

(A) Molecular Function

	Frequency > 4			Frequency > 5			Frequency > 6			Frequency > 7			Frequency > 8			Frequency > 9		
	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score
molecular function	26484	34034	-4	22940	29664	-4	13659	17907	-3	8485	11315	-3	5434	7375	-3	3538	5017	-3
hydrolase activity	4168	2748	4	3688	2396	4	2308	1464	3	1490	926	3	1023	592	3	718	407	3
transferase activity	2585	2001	2	2232	1736	2	1321	1053	1	834	660	1	521	436	0	345	297	0
protein binding	1591	1268	1	1418	1093	1	863	663	1	549	419	1	379	273	1	279	186	1
transporter activity	960	595	3	828	524	2	480	313	2	294	197	1	182	130	1	118	86	1
DNA binding	588	505	0	510	442	0	310	267	0	189	168	0	114	109	0	73	73	0
structural molecule activity	300	501	-2	249	433	-2	143	260	-1	91	163	-1	47	108	-1	29	73	-1
transcription regulator activity	556	439	1	472	384	1	286	232	0	183	146	0	122	95	0	89	65	1
oxidoreductase activity	345	320	0	303	273	0	194	166	0	120	106	0	79	67	0	59	47	0
RNA binding	179	206	0	161	182	0	88	109	0	51	67	0	39	45	0	24	31	0
enzyme regulator activity	183	192	0	168	165	0	117	101	0	69	64	0	43	41	0	24	27	0
ligase activity	216	131	2	197	114	2	124	68	2	79	43	2	51	28	1	29	19	0
protein kinase activity	103	69	1	90	60	1	53	36	1	35	23	1	23	15	0	12	10	0
peptidase activity	72	52	1	60	46	0	38	28	0	23	17	0	19	11	1	16	7	1
lyase activity	33	30	0	27	26	0	18	16	0	9	9	0	8	6	0	6	4	0
helicase activity	48	28	1	46	24	1	35	15	2	18	9	1	15	6	1	12	4	2
lipid binding	18	21	0	14	19	0	9	11	0	6	7	0	4	4	0	2	3	0
nucleotidyltransferase activity	12	18	0	10	16	0	1	9	-1	0	5	-1	0	3	0	0	2	0
isomerase activity	19	13	0	17	11	0	10	7	0	8	4	1	6	2	1	4	2	0
phosphoprotein phosphatase activity	13	10	0	12	8	0	7	5	0	5	3	0	4	2	0	3	1	1
signal transducer activity	16	8	1	14	7	1	7	4	0	7	2	1	6	1	2	4	1	1
motor activity	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
transcription regulator activity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(B) Biological Process

	Frequency > 4			Frequency > 5			Frequency > 6			Frequency > 7			Frequency > 8			Frequency > 9		
	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score
biological process	10854	18099	-5	9233	15698	-5	5367	9500	-5	3285	6001	-4	2039	3928	-4	1273	2675	-4
RNA metabolic process	6454	5115	2	5676	4483	2	3480	2686	2	2268	1721	2	1541	1118	2	1089	756	2
transport	5785	4670	2	5099	4059	2	3104	2440	2	2043	1541	2	1396	1012	2	986	678	2
transcription	2323	1608	3	2047	1407	3	1259	852	2	816	536	2	510	351	2	362	233	2
response to stress	2027	1424	2	1785	1251	2	1132	746	2	736	478	2	505	313	2	364	210	2
protein modification process	1772	1304	2	1561	1140	2	967	692	2	615	438	1	393	285	1	283	195	1
cell cycle	2134	1239	4	1870	1079	4	1170	650	4	716	411	3	459	267	2	299	184	2
DNA metabolic process	936	683	2	839	590	2	504	356	1	317	226	1	200	149	1	140	101	1
response to chemical stimulus	981	663	2	810	584	2	483	352	1	308	224	1	192	146	1	130	96	1
chromosome organization	929	648	2	825	572	2	549	342	2	378	217	2	259	142	2	195	95	3
translocation	513	625	0	456	547	0	268	327	0	161	208	0	112	136	0	71	93	0
vesicle-mediated transport	589	538	0	511	476	0	325	284	0	210	182	0	137	118	0	101	81	0
ribosome biogenesis	515	498	0	471	431	0	296	260	0	198	165	0	139	107	0	95	72	0
mitochondrion organization	249	363	-1	229	316	-1	146	190	0	99	121	0	70	78	0	51	53	0
cellular membrane organization	353	333	0	298	289	0	171	175	0	90	111	0	57	72	0	39	50	0
cellular carbohydrate metabolic process	420	320	1	350	280	1	215	166	1	127	105	0	79	69	0	59	46	0
cellular amino acid and derivative metabolic process	376	285	1	331	250	1	198	149	1	100	94	0	58	61	0	34	42	0
signal transduction	356	221	2	314	190	2	198	114	2	138	72	2	95	47	2	66	31	2
cytoskeleton organization	241	217	0	214	187	0	135	113	0	89	72	0	54	46	0	35	31	0
protein complex biogenesis	159	209	-1	144	184	0	91	109	0	72	69	0	52	44	0	45	30	1
cellular lipid metabolic process	252	198	1	223	176	0	138	105	1	81	66	0	56	43	0	45	29	1
cellular protein catabolic process	245	153	2	216	133	2	140	81	2	99	51	2	69	33	2	52	22	2
heterocycle metabolic process	184	152	0	164	130	0	102	79	0	63	50	0	40	32	0	25	22	0
generation of precursor metabolites and energy	128	140	0	102	123	0	61	74	0	41	46	0	24	29	0	16	20	0
cofactor metabolic process	146	127	0	136	110	0	87	66	0	56	42	0	35	27	0	20	19	0
cellular component morphogenesis	255	127	3	199	111	2	119	65	2	68	41	1	48	26	1	33	18	1
meiosis	188	104	2	170	91	2	98	54	2	60	34	1	30	22	0	18	15	0
chromosome segregation	157	88	2	143	76	2	85	46	2	58	29	2	39	20	1	28	13	1
cellular homeostasis	109	84	0	97	76	0	52	45	0	37	28	0	27	18	0	16	12	0
sporulation resulting in formation of a cellular spore	109	73	1	87	62	1	58	39	1	32	24	0	22	16	0	12	10	0
fungus-type cell wall organization	99	72	1	93	62	1	58	37	1	38	24	1	28	16	1	17	10	0
conjugation	67	62	0	57	53	0	28	32	0	17	21	0	11	13	0	9	8	0
cytokinesis	97	59	1	74	53	1	39	31	0	20	20	0	11	13	0	7	8	0
cellular respiration	35	37	0	26	33	0	14	19	0	10	12	0	4	8	0	3	5	0
cell budding	55	33	1	47	29	1	28	17	1	17	11	0	11	7	0	7	5	0
protein folding	42	33	0	37	29	0	22	17	0	12	11	0	7	7	0	6	5	0
cellular aromatic compound metabolic process	32	25	0	28	22	0	20	13	0	10	8	0	2	5	0	0	3	0
vesicle organization	30	22	0	28	18	1	13	11	0	6	7	0	2	4	0	2	3	0
nucleus organization	32	18	1	29	16	1	19	9	1	10	6	0	6	4	0	2	2	0
pseudohyphal growth	18	17	0	17	15	0	13	9	0	8	5	0	4	4	0	1	2	0
vacuole organization	15	16	0	12	14	0	6	8	0	3	5	0	3	3	0	2	2	0
vitamin metabolic process	30	16	1	29	14	1	19	8	1	14	5	2	8	3	1	8	2	2
peroxisome organization	19	15	0	18	13	0	14	8	1	13	5	2	8	3	1	6	2	1
transposition	17	8	1	13	8	0	10	5	1	8	2	2	6	2	1	3	1	1

(C) Cellular Component

	Frequency > 4			Frequency > 5			Frequency > 6			Frequency > 7			Frequency > 8			Frequency > 9		
	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score	observed	expected	Z-score
cytoplasm	57286	52552	2	49763	45855	1	29789	27691	1	18760	17554	1	12332	11445	1	8449	7753	1
nucleus	19899	15564	4	17566	13579	3	10826	8235	3	7017	5184	3	4625	3385	3	3200	2298	2
cellular component	5975	10883	-5	5091	9511	-5	3008	5720	-5	1924	3635	-4	1211	2372	-3	795	1603	-3
membrane	7578	5646	3	6618	4893	3	4066	2967	3	2625	1884	2	1798	1227	2			