	-0.698	1.209
174P	1.559	-0.098	1.533	0.813	1.230	0.992	-0.150	1.559	-0.150	0.840
175G	1.192	-0.456	1.412	0.051	1.221	0.994	1.449	1.449	-0.456	0.837
176T	0.692	-0.270	1.141	-0.888	0.902	0.505	0.447	1.141	-0.888	0.361
177L	0.193	0.053	0.870	-1.557	0.583	0.016	-0.554	0.870	-1.557	-0.057
178V	0.326	1.113	1.057	-2.015	0.784	0.621	-0.775	1.113	-2.015	0.159
179A	0.231	1.700	1.496	-2.257	1.303	1.246	-0.776	1.700	-2.257	0.420
180A	0.313	2.058	1.449	-2.209	1.303	1.246	-0.657	2.058	-2.209	0.501
181R	1.224	1.854	1.730	-1.823	1.449	1.261	-1.051	1.854	-1.823	0.663
182R	1.590	0.944	2.094	-1.056	1.731	1.278	-1.420	2.094	-1.420	0.737
183S	0.876	-0.074	2.010	-0.401	1.741	1.284	0.025	2.010	-0.401	0.780
184T	0.509	-0.302	1.889	-0.108	1.731	1.285	1.624	1.889	-0.302	0.947
185P	-0.338	-1.117	1.375	-0.482	1.267	0.666	2.060	2.060	-1.117	0.490
186L	-0.243	-0.849	0.935	-1.099	0.747	0.041	2.061	2.061	-1.099	0.228
187V	-1.160	-0.106	0.646	-1.891	0.574	0.023	2.223	2.223	-1.891	0.044
188L	-1.128	0.600	0.440	-2.237	0.373	0.003	2.183	2.183	-2.237	0.033
189G	-0.629	1.379	0.468	-2.148	0.419	0.473	1.954	1.954	-2.148	0.274
190I	0.395	0.638	0.851	-1.264	0.720	0.508	1.406	1.406	-1.264	0.465
191G	1.122	0.788	1.300	-0.168	1.093	1.106	0.791	1.300	-0.168	0.862
192D	1.438	0.065	1.375	0.781	1.130	1.118	0.301	1.438	0.065	0.887
193N	0.496	0.153	1.318	0.906	1.130	1.122	0.551	1.318	0.153	0.811
194E	0.768	0.399	1.337	0.188	1.139	1.122	0.819	1.337	0.188	0.825
195M	0.768	0.363	1.337	-0.782	1.139	1.122	0.819	1.337	-0.782	0.681
196F	0.547	0.381	1.216	-1.207	0.975	0.653	0.987	1.216	-1.207	0.507
197V	0.737	0.556	1.188	-0.929	0.984	1.101	1.091	1.188	-0.929	0.675
198G	0.010	0.652	0.739	-0.201	0.610	0.503	1.706	1.706	-0.201	0.574
199S	0.408	-0.150	0.748	0.366	0.565	0.486	0.751	0.751	-0.150	0.454
200D	1.122	-1.330	0.814	0.216	0.610	0.482	-0.510	1.122	-1.330	0.201
201V	0.775	-1.294	0.870	-0.305	0.574	0.485	-0.847	0.870	-1.294	0.037
202A	-0.092	-1.107	0.739	-1.083	0.601	0.486	-0.526	0.739	-1.107	-0.140
203A	-0.009	-0.617	0.917	-1.636	0.811	1.066	-0.712	1.066	-1.636	-0.026
204F	-0.509	0.197	0.804	-1.609	0.665	1.197	-0.436	1.197	-1.609	0.044
205I	0.054	0.946	1.122	-1.123	0.829	1.215	-0.984	1.215	-1.123	0.294
206E	0.187	1.271	1.552	-0.490	1.303	1.840	0.025	1.840	-0.490	0.813
207H	0.547	0.600	1.879	-0.086	1.668	2.439	1.009	2.439	-0.086	1.151
208T	1.261	1.084	1.945	-0.333	1.713	2.435	-0.252	2.435	-0.333	1.122
209R	1.533	0.389	1.963	-1.025	1.722	2.435	0.015	2.435	-1.025	1.005

210E	1.533	0.203	1.963	-1.724	1.722	2.435	0.015	2.435	-1.724	0.878
211A	0.819	0.119	1.720	-2.272	1.558	1.821	0.183	1.821	-2.272	0.564
212V	0.850	0.658	1.515	-2.355	1.358	1.801	0.142	1.801	-2.355	0.567
213E	0.964	1.245	1.412	-2.192	1.257	1.218	0.306	1.412	-2.192	0.602
214L	1.103	0.670	1.356	-1.689	1.212	1.108	0.324	1.356	-1.689	0.583
215G	1.350	0.778	1.683	-0.968	1.586	1.150	1.497	1.683	-0.968	1.011
216Q	1.717	0.055	1.804	-0.234	1.595	1.149	-0.102	1.804	-0.234	0.855
217D	0.990	-0.761	1.356	0.054	1.221	0.551	0.513	1.356	-0.761	0.560
218Q	1.337	-0.809	1.318	-0.261	1.203	0.547	0.667	1.337	-0.809	0.572
219A	0.471	-1.300	1.188	-1.082	1.230	0.549	0.988	1.230	-1.300	0.292
220V	0.421	-0.761	1.057	-1.724	1.011	0.526	0.866	1.057	-1.724	0.199
221V	-0.079	-0.038	0.786	-2.149	0.692	0.037	-0.135	0.786	-2.149	-0.127
222I	0.174	-0.348	0.730	-1.792	0.638	0.484	-0.307	0.730	-1.792	-0.060
223T	0.402	0.790	0.720	-1.252	0.592	0.484	0.703	0.790	-1.252	0.348
224A	0.515	-0.026	1.094	-0.592	0.838	0.501	0.446	1.094	-0.592	0.397
225D	1.015	0.830	1.646	-0.428	1.321	1.125	-0.143	1.646	-0.428	0.766
226G	1.015	0.830	1.646	-0.701	1.321	1.125	-0.143	1.646	-0.701	0.727
227Y	1.097	0.029	1.599	-1.214	1.321	1.125	-0.024	1.599	-1.214	0.562
228R	1.597	0.974	1.870	-1.214	1.640	1.614	0.977	1.870	-1.214	1.065
229I	0.383	0.788	1.533	-0.774	1.276	1.129	1.237	1.533	-0.774	0.796
230S	0.655	1.722	1.814	0.338	1.640	1.618	1.228	1.814	0.338	1.288
231D	1.135	1.405	1.552	1.085	1.358	1.598	0.896	1.598	0.896	1.290
232F	1.312	1.493	1.421	1.697	1.194	1.014	0.784	1.697	0.784	1.274
233D	2.450	1.463	1.832	2.011	1.531	1.501	0.453	2.450	0.453	1.606
234G	2.399	1.415	1.674	2.173	1.330	1.481	0.294	2.399	0.294	1.538
235N	1.186	0.788	1.318	1.999	1.020	0.998	0.738	1.999	0.738	1.150
236D	2.147	0.806	1.711	1.494	1.440	1.036	0.650	2.147	0.650	1.326
237G	1.647	1.080	1.440	0.329	1.121	0.547	-0.351	1.647	-0.351	0.830
238L	1.647	0.992	1.440	-0.577	1.121	0.547	-0.351	1.647	-0.577	0.688
239Q	1.470	1.022	1.571	-1.385	1.285	1.131	-0.239	1.571	-1.385	0.694
240A	1.470	1.345	1.571	-1.451	1.285	1.131	-0.239	1.571	-1.451	0.730
241G	0.528	1.704	1.515	-1.196	1.285	1.135	0.012	1.704	-1.196	0.712
242R	1.375	0.902	2.029	-0.761	1.750	1.755	-0.424	2.029	-0.761	0.946
243D	1.129	0.179	1.945	-0.394	1.649	1.731	-0.368	1.945	-0.394	0.839
244F	0.414	-0.685	1.879	-0.205	1.604	1.735	0.894	1.879	-0.685	0.805
245R	0.187	0.029	2.047	0.079	1.823	2.355	1.161	2.355	0.029	1.097
246P	-0.585	-1.288	1.477	0.301	1.330	1.732	1.483	1.732	-1.288	0.636
247F	-0.585	-1.107	1.477	0.748	1.330	1.732	1.483	1.732	-1.107	0.726
248H	-0.635	-1.138	1.561	0.769	1.394	1.754	1.254	1.754	-1.138	0.708
249I	-0.269	-1.228	1.403	0.864	1.239	1.618	1.246	1.618	-1.228	0.696
250D	-0.983	-0.903	1.075	0.414	0.975	1.604	1.461	1.604	-0.983	0.521
251W	-0.269	-1.442	1.141	0.197	1.020	1.600	0.200	1.600	-1.442	0.350
252D	-0.269	-0.364	0.982	-0.444	0.847	0.980	-1.077	0.982	-1.077	0.094
253L	0.370	-0.072	1.122	-0.882	0.866	0.978	-2.409	1.122	-2.409	-0.004
254A	0.231	0.760	1.178	-1.646	0.911	1.089	-2.427	1.178	-2.427	0.014
255A	1.224	1.387	1.608	-1.998	1.531	1.658	-2.384	1.658	-2.384	0.432
256A	0.952	0.980	1.328	-2.302	1.166	1.169	-2.375	1.328	-2.375	0.131
257E	1.894	1.555	1.403	-2.268	1.112	1.164	-2.809	1.894	-2.809	0.293
258K	1.641	0.574	1.655	-2.129	1.349	1.183	-1.467	1.655	-2.129	0.401
259G	2.001	-0.432	1.982	-1.956	1.713	1.783	-0.483	2.001	-1.956	0.658
260G	1.748	-1.174	2.234	-1.740	1.950	1.802	0.859	2.234	-1.740	0.811
261Y	0.673	-2.005	1.842	-1.543	1.540	1.207	1.136	1.842	-2.005	0.407
262E	0.048	-0.767	1.384	-1.482	0.948	0.629	1.016	1.384	-1.482	0.254
263Y	-0.894	-0.767	1.309	-1.537	1.002	0.635	1.451	1.451	-1.537	0.171
264F	-0.894	-0.685	1.767	-1.784	1.686	1.230	1.516	1.767	-1.784	0.405
265M	-0.281	-0.510	1.842	-2.149	1.813	1.810	1.157	1.842	-2.149	0.526
266L	-1.280	0.179	1.375	-2.530	1.431	1.212	1.505	1.505	-2.530	0.270
267K	-1.027	0.874	1.122	-2.740	1.194	1.193	0.163	1.194	-2.740	0.111
268E	0.048	0.401	1.515	-2.868	1.604	1.788	-0.114	1.788	-2.868	0.339
269I	0.692	-0.174	1.851	-2.651	1.932	1.813	0.104	1.932	-2.651	0.510
270A	1.407	0.151	2.178	-2.218	2.196	1.827	-0.111	2.196	-2.218	0.776

271E	1.179	0.055	1.730	-1.637	1.558	1.232	-1.186	1.730	-1.637	0.419
272Q	0.819	-0.520	1.403	-1.151	1.194	0.633	-2.170	1.403	-2.170	0.029
273P	1.091	-0.472	1.421	-1.001	1.203	0.632	-1.903	1.421	-1.903	0.139
274A	1.091	-0.340	1.421	-1.276	1.203	0.632	-1.903	1.421	-1.903	0.118
275A	1.230	-0.544	1.365	-1.384	1.157	0.522	-1.886	1.365	-1.886	0.066
276V	1.179	-0.749	1.234	-1.216	0.938	0.499	-2.008	1.234	-2.008	-0.017
277A	0.465	-0.026	0.907	-0.773	0.674	0.486	-1.793	0.907	-1.793	-0.009
278D	-0.250	0.065	0.823	-0.430	0.683	0.491	-0.348	0.823	-0.430	0.148
279T	-0.022	-0.649	0.814	-0.570	0.638	0.491	0.662	0.814	-0.649	0.195
280L	0.345	-1.236	1.094	-0.735	0.820	1.109	0.341	1.109	-1.236	0.248
281L	-0.370	-0.404	1.029	-0.641	0.774	1.114	1.602	1.602	-0.641	0.443
282G	-1.236	0.427	0.636	-0.220	0.446	0.626	2.200	2.200	-1.236	0.412
283H	-1.204	0.614	0.431	0.173	0.246	0.606	2.160	2.160	-1.204	0.432
284F	-0.262	0.199	0.505	0.066	0.191	0.601	1.725	1.725	-0.262	0.432
285V	0.585	0.277	1.019	-0.644	0.656	1.220	1.289	1.289	-0.644	0.629
286G	-0.281	0.169	0.889	-1.441	0.683	1.222	1.610	1.610	-1.441	0.407
287G	-0.648	0.081	0.608	-2.180	0.501	0.604	1.932	1.932	-2.180	0.128
288R	-0.648	0.029	0.589	-2.566	0.556	0.605	2.116	2.116	-2.566	0.097
289I	0.218	-0.294	0.982	-2.411	0.884	1.092	1.518	1.518	-2.411	0.284
290V	0.351	0.844	1.318	-2.050	1.294	1.692	1.491	1.692	-2.050	0.706
291L	0.370	0.736	1.655	-1.316	1.713	1.734	1.654	1.734	-1.316	0.935
292D	0.370	1.796	1.655	-0.892	1.713	1.734	1.654	1.796	-0.892	1.147
293E	0.294	1.796	1.711	-0.844	1.741	1.738	1.768	1.796	-0.844	1.172
294Q	0.939	1.712	1.982	-1.054	1.905	1.756	1.339	1.982	-1.054	1.225
295R	2.153	1.796	2.337	-0.882	2.214	2.240	0.895	2.337	-0.882	1.536
296L	1.900	0.778	2.393	-0.436	2.269	1.793	1.067	2.393	-0.436	1.395
297S	1.900	1.796	2.393	0.295	2.269	1.793	1.067	2.393	0.295	1.645
298D	0.939	1.515	1.982	0.435	1.905	1.756	1.339	1.982	0.435	1.410
299Q	0.939	0.652	1.982	-0.128	1.905	1.756	1.339	1.982	-0.128	1.206
300E	2.014	0.700	2.393	-1.092	2.260	2.350	0.877	2.393	-1.092	1.358
301L	1.097	0.956	2.103	-2.087	2.087	2.332	1.039	2.332	-2.087	1.075
302R	1.097	1.064	2.103	-2.341	2.087	2.332	1.039	2.332	-2.341	1.055
303E	1.078	0.077	2.225	-2.190	2.351	2.884	0.941	2.884	-2.190	1.052
304I	0.351	-0.595	1.776	-1.676	1.977	2.286	1.556	2.286	-1.676	0.811
305D	0.351	-0.366	1.795	-1.272	1.923	2.285	1.372	2.285	-1.272	0.870
306K	-0.148	-0.905	1.244	-1.131	1.440	1.662	1.962	1.962	-1.131	0.589
307V	-0.876	-1.701	0.795	-1.291	1.066	1.064	2.577	2.577	-1.701	0.234
308F	-0.237	-0.977	0.935	-1.448	1.084	1.062	1.245	1.245	-1.448	0.238
309V	-0.781	-0.312	0.449	-1.586	0.674	0.591	1.876	1.876	-1.586	0.130
310V	-0.781	-0.216	-0.009	-1.471	-0.009	-0.003	1.812	1.812	-1.471	-0.097
311A	-0.218	-0.526	0.309	-1.111	0.155	0.015	1.264	1.264	-1.111	-0.016
312C	0.496	-0.436	0.375	-0.892	0.200	0.011	0.002	0.496	-0.892	-0.035
313G	0.610	0.383	0.748	-0.711	0.446	0.028	-0.254	0.748	-0.711	0.179
314T	0.977	0.383	1.029	-0.477	0.629	0.647	-0.576	1.029	-0.576	0.373
315A	1.255	-0.312	1.178	0.018	0.784	0.667	0.594	1.255	-0.312	0.598
316Y	1.527	-0.516	1.384	0.620	0.829	0.649	-0.028	1.527	-0.516	0.638
317H	0.585	-0.110	1.309	1.078	0.884	0.654	0.407	1.309	-0.110	0.687
318S	-0.325	0.632	1.029	0.745	0.738	0.640	0.801	1.029	-0.325	0.608
319G	-0.325	-0.631	1.029	-0.211	0.738	0.640	0.801	1.029	-0.631	0.292
320L	0.155	-1.258	1.225	-1.307	1.139	1.215	0.534	1.225	-1.307	0.243
321L	-0.098	-1.378	1.318	-2.067	1.203	0.615	0.599	1.318	-2.067	0.027
322A	-0.376	-0.599	1.169	-2.288	1.048	0.595	-0.571	1.169	-2.288	-0.146
323K	-1.242	-0.508	1.038	-2.255	1.075	0.596	-0.250	1.075	-2.255	-0.221
324Y	-0.167	-1.843	1.449	-2.264	1.431	1.191	-0.711	1.449	-2.264	-0.131
325A	0.547	-0.945	1.692	-1.970	1.595	1.805	-0.879	1.805	-1.970	0.264
326I	-0.218	-0.132	1.711	-1.632	1.613	1.830	0.154	1.830	-1.632	0.475
327E	-0.250	-0.011	1.459	-0.856	1.130	1.256	0.130	1.459	-0.856	0.408
328H	0.136	-0.228	1.636	-0.433	1.367	1.861	-0.203	1.861	-0.433	0.591
329W	-0.578	-0.414	1.552	-0.429	1.376	1.866	1.242	1.866	-0.578	0.659
330T	0.060	0.664	1.935	-0.818	1.668	1.883	1.140	1.935	-0.818	0.933
331R	-0.667	0.077	1.487	-1.206	1.294	1.285	1.755	1.755	-1.206	0.575

332L	-0.307	-0.162	1.655	-1.533	1.485	1.265	1.461	1.655	-1.533	0.552
333P	0.092	-0.162	1.515	-1.506	1.458	1.242	2.028	2.028	-1.506	0.667
334V	0.256	-0.520	1.646	-1.698	1.668	1.821	1.961	1.961	-1.698	0.733
335E	-0.591	0.431	1.132	-1.965	1.203	1.202	2.397	2.397	-1.965	0.544
336V	0.123	0.431	1.216	-2.196	1.194	1.196	0.951	1.216	-2.196	0.417
337E	0.402	0.353	1.122	-2.129	1.075	1.198	0.891	1.198	-2.129	0.416
338L	1.129	0.592	1.571	-1.805	1.449	1.796	0.276	1.796	-1.805	0.715
339A	0.054	0.389	1.178	-1.218	1.039	1.200	0.554	1.200	-1.218	0.457
340S	0.553	1.203	1.730	-0.917	1.522	1.823	-0.036	1.823	-0.917	0.840
341E	-0.060	0.886	1.655	-0.833	1.394	1.243	0.323	1.655	-0.833	0.658
342F	0.787	0.670	2.169	-1.187	1.859	1.862	-0.113	2.169	-1.187	0.864
343R	1.287	0.748	2.440	-1.227	2.178	2.351	0.888	2.440	-1.227	1.238
344Y	1.009	-0.270	2.533	-1.132	2.296	2.350	0.948	2.533	-1.132	1.105
345R	0.281	0.676	2.085	-0.560	1.923	1.752	1.563	2.085	-0.560	1.103
346D	0.281	0.676	2.066	-0.267	1.977	1.753	1.747	2.066	-0.267	1.176
347P	0.648	0.992	1.907	-0.039	1.823	1.618	1.739	1.907	-0.039	1.241
348V	1.034	1.125	2.085	-0.366	2.060	2.223	1.406	2.223	-0.366	1.366
349L	1.179	1.016	1.804	-0.287	1.741	1.618	1.566	1.804	-0.287	1.234
350D	0.876	1.125	1.730	-0.220	1.576	1.149	1.616	1.730	-0.220	1.122
351R	0.161	0.489	1.403	-0.003	1.312	1.136	1.831	1.831	-0.003	0.904
352S	0.161	-0.324	1.403	-0.091	1.312	1.136	1.831	1.831	-0.324	0.775
353T	0.509	-1.504	1.365	-0.490	1.294	1.132	1.985	1.985	-1.504	0.613
354L	0.010	-1.140	1.094	-1.272	0.975	0.643	0.984	1.094	-1.272	0.185
355V	-0.762	-0.444	0.524	-1.842	0.483	0.020	1.306	1.306	-1.842	-0.102
356V	-0.762	0.507	0.524	-2.068	0.483	0.020	1.306	1.306	-2.068	0.002
357A	-0.711	1.231	0.655	-1.875	0.701	0.043	1.429	1.429	-1.875	0.210
358I	0.281	1.806	0.889	-1.068	0.847	0.057	1.154	1.806	-1.068	0.567
359S	0.876	2.621	1.001	-0.316	0.811	0.056	0.565	2.621	-0.316	0.802
360Q	1.603	1.766	1.449	0.188	1.185	0.654	-0.050	1.766	-0.050	0.971
361S	1.799	1.814	1.646	0.128	1.339	0.674	1.001	1.814	0.128	1.200
362G	2.437	1.449	1.786	-0.286	1.358	0.672	-0.331	2.437	-0.331	1.012
363E	2.659	0.618	1.907	-0.622	1.522	1.141	-0.499	2.659	-0.622	0.961
364T	2.608	0.618	1.776	-0.517	1.303	1.118	-0.622	2.608	-0.622	0.898
365A	1.616	0.127	1.543	-0.257	1.157	1.104	-0.347	1.616	-0.347	0.706
366D	1.748	0.031	1.879	-0.134	1.567	1.703	-0.373	1.879	-0.373	0.917
367T	1.388	0.305	1.552	-0.440	1.203	1.104	-1.357	1.552	-1.357	0.536
368L	0.825	-0.096	1.234	-1.182	1.039	1.085	-0.809	1.234	-1.182	0.300
369E	0.958	0.109	1.664	-1.800	1.513	1.710	0.200	1.710	-1.800	0.622
370A	0.459	0.365	1.552	-1.854	1.367	1.841	0.476	1.841	-1.854	0.601
371V	0.263	0.940	1.356	-1.503	1.212	1.821	-0.575	1.821	-1.503	0.502
372R	1.205	1.527	1.889	-0.848	1.841	2.410	-0.944	2.410	-0.944	1.011
373H	1.205	1.545	1.889	-0.605	1.841	2.410	-0.944	2.410	-0.944	1.049
374A	1.451	1.455	2.216	-0.738	2.214	2.453	0.229	2.453	-0.738	1.326
375K	2.045	2.287	2.786	-1.289	2.862	3.046	-0.295	3.046	-1.289	1.635
376E	1.913	1.359	2.356	-1.593	2.388	2.421	-1.304	2.421	-1.593	1.077
377Q	2.140	0.580	2.646	-1.965	2.852	2.396	-1.506	2.852	-1.965	1.020
378K	1.774	0.089	2.524	-2.032	2.843	2.397	0.093	2.843	-2.032	1.098
379A	0.832	-1.067	1.991	-2.225	2.214	1.808	0.462	2.214	-2.225	0.574
380K	0.471	-1.031	1.664	-2.351	1.850	1.208	-0.521	1.850	-2.351	0.184
381V	-0.414	-1.254	1.197	-2.540	1.458	1.168	-0.363	1.458	-2.540	-0.107
382L	-0.686	-0.667	0.533	-2.376	0.729	0.591	0.194	0.729	-2.376	-0.240
383A	-0.376	0.147	0.832	-1.747	1.039	0.632	1.091	1.091	-1.747	0.231
384I	-0.408	0.774	0.580	-0.701	0.556	0.057	1.067	1.067	-0.701	0.275
385C	0.269	1.954	1.001	0.894	0.875	0.096	0.365	1.954	0.096	0.779
386N	1.211	2.409	1.075	2.035	0.820	0.091	-0.069	2.409	-0.069	1.082
387T	1.489	1.475	1.225	2.674	0.975	0.111	1.101	2.674	0.111	1.293
388N	2.374	1.343	1.692	2.452	1.367	0.151	0.942	2.452	0.151	1.474
389G	1.780	1.547	1.767	1.677	1.440	0.135	0.642	1.780	0.135	1.284
390S	1.470	1.495	1.711	0.684	1.403	0.114	0.975	1.711	0.114	1.122
391Q	1.407	0.676	1.945	-0.130	1.722	0.718	0.933	1.945	-0.130	1.039
392I	1.457	0.724	1.973	-0.966	1.777	1.277	1.020	1.973	-0.966	1.037

393P	1.186	1.048	1.767	-1.220	1.731	1.295	1.642	1.767	-1.220	1.064
394R	1.407	0.594	1.889	-1.086	1.895	1.764	1.473	1.895	-1.086	1.134
395E	1.160	-0.424	1.561	-0.671	1.522	1.722	0.299	1.722	-0.671	0.738
396C	1.432	-1.406	1.580	-0.113	1.531	1.721	0.566	1.721	-1.406	0.759
397D	0.718	-0.951	1.253	-0.185	1.267	1.708	0.782	1.708	-0.951	0.656
398A	0.332	-0.677	1.075	-0.603	1.030	1.102	1.114	1.114	-0.677	0.482
399V	0.168	-0.677	0.945	-1.152	0.820	0.523	1.182	1.182	-1.152	0.258
400L	0.345	0.047	1.589	-1.516	1.385	1.130	0.558	1.589	-1.516	0.505
401Y	-0.155	0.610	1.318	-1.600	1.066	0.641	-0.443	1.318	-1.600	0.205
402T	0.073	1.591	1.309	-1.550	1.020	0.641	0.568	1.591	-1.550	0.522
403R	0.440	0.776	1.674	-1.506	1.303	0.658	0.199	1.674	-1.506	0.506
404A	1.514	0.590	2.085	-1.493	1.658	1.252	-0.262	2.085	-1.493	0.763
405G	1.129	0.493	1.692	-1.451	1.403	1.235	-0.273	1.692	-1.451	0.604
406P	1.160	-0.134	1.487	-1.544	1.203	1.215	-0.313	1.487	-1.544	0.439
407E	0.661	0.363	0.935	-1.778	0.720	0.592	0.276	0.935	-1.778	0.253
408I	0.661	0.279	0.935	-2.101	0.720	0.592	0.276	0.935	-2.101	0.195
409G	0.711	1.435	1.094	-1.990	0.920	0.612	0.436	1.435	-1.990	0.460
410V	0.907	1.299	1.047	-1.576	0.802	0.613	0.257	1.299	-1.576	0.478
411A	0.775	1.221	1.169	-0.948	1.075	0.608	0.348	1.221	-0.948	0.607
412S	1.609	1.016	1.505	-0.423	1.248	0.626	0.067	1.609	-0.423	0.807
413T	0.667	0.161	1.449	-0.300	1.248	0.630	0.318	1.449	-0.300	0.596
414K	0.319	0.161	1.487	-0.488	1.267	0.634	0.164	1.487	-0.488	0.506
415T	0.319	-0.995	1.487	-0.756	1.267	0.634	0.164	1.487	-0.995	0.303
416F	0.288	-1.486	1.664	-1.065	1.485	0.656	0.168	1.664	-1.486	0.244
417L	-0.547	-1.312	1.328	-1.415	1.312	0.638	0.449	1.328	-1.415	0.065
418A	-0.774	-0.498	0.879	-1.649	0.674	0.044	-0.627	0.879	-1.649	-0.279
419Q	-0.970	-0.905	0.683	-1.963	0.519	0.024	-1.677	0.683	-1.963	-0.613
420I	0.054	-1.600	1.047	-1.704	0.875	0.060	-2.042	1.047	-2.042	-0.473
421A	0.515	-1.480	1.384	-1.175	1.103	0.074	-2.144	1.384	-2.144	-0.246
422A	-0.199	-0.853	1.300	-0.362	1.112	0.079	-0.699	1.300	-0.853	0.054
423N	-1.160	-1.057	0.889	-0.039	0.747	0.042	-0.428	0.889	-1.160	-0.144
424Y	-0.294	-1.666	1.019	-0.236	0.720	0.041	-0.749	1.019	-1.666	-0.166
425L	-1.008	-1.464	0.935	-1.074	0.729	0.046	0.696	0.935	-1.464	-0.163
426L	-1.008	-1.260	0.935	-1.722	0.729	0.046	0.696	0.935	-1.722	-0.226
427G	-2.033	-0.564	0.552	-2.261	0.428	0.011	1.244	1.244	-2.261	-0.375
428L	-1.780	-1.192	0.300	-2.317	0.191	-0.009	-0.098	0.300	-2.317	-0.701
429A	-0.819	-0.174	0.711	-2.222	0.556	0.028	-0.370	0.711	-2.222	-0.327
430L	-0.104	0.453	0.795	-2.072	0.547	0.023	-1.815	0.795	-2.072	-0.310
431A	-0.199	1.149	1.234	-1.919	1.066	0.648	-1.816	1.234	-1.919	0.023
432Q	0.743	1.980	1.309	-1.805	1.011	0.642	-2.251	1.980	-2.251	0.233
433A	0.939	1.082	1.505	-1.741	1.166	0.662	-1.200	1.505	-1.741	0.345
434R	1.881	1.441	2.038	-1.745	1.795	1.252	-1.570	2.038	-1.745	0.727
435G	1.628	1.167	2.290	-1.599	2.032	1.271	-0.228	2.290	-1.599	0.937
436T	1.382	1.115	2.206	-1.378	1.932	1.247	-0.171	2.206	-1.378	0.905
437K	1.881	0.527	2.477	-0.855	2.251	1.736	0.830	2.477	-0.855	1.264
438Y	2.109	0.271	2.374	-0.369	2.142	1.711	0.805	2.374	-0.369	1.292
439P	1.514	1.491	2.262	0.026	2.178	1.713	1.393	2.262	0.026	1.511
440D	1.679	1.708	2.393	-0.137	2.388	2.292	1.326	2.393	-0.137	1.664
441E	1.584	0.762	2.374	-0.725	2.224	2.322	1.260	2.374	-0.725	1.400
442V	2.197	0.277	2.449	-1.572	2.351	2.903	0.902	2.903	-1.572	1.358
443E	1.944	0.948	2.459	-2.122	2.315	2.903	1.014	2.903	-2.122	1.351
444R	1.445	0.169	2.346	-1.951	2.169	3.034	1.290	3.034	-1.951	1.215
445E	1.445	-0.070	2.346	-1.304	2.169	3.034	1.290	3.034	-1.304	1.273
446Y	1.097	-0.645	2.384	-0.543	2.187	3.038	1.136	3.038	-0.645	1.236
447H	1.097	-0.352	2.384	-0.311	2.187	3.038	1.136	3.038	-0.352	1.311
448E	0.964	-0.084	1.954	-0.669	1.713	2.413	0.127	2.413	-0.669	0.917
449L	0.206	-0.120	1.617	-1.512	1.394	1.831	0.098	1.831	-1.512	0.502
450E	0.459	-0.120	1.608	-1.967	1.431	1.830	-0.014	1.830	-1.967	0.461
451A	0.958	-0.791	1.720	-1.932	1.576	1.699	-0.290	1.720	-1.932	0.420
452M	-0.117	-0.791	1.309	-1.288	1.221	1.105	0.171	1.309	-1.288	0.230
453P	0.231	0.137	1.272	-0.636	1.203	1.101	0.325	1.272	-0.636	0.519

454D	-0.129	-0.318	0.945	-0.457	0.838	0.502	-0.659	0.945	-0.659	0.103
455L	0.003	-1.182	1.375	-0.889	1.312	1.127	0.350	1.375	-1.182	0.300
456V	0.035	-0.977	1.262	-1.547	1.257	1.111	0.994	1.262	-1.547	0.305
457A	-0.604	-0.881	0.879	-2.211	0.966	1.094	1.096	1.096	-2.211	0.048
458R	-1.103	-0.390	0.608	-2.618	0.647	0.605	0.095	0.647	-2.618	-0.308
459V	-0.389	-0.576	0.692	-2.709	0.638	0.599	-1.350	0.692	-2.709	-0.442
460I	0.174	-0.122	1.010	-2.555	0.802	0.618	-1.898	1.010	-2.555	-0.282
461A	0.402	0.107	1.001	-2.252	0.756	0.618	-0.888	1.001	-2.252	-0.037
462A	0.269	0.107	0.814	-1.631	0.556	0.012	-0.667	0.814	-1.631	-0.077
463T	0.269	0.682	0.814	-1.179	0.556	0.012	-0.667	0.814	-1.179	0.069
464G	0.907	-0.013	0.954	-0.868	0.574	0.010	-1.999	0.954	-1.999	-0.062
465P	1.268	-0.641	1.281	-1.013	0.938	0.610	-1.015	1.281	-1.015	0.204
466V	0.553	-0.909	1.197	-1.375	0.948	0.615	0.430	1.197	-1.375	0.208
467A	0.357	0.001	1.001	-1.884	0.793	0.595	-0.621	1.001	-1.884	0.035
468E	0.130	-0.174	1.169	-1.757	1.011	1.215	-0.354	1.215	-1.757	0.177
469L	0.263	-0.749	1.356	-1.481	1.212	1.821	-0.575	1.821	-1.481	0.264
470A	-0.085	-0.054	1.412	-0.702	1.175	1.824	-0.912	1.824	-0.912	0.380
471H	-0.085	0.802	1.412	-0.316	1.175	1.824	-0.912	1.824	-0.912	0.557
472R	-0.199	1.567	1.412	-0.238	1.185	1.266	-0.723	1.567	-0.723	0.610
473F	0.794	1.245	1.646	-0.379	1.330	1.281	-0.998	1.646	-0.998	0.703
474A	1.072	1.323	1.795	-0.118	1.485	1.301	0.172	1.795	-0.118	1.004
475Q	1.268	1.119	1.832	0.266	1.467	0.701	-0.054	1.832	-0.054	0.943
476S	0.768	0.453	1.281	0.835	0.984	0.078	0.535	1.281	0.078	0.705
477S	0.768	-0.607	1.262	0.715	1.039	0.079	0.719	1.262	-0.607	0.568
478T	0.054	-0.835	1.197	0.160	0.993	0.083	1.980	1.980	-0.835	0.519
479V	-0.907	-0.512	0.786	-0.700	0.629	0.046	2.252	2.252	-0.907	0.228
480L	-0.958	-0.326	0.627	-1.315	0.428	0.026	2.093	2.093	-1.315	0.082
481F	-1.103	-0.218	0.907	-1.693	0.747	0.631	1.932	1.932	-1.693	0.172
482L	-1.299	0.584	0.870	-1.454	0.765	1.231	2.158	2.158	-1.454	0.408
483G	-1.299	0.381	0.870	-1.153	0.765	1.231	2.158	2.158	-1.299	0.422
484R	-0.357	0.113	0.945	-0.582	0.711	1.226	1.724	1.724	-0.582	0.540
485H	0.104	-0.797	1.262	-0.352	0.993	1.241	1.805	1.805	-0.797	0.608
486V	0.819	-0.887	1.589	-0.241	1.257	1.254	1.590	1.590	-0.887	0.769
487G	0.225	-0.995	1.477	-0.554	1.294	1.256	2.178	2.178	-0.995	0.697
488Y	0.092	-1.047	1.047	-0.704	0.820	0.631	1.169	1.169	-1.047	0.287
489P	-0.623	-0.013	0.804	-1.129	0.656	0.017	1.336	1.336	-1.129	0.150
490V	0.104	-0.372	1.253	-1.419	1.030	0.615	0.721	1.253	-1.419	0.276
491A	0.104	-0.480	1.253	-1.838	1.030	0.615	0.721	1.253	-1.838	0.201
492L	0.357	0.351	1.001	-2.112	0.793	0.595	-0.621	1.001	-2.112	0.052
493E	-0.357	0.351	0.674	-2.256	0.528	0.582	-0.406	0.674	-2.256	-0.126
494G	0.237	0.608	1.244	-2.246	1.175	1.175	-0.929	1.244	-2.246	0.180
495A	-0.477	0.556	1.160	-2.316	1.185	1.180	0.516	1.185	-2.316	0.257
496L	0.465	0.351	1.692	-2.453	1.813	1.769	0.146	1.813	-2.453	0.541
497K	0.465	0.556	1.692	-2.574	1.813	1.769	0.146	1.813	-2.574	0.552
498L	-0.477	-0.683	1.617	-2.655	1.868	1.775	0.580	1.868	-2.655	0.289
499K	-0.477	-0.593	1.617	-2.631	1.868	1.775	0.580	1.868	-2.631	0.306
500E	-0.016	-1.334	1.954	-2.493	2.096	1.789	0.477	2.096	-2.493	0.353
501L	-0.642	-1.909	1.496	-2.393	1.504	1.211	0.357	1.504	-2.393	-0.054
502A	0.073	-1.129	1.739	-1.872	1.668	1.826	0.190	1.826	-1.872	0.356
503Y	-0.155	-0.502	1.290	-1.377	1.030	1.231	-0.886	1.290	-1.377	0.090
504M	-0.155	-0.270	1.290	-0.768	1.030	1.231	-0.886	1.290	-0.886	0.210
505H	0.787	-0.156	1.365	-0.529	0.975	1.226	-1.320	1.365	-1.320	0.335
506A	0.073	-0.246	1.300	-0.585	0.929	1.230	-0.059	1.300	-0.585	0.377
507E	0.326	0.381	1.047	-1.027	0.692	1.211	-1.401	1.211	-1.401	0.176
508G	0.724	0.381	1.057	-1.221	0.647	1.193	-2.356	1.193	-2.356	0.061
509F	0.952	-0.450	0.889	-1.529	0.428	0.574	-2.623	0.952	-2.623	-0.251
510A	1.312	0.556	1.216	-1.611	0.793	1.173	-1.639	1.312	-1.639	0.257
511A	0.237	0.646	0.804	-1.822	0.437	0.579	-1.178	0.804	-1.822	-0.042
512G	0.237	1.273	1.262	-2.068	1.121	1.174	-1.113	1.273	-2.068	0.269
513E	0.952	1.004	1.487	-1.880	1.339	1.789	-1.097	1.789	-1.880	0.513
514L	1.179	0.105	1.477	-1.457	1.294	1.789	-0.087	1.789	-1.457	0.614

515K	1.179	0.309	1.720	-0.592	1.567	1.808	1.143	1.808	-0.592	1.019
516H	0.313	-0.727	1.589	-0.121	1.595	1.810	1.465	1.810	-0.727	0.846
517G	-0.047	-1.142	1.262	-0.077	1.230	1.211	0.481	1.262	-1.142	0.417
518P	-0.047	-1.194	1.262	-0.762	1.230	1.211	0.481	1.262	-1.194	0.312
519I	-0.913	-1.013	0.674	-1.562	0.574	0.618	0.738	0.738	-1.562	-0.127
520A	-0.553	-0.062	0.842	-2.413	0.765	0.597	0.444	0.842	-2.413	-0.054
521L	-0.281	-0.266	1.122	-2.388	1.130	1.086	0.435	1.130	-2.388	0.120
522I	-0.054	0.297	0.870	-2.124	0.811	1.067	0.215	1.067	-2.124	0.155
523E	-0.129	0.525	0.926	-1.450	0.838	1.071	0.328	1.071	-1.450	0.301
524D	-0.129	-0.374	1.169	-0.885	1.112	1.090	1.558	1.558	-0.885	0.506
525G	0.218	-1.009	1.132	-0.722	1.093	1.086	1.712	1.712	-1.009	0.502
526L	0.218	-1.733	1.132	-0.943	1.093	1.086	1.712	1.712	-1.733	0.367
527P	-0.509	-1.642	0.683	-1.338	0.720	0.488	2.327	2.327	-1.642	0.104
528V	-1.375	-1.642	0.290	-1.899	0.392	0.001	2.925	2.925	-1.899	-0.187
529I	-2.001	-0.691	0.290	-2.332	0.483	0.018	2.869	2.869	-2.332	-0.195
530V	-1.286	-0.007	0.618	-2.391	0.747	0.031	2.654	2.654	-2.391	0.052
531V	-1.008	0.920	0.524	-2.075	0.629	0.033	2.594	2.594	-2.075	0.231
532M	-0.642	1.644	0.889	-1.222	0.911	0.050	2.225	2.225	-1.222	0.551
533P	0.225	2.613	1.477	-0.357	1.567	0.643	1.969	2.613	-0.357	1.162
534S	0.819	2.255	1.589	0.116	1.531	0.641	1.380	2.255	0.116	1.190
535P	1.464	1.890	1.860	0.134	1.695	0.660	0.951	1.890	0.134	1.236
536K	1.862	1.327	1.870	-0.179	1.649	0.643	-0.003	1.870	-0.179	1.024
537G	2.058	0.586	1.823	-0.366	1.531	0.644	-0.183	2.058	-0.366	0.870
538S	1.065	-0.042	1.589	-0.520	1.385	0.629	0.093	1.589	-0.520	0.600
539A	1.065	-0.066	1.505	-0.271	1.285	1.230	0.140	1.505	-0.271	0.698
540T	0.838	-0.270	1.057	-0.163	0.647	0.635	-0.935	1.057	-0.935	0.258
541L	0.838	-0.965	1.515	0.027	1.330	1.230	-0.870	1.515	-0.965	0.443
542H	-0.155	0.095	1.281	-0.250	1.185	1.215	-0.595	1.281	-0.595	0.396
543A	-0.869	0.614	1.197	-0.727	1.194	1.221	0.850	1.221	-0.869	0.497
544K	-0.787	0.289	1.150	-1.322	1.194	1.221	0.969	1.221	-1.322	0.388
545L	0.237	0.271	1.533	-1.044	1.494	1.256	0.421	1.533	-1.044	0.596
546L	-0.401	1.050	1.234	-0.509	1.303	0.638	0.475	1.303	-0.509	0.541
547S	-0.269	0.930	1.664	0.348	1.777	1.262	1.484	1.777	-0.269	1.028
548N	-0.136	0.566	1.543	0.365	1.504	1.267	1.393	1.543	-0.136	0.929
549I	-0.060	0.447	1.487	-0.517	1.476	1.264	1.280	1.487	-0.517	0.768
550R	0.901	1.585	1.898	-1.555	1.841	1.301	1.008	1.898	-1.555	0.997
551E	0.819	1.399	1.945	-2.101	1.841	1.301	0.889	1.945	-2.101	0.870
552I	0.642	0.824	2.075	-2.143	2.005	1.885	1.001	2.075	-2.143	0.898
553Q	1.508	1.052	2.206	-1.663	1.977	1.883	0.680	2.206	-1.663	1.092
554T	1.375	1.052	1.776	-1.478	1.504	1.258	-0.329	1.776	-1.478	0.737
555R	0.648	0.237	1.328	-1.594	1.130	0.660	0.286	1.328	-1.594	0.385
556G	1.483	-0.673	1.664	-1.679	1.303	0.678	0.005	1.664	-1.679	0.397
557A	0.598	-1.624	1.197	-1.837	0.911	0.638	0.163	1.197	-1.837	0.006
558V	0.035	-1.624	0.879	-1.870	0.747	0.619	0.711	0.879	-1.870	-0.072
559T	-0.736	-0.953	0.309	-2.021	0.255	-0.003	1.034	1.034	-2.021	-0.302
560I	-0.964	-0.869	0.318	-2.295	0.300	-0.003	0.023	0.318	-2.295	-0.499
561V	-0.604	0.083	0.646	-2.611	0.665	0.596	1.007	1.007	-2.611	-0.031
562I	0.123	0.718	1.094	-2.706	1.039	1.194	0.392	1.194	-2.706	0.265
563A	0.155	1.617	0.889	-2.681	0.838	1.174	0.351	1.617	-2.681	0.335
564E	1.293	2.108	1.300	-2.132	1.175	1.661	0.021	2.108	-2.132	0.775
565E	2.020	1.437	1.748	-1.621	1.549	2.259	-0.594	2.259	-1.621	0.971
566G	2.855	1.676	2.085	-0.878	1.722	2.277	-0.875	2.855	-0.878	1.266
567D	2.488	1.407	1.963	-0.541	1.713	2.279	0.724	2.488	-0.541	1.433
568E	2.260	0.461	2.066	-0.584	1.823	2.304	0.749	2.304	-0.584	1.297
569T	1.900	-0.114	1.982	-0.884	1.731	1.723	0.995	1.982	-0.884	1.048
570V	1.420	-0.066	2.244	-1.129	2.014	1.743	1.327	2.244	-1.129	1.079
571R	0.920	0.121	1.973	-1.290	1.695	1.254	0.326	1.973	-1.290	0.714
572P	1.059	-0.897	1.917	-0.890	1.649	1.143	0.343	1.917	-0.897	0.618
573Y	0.863	-1.580	1.879	-0.237	1.668	1.743	0.570	1.879	-1.580	0.701
574A	0.515	-0.599	1.917	0.456	1.686	1.747	0.416	1.917	-0.599	0.877
575D	-0.256	-0.923	1.346	0.911	1.194	1.124	0.739	1.346	-0.923	0.591

576H	0.104	-1.103	1.431	0.559	1.285	1.705	0.493	1.705	-1.103	0.639
577L	-0.281	-1.194	1.038	-0.510	1.030	1.687	0.482	1.687	-1.194	0.322
578I	-0.281	-1.085	1.281	-1.533	1.303	1.706	1.712	1.712	-1.533	0.443
579E	-0.781	0.095	1.010	-2.181	0.984	1.217	0.711	1.217	-2.181	0.151
580I	-1.147	0.011	0.730	-2.185	0.802	0.599	1.032	1.032	-2.185	-0.023
581P	-0.155	0.131	0.963	-1.604	0.948	0.614	0.757	0.963	-1.604	0.236
582A	0.680	-0.432	1.300	-1.013	1.121	0.632	0.476	1.300	-1.013	0.395
583V	-0.395	0.059	0.889	-0.619	0.765	0.038	0.938	0.938	-0.619	0.239
584S	-0.471	0.513	0.945	-0.426	0.793	0.041	1.051	1.051	-0.471	0.349
585T	-0.224	-0.546	1.029	-0.639	0.893	0.065	0.994	1.029	-0.639	0.224
586L	-0.224	-1.242	1.272	-0.882	1.166	0.084	2.224	2.224	-1.242	0.343
587L	-0.572	-0.182	1.309	-1.040	1.185	0.087	2.071	2.071	-1.040	0.408
588Q	-1.565	0.513	1.075	-1.111	1.039	0.073	2.346	2.346	-1.565	0.339
589P	-1.482	-0.302	1.029	-0.939	1.039	0.073	2.465	2.465	-1.482	0.269
590L	-0.572	-0.302	1.309	-0.776	1.185	0.087	2.071	2.071	-0.776	0.429
591L	-0.496	-0.302	1.253	-0.677	1.157	0.084	1.957	1.957	-0.677	0.425
592S	-0.743	0.393	1.169	-0.506	1.057	0.060	2.014	2.014	-0.743	0.492
593T	-1.457	-0.558	0.842	-0.648	0.793	0.047	2.229	2.229	-1.457	0.178
594I	-0.496	-1.224	1.253	-0.782	1.157	0.084	1.957	1.957	-1.224	0.279
595P	-0.148	-0.899	1.216	-1.035	1.139	0.080	2.111	2.111	-1.035	0.352
596L	-1.141	-1.258	1.001	-1.140	0.938	0.064	2.202	2.202	-1.258	0.095
597Q	-1.337	-0.198	0.804	-1.226	0.784	0.044	1.151	1.151	-1.337	0.003
598V	-0.698	-0.785	0.945	-1.184	0.802	0.042	-0.180	0.945	-1.184	-0.151
599F	-0.420	-0.689	0.851	-1.171	0.683	0.043	-0.240	0.851	-1.171	-0.135
600A	-0.073	0.299	0.814	-1.033	0.665	0.040	-0.087	0.814	-1.033	0.089
601A	-0.319	0.299	0.487	-0.916	0.291	-0.003	-1.260	0.487	-1.260	-0.203
602S	0.180	1.113	1.038	-0.948	0.774	0.620	-1.850	1.113	-1.850	0.133
603V	0.895	0.884	1.103	-1.283	0.820	0.616	-3.111	1.103	-3.111	-0.011
604A	1.028	0.574	1.533	-1.818	1.294	1.241	-2.102	1.533	-2.102	0.250
605R	1.255	1.113	1.524	-2.178	1.248	1.241	-1.091	1.524	-2.178	0.445
606A	0.724	0.203	1.627	-2.382	1.330	1.240	-0.919	1.627	-2.382	0.261
607R	1.590	0.742	2.019	-1.905	1.658	1.727	-1.517	2.019	-1.905	0.616
608G	1.224	0.760	1.898	-1.346	1.649	1.729	0.082	1.898	-1.346	0.856
609Y	1.590	0.491	1.739	-0.429	1.494	1.593	0.074	1.739	-0.429	0.936
610D	1.818	1.712	2.188	0.045	2.132	2.188	1.149	2.188	0.045	1.604
611V	1.685	1.782	2.001	0.391	1.932	1.582	1.370	2.001	0.391	1.535
612D	1.590	1.674	2.440	0.102	2.451	2.207	1.369	2.451	0.102	1.690
613K	2.153	1.135	2.487	0.183	2.524	2.228	0.924	2.524	0.183	1.662
614P	0.939	1.135	2.132	-0.006	2.214	1.745	1.368	2.214	-0.006	1.361
615R	1.306	1.631	2.253	0.275	2.224	1.743	-0.231	2.253	-0.231	1.314
616N	1.034	0.722	2.431	-0.041	2.543	1.849	-0.157	2.543	-0.157	1.197
617L	1.084	0.604	2.132	-0.226	2.060	1.274	-0.062	2.132	-0.226	0.981
618A	0.718	0.712	1.767	-0.827	1.777	1.257	0.306	1.777	-0.827	0.816
619K	0.781	1.287	1.533	-0.774	1.458	0.652	0.348	1.533	-0.774	0.755
620S	0.104	0.710	1.113	-0.886	1.139	0.613	1.050	1.139	-0.886	0.549
621V	1.179	0.109	1.524	-0.777	1.494	1.207	0.588	1.524	-0.777	0.761
622T	1.046	0.459	1.066	-1.006	1.813	1.267	0.588	1.813	-1.006	0.748
623V	0.686	0.223	0.160	-1.173	1.494	0.733	-0.487	1.494	-1.173	0.234
624E	0.275	0.574	-0.448	-1.276	1.658	0.773	-1.657	1.658	-1.657	-0.014

TOP

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]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Hydrophilicity	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Flexibility	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Accessibility	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Turns	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY

	TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Exposed Surface	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Polarity	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]
Antigenic Propensity	[1]VCGIVGYVGRRPAYVVVMDALRRMEYRGYDSSGIALVDGGTLTVRRRAGRLANLEEAVAEMPSTA LSGTTGLGHTRWATHGRPTDRNAHPHRDAAGKIAVVHNGIIENFAVLRRELETAGVEFASDTDTEVA AHLVARAYRHGETADDFVGSVLAVLRRLEGHFTLVFANADDPGTLVAARRSTPLVLGIGDNEMFVGS DVAAFIEHTREAVELGQDQAVVITADGYRISDFDGNDGLQAGRDFRPFHIDWDLAAAEKGGYEYFM LKEIAEQPAAVADTLLGHFVGGRIVLDEQRLSDQELREIDKVFVVACGTAYHSGLLAKYAIEHWTRLP VEVELASEFRYRDPVLDRSTLVVAISQSGETADTLEAVRHAKEQKAKVLAICNTNGSQIPRECDAVLY TRAGPEIGVASTKTFLAQIAANYLLGLALAQARGTKYPDEVEREYHELEAMPDLVARVIAATGPVAEL AHRFAQSSTVLFLGRHVGYPVALEGALKLKELAYMHAEGFAAGELKHGPIALIEDGLPVIVVMPSPK GSATLHAKLLSNIREIQTRGAVTIVIAEEGDETVRPYADHLIEIPAVSTLLQPLLSTIPLQVFAASVARAR GYDVDKPRNLAKSVTVE[624]

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