

#	Keywords	Number of proteins	Number of families	Average sequence length	Z-score	P-value		#	name	n	avg_len	avg_dis	z	p
1	Oxidoreductase	14995	992	376.63	-29.54	0		1	Oxidoreductase	4126	472.25	0.28	-41.35	0
2	Transferase	26525	1606	445.17	-24.25	0		2	Hydrolase	7564	614.81	0.51	-26.99	0
3	Lyase	7262	347	377.92	-22.64	0		3	Lyase	1431	481.37	0.30	-23.62	0
4	Hydrolase	20464	1995	430.68	-21.75	0		4	Monooxygenase	555	503.36	0.20	-20.29	0
5	Isomerase	4487	220	383.98	-14.18	0		5	Transferase	8846	631.95	0.55	-19.72	0
6	Glycosidase	1826	244	444.73	-13.98	0		6	Ligase	995	693.30	0.46	-18.05	0
7	Glycosyltransferase	2950	261	437.53	-12.51	0		7	Glycosyltransferase	1134	551.26	0.40	-17.04	0
8	Acyltransferase	2239	179	402.83	-10.85	0		8	Glycosidase	697	570.50	0.37	-16.81	0
9	Methyltransferase	3524	224	349.60	-10.53	0		9	Isomerase	931	422.72	0.35	-13.60	0
10	Kinase	7017	322	448.29	-10.22	0		10	Protease	1863	674.42	0.54	-13.20	0
11	Ligase	8010	230	529.41	-10.06	0		11	Transducer	1703	482.28	0.41	-12.56	0
12	Decarboxylase	1293	63	345.26	-9.66	0		12	G-protein coupled receptor	1385	465.62	0.39	-12.45	0
13	Monooxygenase	1668	73	444.87	-9.26	0		13	Acyltransferase	867	531.58	0.42	-11.28	0
14	Metalloprotease	1100	109	553.73	-7.89	0		14	Decarboxylase	195	488.21	0.25	-10.70	0
15	Aminopeptidase	452	39	509.17	-7.55	0		15	Aminotransferase	202	451.05	0.24	-10.23	0
16	Dioxygenase	360	66	433.20	-7.32	0		16	Aminopeptidase	130	668.72	0.37	-9.10	0
17	Aminoacyl-tRNA synthetase	3402	37	571.83	-7.15	0		17	Serine protease	460	700.07	0.50	-8.87	0
18	Protease	4423	380	549.70	-7.1	0		18	Metalloprotease	507	688.25	0.56	-8.43	0
19	Aminotransferase	955	28	420.27	-6.02	0		19	Methyltransferase	874	611.22	0.47	-8.33	0
								20	Carboxypeptidase	116	631.16	0.37	-8.25	0
								21	Threonine protease	138	246.88	0.18	-7.50	0
								22	Dioxygenase	366	622.32	0.48	-7.39	0