

BcePred Prediction Server

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

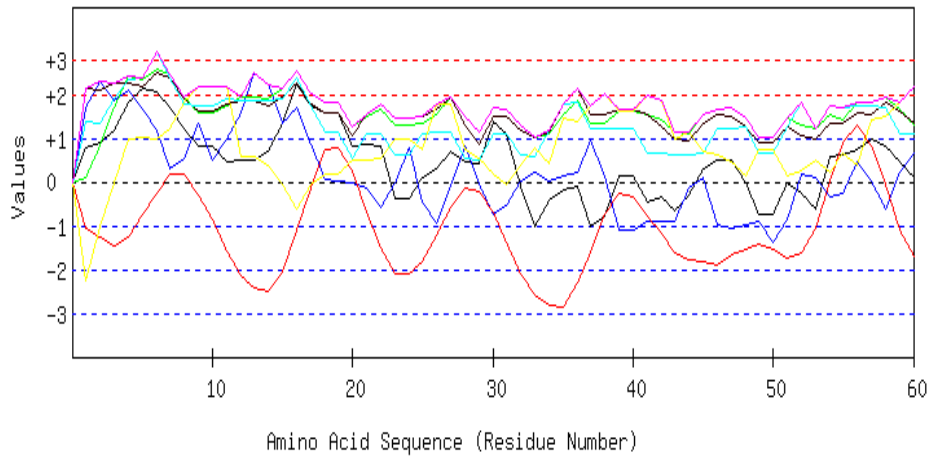
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Length=174

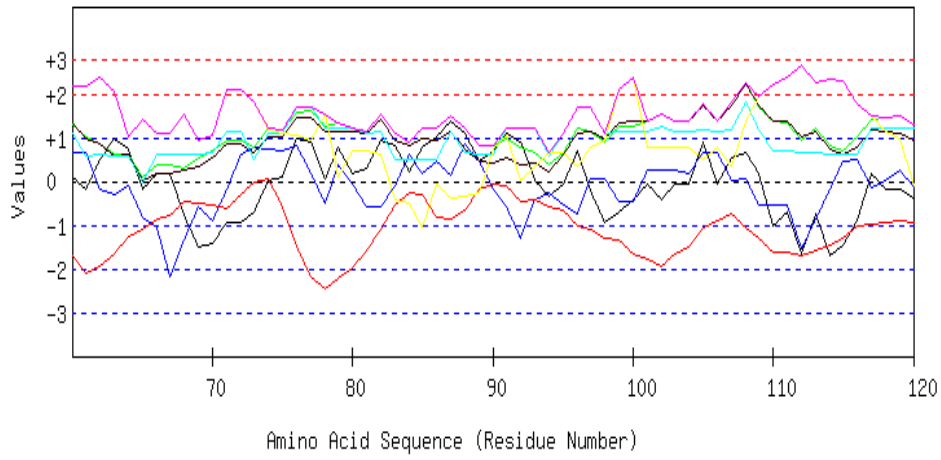
GRAPHICAL RESULT

GRAPHICAL RESULT :: SEQ 1 to 60



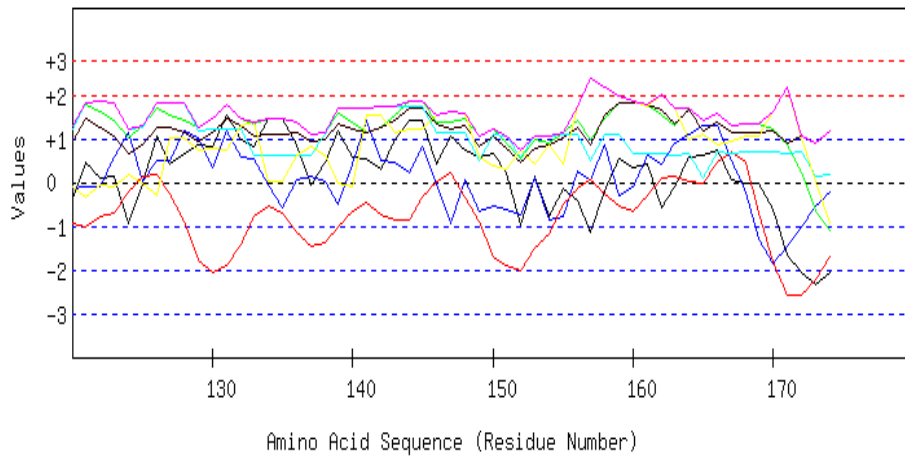
Hydrophilicity Turns Surface Flexibility Polar Accessibility Antigenic Comb4 Combined

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

[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

VTERPRDCRPVRRARTSDVPAIKQLVDTYAGKILLEKNLVTLYEAVQEFWVAEHPDLYG
KVVGCGALHVLWSDLGEIRTVAVDPAMTGHGIGHAIVDRLLQVARDLQLQRVFLTFETE
FFARHGFTIEGTPVTAEVFDEMCRSYDIGVAEFLDLSYVKPNILGNSRMLLVL

Length=174

A.A.	Parameter										Combined
	Hydro	Flexi	Access	Turns	Surface	Polar	AntiPro	MAX	MIN	AVG	
1 V	0.775	1.682	0.104	-1.073	2.142	1.396	-2.246	2.142	-2.246	0.397	
2 T	0.907	2.317	0.804	-1.266	2.096	1.355	-1.016	2.317	-1.266	0.742	
3 E	1.173	1.862	1.692	-1.465	2.251	1.919	-0.007	2.251	-1.465	1.061	
4 R	1.805	2.100	2.421	-1.252	2.251	2.348	0.994	2.421	-1.252	1.524	
5 P	2.128	1.646	2.328	-0.753	2.169	2.364	1.028	2.364	-0.753	1.558	
6 R	2.064	1.191	2.561	-0.246	2.488	2.969	0.986	2.969	-0.246	1.716	
7 D	1.704	0.281	2.477	0.193	2.397	2.389	1.232	2.477	0.193	1.525	
8 C	1.205	0.556	1.926	0.172	1.914	1.765	1.822	1.926	0.172	1.337	
9 R	0.838	1.333	1.561	-0.311	1.631	1.748	2.191	2.191	-0.311	1.285	
10 P	0.838	0.519	1.561	-0.876	1.631	1.748	2.191	2.191	-0.876	1.088	
11 V	0.471	0.974	1.720	-1.564	1.786	1.884	2.199	2.199	-1.564	1.067	
12 V	0.515	1.561	1.935	-2.121	1.877	1.866	0.566	1.935	-2.121	0.886	
13 R	0.515	2.513	1.935	-2.423	1.877	1.866	0.566	2.513	-2.423	0.979	
14 R	0.711	2.239	1.889	-2.510	1.759	1.867	0.387	2.239	-2.510	0.906	
15 A	1.356	1.329	2.160	-2.051	1.923	1.885	-0.042	2.160	-2.051	0.937	
16 R	2.222	1.688	2.552	-1.117	2.251	2.373	-0.639	2.552	-1.117	1.333	
17 T	1.723	0.874	2.001	-0.131	1.768	1.750	-0.050	2.001	-0.131	1.134	
18 S	1.590	0.059	1.814	0.722	1.567	1.144	0.171	1.814	0.059	1.010	
19 D	1.590	0.035	1.814	0.793	1.567	1.144	0.171	1.814	0.035	1.016	
20 V	0.819	-0.013	1.244	0.263	1.075	0.521	0.494	1.244	-0.013	0.629	
21 P	0.850	-0.122	1.496	-0.705	1.558	1.096	0.518	1.558	-0.705	0.670	
22 A	0.819	-0.576	1.674	-1.507	1.777	1.118	0.521	1.777	-1.507	0.546	
23 I	-0.395	-0.038	1.318	-2.089	1.467	0.635	0.965	1.467	-2.089	0.266	
24 K	-0.395	0.778	1.318	-2.119	1.467	0.635	0.965	1.467	-2.119	0.378	
25 Q	0.104	-0.460	1.346	-1.808	1.513	1.105	0.736	1.513	-1.808	0.362	
26 L	0.300	-0.951	1.543	-1.240	1.668	1.125	1.787	1.787	-1.240	0.605	
27 V	0.686	-0.120	1.935	-0.569	1.923	1.142	1.798	1.935	-0.569	0.971	
28 D	0.459	0.808	1.487	-0.158	1.285	0.547	0.723	1.487	-0.158	0.736	
29 T	0.440	-0.056	1.150	-0.204	0.866	0.505	0.560	1.150	-0.204	0.466	
30 Y	1.382	-0.751	1.683	-0.696	1.494	1.094	0.190	1.683	-0.751	0.628	
31 A	1.110	-0.548	1.664	-1.387	1.485	1.094	-0.077	1.664	-1.387	0.477	

32 G	-0.104	0.027	1.309	-2.119	1.175	0.611	0.366	1.309	-2.119	0.181
33 K	-1.015	0.231	1.029	-2.568	1.030	0.596	0.761	1.030	-2.568	0.009
34 I	-0.401	0.009	1.103	-2.803	1.157	1.177	0.402	1.177	-2.803	0.092
35 L	-0.174	0.129	1.552	-2.842	1.795	1.771	1.477	1.795	-2.842	0.530
36 L	-0.092	0.237	1.860	-2.281	2.151	1.812	1.364	2.151	-2.281	0.722
37 E	-1.034	0.932	1.328	-1.604	1.522	1.223	1.734	1.734	-1.604	0.586
38 K	-0.762	0.153	1.346	-0.731	1.531	1.222	2.001	2.001	-0.762	0.680
39 N	0.149	-1.085	1.627	-0.262	1.677	1.237	1.607	1.677	-1.085	0.707
40 L	0.149	-1.119	1.627	-0.337	1.677	1.237	1.607	1.677	-1.119	0.691
41 V	-0.465	-0.915	1.552	-0.780	1.549	0.657	1.965	1.965	-0.915	0.509
42 T	-0.332	-0.915	1.431	-1.171	1.276	0.662	1.874	1.874	-1.171	0.404
43 L	-0.642	-0.915	1.132	-1.616	0.966	0.621	0.977	1.132	-1.616	0.075
44 Y	-0.294	-0.136	1.094	-1.772	0.948	0.617	1.131	1.131	-1.772	0.227
45 E	0.319	0.097	1.543	-1.825	1.330	0.658	0.705	1.543	-1.825	0.404
46 A	0.484	-0.981	1.674	-1.904	1.540	1.238	0.638	1.674	-1.904	0.384
47 V	0.484	-1.077	1.692	-1.648	1.485	1.236	0.454	1.692	-1.648	0.375
48 Q	-0.028	-0.981	1.459	-1.522	1.267	1.242	0.145	1.459	-1.522	0.226
49 E	-0.755	-0.897	1.010	-1.413	0.893	0.644	0.760	1.010	-1.413	0.035
50 F	-0.755	-1.382	1.010	-1.545	0.893	0.644	0.760	1.010	-1.545	-0.054
51 W	-0.028	-0.849	1.459	-1.759	1.267	1.242	0.145	1.459	-1.759	0.211
52 V	-0.275	0.193	1.290	-1.640	1.066	1.820	0.249	1.820	-1.640	0.386
53 A	-0.635	0.085	1.206	-1.080	0.975	1.239	0.495	1.239	-1.080	0.326
54 E	0.579	-0.322	1.543	0.006	1.339	1.724	0.235	1.724	-0.322	0.729
55 H	0.629	-0.270	1.440	0.915	1.330	1.704	0.647	1.704	-0.270	0.914
56 P	0.743	0.471	1.814	1.317	1.576	1.722	0.391	1.814	0.391	1.148
57 D	0.971	0.017	1.804	0.809	1.531	1.722	1.401	1.804	0.017	1.179
58 L	0.838	-0.619	1.926	-0.054	1.804	1.717	1.493	1.926	-0.619	1.015
59 Y	0.471	0.213	1.646	-1.110	1.622	1.099	1.814	1.814	-1.110	0.822
60 G	0.104	0.656	1.281	-1.691	1.339	1.081	2.183	2.183	-1.691	0.708
61 K	-0.167	0.656	1.001	-2.082	0.975	0.592	2.192	2.192	-2.082	0.452
62 V	0.503	-0.176	0.870	-1.931	0.875	0.605	2.379	2.379	-1.931	0.446
63 V	0.983	-0.284	0.608	-1.656	0.592	0.585	2.047	2.047	-1.656	0.411
64 G	0.756	-0.098	0.618	-1.261	0.638	0.585	1.037	1.037	-1.261	0.325
65 C	-0.186	-0.821	0.085	-1.092	0.009	-0.004	1.407	1.407	-1.092	-0.086
66 G	0.180	-1.061	0.365	-0.851	0.191	0.614	1.086	1.086	-1.061	0.075
67 A	0.180	-2.191	0.365	-0.772	0.191	0.614	1.086	1.086	-2.191	-0.075
68 L	-0.762	-1.336	0.290	-0.475	0.246	0.620	1.520	1.520	-1.336	0.015
69 H	-1.482	-0.593	0.524	-0.507	0.355	0.627	0.920	0.920	-1.482	-0.022
70 V	-1.432	-0.887	0.683	-0.550	0.556	0.647	1.080	1.080	-1.432	0.014
71 L	-0.932	-0.164	0.954	-0.610	0.875	1.136	2.081	2.081	-0.932	0.477
72 W	-0.932	0.616	0.954	-0.312	0.875	1.136	2.081	2.081	-0.932	0.631
73 S	-0.705	0.794	0.786	-0.025	0.656	0.516	1.814	1.814	-0.705	0.548
74 D	0.022	0.752	1.234	0.048	1.030	1.114	1.199	1.234	0.022	0.771
75 L	0.098	0.704	1.178	-0.582	1.002	1.111	1.086	1.178	-0.582	0.657
76 G	0.996	0.812	1.589	-1.507	1.458	1.710	1.062	1.710	-1.507	0.874
77 E	0.914	0.185	1.636	-2.187	1.458	1.710	0.943	1.710	-2.187	0.666
78 I	0.048	-0.486	1.244	-2.469	1.130	1.223	1.541	1.541	-2.469	0.319
79 R	0.762	0.377	1.328	-2.220	1.121	1.217	0.096	1.328	-2.220	0.383
80 T	0.168	-0.078	1.216	-1.992	1.157	1.219	0.684	1.219	-1.992	0.339
81 V	0.307	-0.568	1.160	-1.582	1.112	1.108	0.702	1.160	-1.582	0.320
82 A	0.945	-0.587	1.543	-1.112	1.403	1.125	0.600	1.543	-1.112	0.560
83 V	0.813	-0.096	1.113	-0.524	0.929	0.501	-0.409	1.113	-0.524	0.332
84 D	0.218	0.628	0.907	-0.266	0.820	0.498	-0.505	0.907	-0.505	0.329
85 P	0.781	0.179	1.225	-0.300	0.984	0.516	-1.053	1.225	-1.053	0.333
86 A	1.009	0.447	1.216	-0.834	0.938	0.516	-0.043	1.216	-0.834	0.464
87 M	1.375	0.123	1.496	-0.865	1.121	1.135	-0.364	1.496	-0.865	0.574
88 T	1.103	0.864	1.216	-0.672	0.756	0.646	-0.355	1.216	-0.672	0.508
89 G	0.465	0.463	0.832	-0.163	0.465	0.629	-0.253	0.832	-0.253	0.348
90 H	0.692	-0.164	0.823	-0.071	0.419	0.629	0.757	0.823	-0.164	0.441

91 G	1.091	-0.578	0.991	-0.118	0.547	1.231	1.080	1.231	-0.578	0.606
92 I	0.895	-1.302	0.795	-0.478	0.392	1.211	0.029	1.211	-1.302	0.220
93 G	0.029	-0.438	0.664	-0.409	0.419	1.213	0.350	1.213	-0.438	0.261
94 H	-0.338	-0.252	0.384	-0.599	0.237	0.595	0.672	0.672	-0.599	0.100
95 A	-0.066	-0.546	0.664	-0.667	0.601	1.084	0.662	1.084	-0.667	0.247
96 I	0.705	-0.751	1.234	-1.019	1.093	1.707	0.340	1.707	-1.019	0.473
97 V	-0.237	0.065	1.160	-1.090	1.148	1.712	0.775	1.712	-1.090	0.505
98 D	-0.951	0.065	0.917	-1.304	0.984	1.098	0.942	1.098	-1.304	0.250
99 R	-0.705	-0.474	1.244	-1.358	1.358	1.140	2.116	2.116	-1.358	0.474
100L	-0.433	-0.474	1.262	-1.649	1.367	1.140	2.383	2.383	-1.649	0.514
101L	-0.066	0.269	1.384	-1.764	1.376	1.138	0.784	1.384	-1.764	0.446
102Q	-0.433	0.269	1.543	-1.940	1.531	1.274	0.792	1.543	-1.940	0.434
103V	-0.066	0.269	1.384	-1.642	1.376	1.138	0.784	1.384	-1.642	0.463
104A	-0.066	0.161	1.384	-1.494	1.376	1.138	0.784	1.384	-1.494	0.469
105R	0.895	0.652	1.795	-1.056	1.741	1.175	0.512	1.795	-1.056	0.816
106D	-0.066	0.652	1.384	-0.888	1.376	1.138	0.784	1.384	-0.888	0.626
107L	0.547	0.017	1.832	-0.751	1.759	1.179	0.358	1.832	-0.751	0.706
108Q	0.680	0.047	2.262	-1.051	2.233	1.804	1.368	2.262	-1.051	1.049
109L	0.180	-0.540	1.711	-1.289	1.750	1.181	1.957	1.957	-1.289	0.707
110Q	-1.034	-0.540	1.375	-1.611	1.385	0.696	2.217	2.217	-1.611	0.355
111R	-0.686	-0.540	1.337	-1.637	1.367	0.692	2.371	2.371	-1.637	0.415
112V	-1.647	-1.528	0.926	-1.711	1.002	0.655	2.643	2.643	-1.711	0.049
113F	-0.736	-0.857	1.206	-1.580	1.148	0.670	2.249	2.249	-1.580	0.300
114V	-1.697	-0.192	0.814	-1.471	0.729	0.631	2.336	2.336	-1.697	0.164
115L	-1.470	0.479	0.711	-1.288	0.619	0.606	2.311	2.311	-1.470	0.281
116T	-0.907	0.509	1.029	-1.019	0.784	0.625	1.763	1.763	-1.019	0.398
117F	0.168	-0.156	1.421	-0.981	1.194	1.220	1.486	1.486	-0.981	0.622
118E	-0.180	0.019	1.477	-0.924	1.157	1.223	1.148	1.477	-0.924	0.560
119T	-0.180	0.257	1.496	-0.920	1.103	1.221	0.964	1.496	-0.920	0.563
120E	-0.376	-0.144	1.300	-0.923	0.948	1.202	-0.087	1.300	-0.923	0.274
121F	0.471	-0.092	1.795	-1.006	1.467	1.822	-0.339	1.822	-1.006	0.588
122F	0.111	-0.092	1.627	-0.762	1.276	1.842	-0.045	1.842	-0.762	0.565
123A	0.142	0.574	1.421	-0.682	1.075	1.822	-0.086	1.822	-0.682	0.610
124R	-0.932	1.149	1.029	-0.208	0.665	1.227	0.192	1.227	-0.932	0.446
125H	-0.022	0.011	1.290	0.128	0.866	1.243	-0.018	1.290	-0.022	0.500
126G	1.053	0.495	1.683	0.184	1.276	1.838	-0.296	1.838	-0.296	0.890
127F	0.414	0.495	1.543	-0.273	1.257	1.840	1.036	1.840	-0.273	0.902
128T	0.642	1.161	1.440	-0.920	1.148	1.815	1.010	1.815	-0.920	0.899
129E	0.869	1.028	1.272	-1.788	0.929	1.195	0.743	1.272	-1.788	0.607
130I	0.838	0.357	1.477	-2.077	1.130	1.215	0.784	1.477	-2.077	0.532
131E	1.552	1.173	1.786	-1.901	1.449	1.230	0.753	1.786	-1.901	0.863
132G	0.990	0.598	1.468	-1.420	1.285	1.211	1.301	1.468	-1.420	0.776
133T	0.825	0.546	1.337	-0.798	1.075	0.632	1.368	1.368	-0.798	0.712
134P	1.464	-0.042	1.477	-0.558	1.093	0.630	0.036	1.477	-0.558	0.586
135V	1.464	-0.574	1.477	-0.705	1.093	0.630	0.036	1.477	-0.705	0.489
136T	0.869	0.061	1.365	-1.121	1.130	0.631	0.624	1.365	-1.121	0.509
137A	-0.041	0.145	1.103	-1.448	0.929	0.616	0.835	1.103	-1.448	0.306
138E	0.459	0.031	1.132	-1.400	0.975	1.086	0.606	1.132	-1.400	0.412
139V	1.186	-0.508	1.580	-1.004	1.349	1.684	-0.009	1.684	-1.004	0.611
140F	0.591	0.401	1.375	-0.654	1.239	1.681	-0.105	1.681	-0.654	0.647
141D	0.547	1.431	1.160	-0.444	1.148	1.699	1.527	1.699	-0.444	1.010
142E	0.319	0.485	1.262	-0.746	1.257	1.724	1.553	1.724	-0.746	0.836
143M	0.964	0.449	1.533	-0.879	1.422	1.742	1.124	1.742	-0.879	0.908
144C	1.426	0.239	1.851	-0.857	1.704	1.757	1.205	1.851	-0.857	1.046
145R	1.426	0.830	1.851	-0.351	1.704	1.757	1.205	1.851	-0.351	1.203
146S	0.427	-0.080	1.384	0.002	1.321	1.160	1.553	1.553	-0.080	0.824
147Y	1.053	-0.935	1.384	0.200	1.230	1.142	1.608	1.608	-0.935	0.812
148D	0.730	0.047	1.477	-0.341	1.312	1.126	1.575	1.575	-0.341	0.847
149I	0.598	-0.667	1.047	-0.909	0.838	0.502	0.565	1.047	-0.909	0.282

150G	0.680	-0.546	1.225	-1.684	1.048	1.081	0.379	1.225	-1.684	0.312
151V	0.218	-0.635	0.907	-1.885	0.765	1.066	0.298	1.066	-1.885	0.105
152A	-0.996	-0.743	0.552	-2.031	0.455	0.582	0.742	0.742	-2.031	-0.205
153E	0.142	0.113	0.963	-1.514	0.793	1.070	0.412	1.070	-1.514	0.283
154F	-0.800	-0.869	0.889	-1.162	0.847	1.075	0.846	1.075	-1.162	0.118
155L	-0.155	-0.791	1.160	-0.502	1.011	1.093	0.417	1.160	-0.791	0.319
156D	-0.408	0.245	1.412	-0.141	1.248	1.113	1.760	1.760	-0.408	0.747
157L	-1.135	0.065	0.963	0.069	0.875	0.515	<u>2.375</u>	2.375	-1.135	0.532
158S	-0.193	0.878	1.477	-0.268	1.558	1.105	<u>2.188</u>	2.188	-0.268	0.964
159Y	0.522	-0.302	1.804	-0.553	1.823	1.119	<u>1.973</u>	1.973	-0.553	0.912
160V	0.332	-0.100	1.832	-0.656	1.813	0.670	1.869	1.869	-0.656	0.823
161K	0.408	0.624	1.776	-0.306	1.786	0.667	1.756	1.786	-0.306	0.959
162P	-0.585	0.401	1.543	0.104	1.640	0.652	<u>2.031</u>	2.031	-0.585	0.827
163N	-0.104	0.898	1.281	0.128	1.358	0.633	1.699	1.699	-0.104	0.842
164I	0.572	1.103	1.702	0.014	1.677	0.672	0.998	1.702	0.014	0.962
165L	0.623	1.313	1.403	-0.003	1.194	0.097	1.093	1.403	-0.003	0.817
166G	0.756	1.313	1.589	0.461	1.394	0.703	0.872	1.589	0.461	1.013
167N	0.048	0.481	1.281	0.693	1.130	0.680	0.930	1.281	0.048	0.749
168S	-0.028	-0.224	1.337	0.445	1.157	0.683	1.043	1.337	-0.224	0.630
169R	-0.028	-1.284	1.337	-0.698	1.157	0.683	1.043	1.337	-1.284	0.316
170M	-0.623	-1.843	1.225	-1.820	1.194	0.685	1.631	1.631	-1.843	0.064
171L	-1.647	-1.474	0.842	-2.578	0.893	0.650	<u>2.179</u>	2.179	-2.578	-0.162
172L	-2.058	-1.015	0.234	-2.594	1.057	0.690	1.009	1.057	-2.594	-0.382
173V	-2.323	-0.556	-0.653	-2.218	0.902	0.125	0.000	0.902	-2.323	-0.675
174L	-2.058	-0.206	-1.102	-1.697	1.175	0.168	-0.955	1.175	-2.058	-0.668

[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	<u>¹VTERPRDCRPVRRARTSDVPAIKQLVDTYAGKILLEKNLVTLYEAVQEFWVAEHPDLYGKVVGCCA</u> LHVLWSDLGEIRTVAVDPAMTGHGIGHAIVDRLLQVARDLQLQRFVLTTFETEFFARHGFTEIEGTPVT <u>AEVFDEMCRSYDIGVAEFLDLSYVKPNILGNSRMLLVL¹⁷⁴</u>
Hydrophili city	¹ <u>VTERPRDCR</u> PVV <u>RRARTSD</u> VPAIKQLVDTYAGKILLEKNLVTLYEAVQEFWVAEHPDLYGKVVGCCA LHVLWSDLGEIRTVAVDPAMTGHGIGHAIVDRLLQVARDLQLQRFVLTTFETEFFARHGFTEIEGTPVT AEVFDEMCRSYDIGVAEFLDLSYVKPNILGNSRMLLVL ¹⁷⁴
Flexibility	¹