#	*Keywords*	*Number of proteins*	*Number of families*	*Average sequence length*	*Z-score*	*P-value*
0	Ribonucleoprotein	12236	412	150.55	22.13	1
1	Ribosomal protein	11692	330	140.58	20.63	1
2	Developmental protein	3260	721	477.93	19.28	1
3	Hormone	1187	161	141.13	15.58	1
4	Growth factor	785	84	255.70	11.16	1
5	Cytokine	899	110	213.28	10.21	1
6	Neuropeptide	268	209	95.08	9.65	1
7	Activator	3086	573	428.47	9.04	1
8	GAP protein	47	2	232.96	7.42	1
9	Antigen	1113	455	437.48	6.99	1
10	Repressor	2309	449	374.46	6.92	1
11	Chromatin regulator	334	100	801.24	6.70	1
12	Pyrogen	37	2	262.59	6.44	1
13	Vasoactive	125	39	160.39	5.56	1
14	Amphibian defense peptide	123	148	50.64	5.44	1
15	GTPase activation	311	70	831.03	5.36	1
16	Endorphin	42	4	226.68	5.35	1
17	Opioid peptide	24	4	216.96	5.14	1
18	Protein phosphatase inhibitor	47	8	366.51	5.07	1
19	Cyclin	182	25	430.58	4.88	1

#	*name*	*n*	*avg_len*	*avg_dis*	*z*	*p*
0	DNA-binding	6518	546.53	0.87	46.90	1
1	Developmental protein	3897	655.21	0.86	31.10	1
2	Activator	2574	600.51	0.88	28.12	1
3	Repressor	1988	589.29	0.85	22.63	1
4	RNA-binding	2728	575.76	0.76	16.62	1
5	Chromatin regulator	1038	847.06	0.90	13.91	1
6	Ribonucleoprotein	1886	272.29	0.60	13.39	1
7	Serine/threonine-protein ki...	1782	802.24	0.84	11.56	1
8	Chaperone	937	430.43	0.71	10.02	1
9	Ribosomal protein	1408	186.38	0.53	9.34	1
10	Growth factor	398	299.63	0.70	8.98	1
11	Protein kinase inhibitor	49	337.20	0.96	8.34	1
12	Calmodulin-binding	520	1229.00	0.90	7.57	1
13	Hormone	338	221.13	0.59	7.24	1
14	Cyclin	133	422.71	0.87	7.18	1
15	Signal transduction inhibitor	115	408.43	0.84	6.76	1
16	Guanine-nucleotide releasin...	319	1144.39	0.96	6.40	1
17	GTPase activation	424	867.35	0.88	6.28	1
18	Growth factor binding	50	593.98	1	6.09	1
19	Neuropeptide	105	234.96	0.68	5.99	1
20	Potassium channel	191	621.52	0.85	5.10	1
21	Calcium channel	193	1397.77	0.93	5.09	1
22	Protein phosphatase inhibitor	64	352.86	0.81	5.07	1
23	Tyrosine-protein kinase	376	863.00	0.89	5.04	1
24	Mitogen	137	286.03	0.68	4.80	1
25	Vasoactive	46	267.00	0.76	4.29	1
26	Heparin-binding	221	650.97	0.73	3.88	1
27	Muscle protein	193	920.01	0.73	3.81	1
28	Actin-binding	837	974.92	0.77	3.80	1
29	Endorphin	12	246.50	1	3.49	1
30	Amphibian defense peptide	49	85.80	0.53	3.34	1
31	Helicase	739	1086.05	0.87	3.29	1
32	Opioid peptide	9	228.67	1	3.14	1
33	Prion	22	497.05	0.91	3.06	1
34	Ion channel	1027	861.88	0.76	2.89	1
35	Voltage-gated channel	386	816.98	0.78	2.87	1
36	Vasoconstrictor	15	246.87	0.80	2.73	1
37	Cell adhesion impairing toxin	6	352.50	1	2.47	1
38	Viral nucleoprotein	39	1202.79	0.90	2.46	1
39	Milk protein	19	194.68	0.68	2.34	1
40	Pair-rule protein	12	553.75	0.92	2.33	1
41	Prothrombin activator	9	648.89	1	2.29	1
42	Antifreeze protein	2	82.00	1	2.26	1
43	Tumor antigen	26	428.81	0.77	2.25	0.99
44	Vasodilator	13	251.31	0.77	2.23	0.99
45	Exonuclease	239	725.99	0.75	2.19	0.99
46	Hypotensive agent	9	197.56	0.78	2.19	0.99
47	Segmentation polarity protein	24	712.75	0.92	2.17	0.99
48	Aspartic protease inhibitor	2	96.00	1	2.02	1
49	Motor protein	467	1227.67	0.83	1.92	0.97

#	*name*	*n*	*avg_len*	*avg_dis*	*z*	*p*
0	DNA binding	8254	574.89	0.86	46.13	1
1	sequence-specific DNA binding	3836	536.95	0.92	41.77	1
2	chromatin binding	1538	713.64	0.93	23.54	1
3	RNA binding	5797	565.80	0.73	19.79	1
4	receptor binding	4109	529.68	0.68	14.04	1
5	protein serine/threonine ki...	1942	784.87	0.84	12.88	1
6	structural molecule activity	2884	558.88	0.64	10.84	1
7	RNA polymerase II distal en...	168	503.93	0.94	9.84	1
8	SH3 domain binding	296	866.61	0.95	9.63	1
9	structural constituent of r...	1350	182.95	0.53	9.25	1
10	calmodulin binding	710	1079.79	0.88	9.22	1
11	growth factor activity	458	312.38	0.70	8.99	1
12	protein kinase inhibitor ac...	237	401.60	0.82	8.94	1
13	hormone activity	452	218.09	0.61	8.84	1
14	cell adhesion molecule binding	1090	805.74	0.80	8.60	1
15	GTPase activator activity	633	820.60	0.87	8.15	1
16	actin binding	1228	1000.47	0.80	7.73	1
17	cyclin-dependent protein se...	142	357.65	0.77	6.58	1
18	protein tyrosine kinase act...	504	933.02	0.86	6.26	1
19	guanyl-nucleotide exchange ...	575	990.55	0.86	6.22	1
20	protein phosphatase inhibit...	89	425.83	0.83	6.19	1
21	heparin binding	403	652.76	0.76	6.01	1
22	neuropeptide hormone activity	117	158.64	0.65	5.88	1
23	microtubule motor activity	225	1394.78	0.97	5.65	1
24	enzyme inhibitor activity	1059	462.66	0.63	5.60	1
25	potassium channel activity	339	612.39	0.79	4.88	1
26	translation regulator activity	162	567.32	0.80	4.73	1
27	translation initiation fact...	117	537.89	0.79	4.49	1
28	lipid binding	1977	615.96	0.68	4.34	1
29	damaged DNA binding	284	680.80	0.80	4.31	1
30	growth factor binding	351	737.85	0.79	4.20	1
31	cAMP binding	109	688.05	0.88	4.18	1
32	chloride channel inhibitor ...	25	827.64	0.96	3.96	1
33	calcium channel activity	327	1205.13	0.86	3.54	1
34	morphogen activity	23	331.57	0.83	3.20	1
35	helicase activity	766	1068.02	0.86	3.15	1
36	structural constituent of c...	22	423.64	0.86	3.11	1
37	cGMP binding	60	738.10	0.92	3.10	1
38	motor activity	447	1275.57	0.86	3.10	1
39	voltage-gated ion channel a...	501	767.73	0.76	3.06	1
40	rRNA binding	541	266.55	0.52	3.00	1
41	calcium ion binding	1878	859.00	0.70	2.80	1
42	RNA-directed DNA polymerase...	75	1427.97	0.97	2.72	1
43	kinase activity	3593	726.02	0.71	2.70	1
44	ATP-dependent helicase acti...	455	926.44	0.84	2.48	1
45	exonuclease activity	371	749.41	0.75	2.40	0.99
46	MHC class II protein binding	20	590.55	0.85	2.28	0.99
47	translation initiation fact...	268	482.02	0.65	1.99	0.97
48	acetylcholine-gated cation-...	60	504.17	0.75	1.99	0.99
49	metalloendopeptidase inhibi...	40	323.35	0.65	1.86	0.98
50	cysteine-type endopeptidase...	153	424.63	0.58	1.48	0.95