

a)

20 statistički najznačajnijih neuređenih ključnih MF-reči (Xie et. al. 2007)						
#	name	n prot	n families	avg_len	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

b)

Neuredene ključne MF-reči iz ovog rada (z-skor > 0.2)						
#	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	Amphibian defense peptide	49	85.80	0.53	3.34	1
30	Helicase	739	1086.05	0.87	3.29	1
31	Prion	22	497.05	0.91	3.06	1
32	Ion channel	1027	861.88	0.76	2.89	1
33	Voltage-gated channel	386	816.98	0.78	2.87	1
34	Viral nucleoprotein	39	1202.79	0.90	2.46	1
35	Tumor antigen	26	428.81	0.77	2.25	0.99

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Neuredeni MF-termini dobijeni iz direktnog i izvedenog mapiranja						
#	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	structural constituent of r...	1350	182.95	0.53	9.25	1
8	calmodulin binding	710	1079.79	0.88	9.22	1
9	growth factor activity	458	312.38	0.70	8.99	1
10	protein kinase inhibitor ac...	237	401.60	0.82	8.94	1
11	hormone activity	452	218.09	0.61	8.84	1
12	cell adhesion molecule binding	1090	805.74	0.80	8.60	1
13	GTPase activator activity	633	820.60	0.87	8.15	1
14	actin binding	1228	1000.47	0.80	7.73	1
15	cyclin-dependent protein se...	142	357.65	0.77	6.58	1
16	protein tyrosine kinase act...	504	933.02	0.86	6.26	1
17	guanyl-nucleotide exchange ...	575	990.55	0.86	6.22	1
18	protein phosphatase inhibi...	89	425.83	0.83	6.19	1
19	heparin binding	403	652.76	0.76	6.01	1
20	neuropeptide hormone activity	117	158.64	0.65	5.88	1
21	microtubule motor activity	225	1394.78	0.97	5.65	1
22	enzyme inhibitor activity	1059	462.66	0.63	5.60	1
23	potassium channel activity	339	612.39	0.79	4.88	1
24	damaged DNA binding	284	680.80	0.80	4.31	1
25	growth factor binding	351	737.85	0.79	4.20	1
26	chloride channel inhibitor ...	25	827.64	0.96	3.96	1
27	calcium channel activity	327	1205.13	0.86	3.54	1
28	morphogen activity	23	331.57	0.83	3.20	1
29	helicase activity	766	1068.02	0.86	3.15	1
30	motor activity	447	1275.57	0.86	3.10	1
31	voltage-gated ion channel a...	501	767.73	0.76	3.06	1
32	rRNA binding	541	266.55	0.52	3.00	1
33	calcium ion binding	1878	859.00	0.70	2.80	1