## FET + FDR

	Go	samplenum	refnum	samplenoobs	refnoobs	FDF
269	extracellular matrix disassembly (GO:0022617)	6	79	86	20893	0.009842
599	mitotic nuclear division (GO:0007067)	11	382	81	20590	0.009842
1670	single-organism process (GO:0044699)	77	12622	15	8350	0.009842
104	positive regulation of granulocyte chemotaxis (GO:0071624)	4	25	88	20947	0.014084
573	chromosome segregation (GO:0007059)	9	294	83	20678	0.014084
741	organelle fission (GO:0048285)	12	548	80	20424	0.014084
862	cell migration (GO:0016477)	15	862	77	20110	0.014084
1601	single-organism cellular process (GO:0044763)	65	9804	27	11168	0.014084
707	cell division (GO:0051301)	11	474	81	20498	0.014512
852	mitotic cell cycle (GO:0000278)	14	792	78	20180	0.015403
759	nuclear division (GO:0000280)	11	517	81	20455	0.022154
914	localization of cell (GO:0051674)	15	950	77	20022	0.022154
915	cell motility (GO:0048870)	15	950	77	20022	0.022154
308	antimicrobial humoral response (GO:0019730)	5	78	87	20894	0.032443
872	mitotic cell cycle process (GO:1903047)	13	764	79	20208	0.032443
176	regulation of granulocyte chemotaxis (GO:0071622)	4	39	88	20933	0.034921
1761	cellular process (GO:0009987)	82	14854	10	6118	0.038293
73	sequestering of metal ion (GO:0051238)	3	15	89	20957	0.052761
1000	cell cycle process (GO:0022402)	15	1089	77	19883	0.065950
9	neutrophil aggregation (GO:0070488)	2	2	90	20970	0.0852024
108	cellular zinc ion homeostasis (GO:0006882)	3	20	89	20952	0.096610

## Author's published result

			Author's published		results		
		ID	Term	Number.of.genes.in.category	Number.of.genes.hit	pvalue	
	190	GO:0007059	chromosome segregation	35	6	5.36202746576449E-8	
•	197	GO:0000279	M phase	189	7	1.34095775672846E-4	
	205	GO:0050926 GO:0050927	regulation of positive chemotaxis  positive regulation of positive chemotaxis	4	2	2.1257303887526E-4 2.1257303887526E-4	
	229	GO:0050918	positive chemotaxis	4	2	2.1257303887526E-4	
	241 253	GO:0050930	induction of positive chemotaxis mitosis	148	6	2.1257303887526E-4 2.55803464574941E-4	
	260	GO:0007067 GO:0000087	M phase of mitotic cell cycle	150	6	2.75048605293036E-4	
	267	GO:0050920	regulation of chemotaxis	5	2	3.52909810082872E-4	
_ ^	279 291	GO:0050921 GO:0051301	positive regulation of chemotaxis cell division	5 160	6	3.52909810082872E-4 3.89033488213736E-4	
	298	GO:0000270	peptidoglycan metabolism	25	3	4.36309556489712E-4	
	302	GO:0006596	polyamine biosynthesis	7	2	7.3535792801318E-4	
7	305	GO:0000278 GO:0006595	mitotic cell cycle polyamine metabolism	195	2	0.00110075537106273 0.00155747478335576	
	315	GO:0007588	excretion	42	3	0.00202442457818816	
	319	GO:0006576	biogenic amine metabolism	44	3	0.00231556422418221	
	323	GO:0030595 GO:0050900	immune cell chemotaxis immune cell migration	14	2	0.00310097820066174	
	347	GO:0006575	amino acid derivative metabolism	50	3	0.00333993541941618	
	351	GO:0030574 GO:0007049	collagen catabolism cell cycle	17 653	10	0.00458079072064237 0.00538838169729787	
	365	GO:0000070	mitotic sister chromatid segregation	19	2	0.00571519131444641	
	368	GO:0009935	nutrient import	1	1	0.00602030730523861	
	370	GO:0006701 GO:0006597	progesterone biosynthesis spermine biosynthesis	1	1	0.00602030730523861 0.00602030730523861	
	374	GO:0008215	spermine metabolism	1	1	0.00602030730523861	
	376 378	GO:0015855 GO:0045132	pyrimidine transport meiotic chromosome segregation	1	1	0.00602030730523861 0.00602030730523861	
	380	GO:0043132	regulation of cell proliferation	277	6	0.0063088016153036	
	396	GO:0007051	spindle organization and biogenesis	20	2	0.00632566105631813	
	399 402	GO:0000819 GO:0042401	sister chromatid segregation biogenic amine biosynthesis	20	2	0.00632566105631813 0.00696450086180834	
	405	GO:0006954	inflammatory response	200	5	0.00699179819908507	
	420	GO:0019722	calcium-mediated signaling	23	2	0.00832588079437378	
	423 426	GO:0042398 GO:0006863	amino acid derivative biosynthesis purine transport	24	1	0.00904772374882653 0.012004908258739	
	428	GO:0006569	tryptophan catabolism	2	1	0.012004908258739	
	430 432	GO:0046218 GO:0045090	indolalkylamine catabolism retroviral genome replication	2	1	0.012004908258739	
	434	GO:0045090	regulation of retroviral genome replication	2	1	0.012004908258739	
	436	GO:0015791	polyol transport	2	1	0.012004908258739	
	438	GO:0046689 GO:0042448	response to mercury ion progesterone metabolism	2	1	0.012004908258739	
	442	GO:0042436	indole derivative catabolism	2	1	0.012004908258739	
	444	GO:0051382	kinetochore assembly	2	1	0.012004908258739	
	446 448		kinetochore organization and biogenesis intracellular signaling cascade	995	1 12	0.012004908258739 0.0146885903671481	
	461	GO:0008054	cyclin catabolism	3	1	0.0179540114443831	
	463 465	GO:0006970 GO:0008295	response to osmotic stress spermidine biosynthesis	3	1	0.0179540114443831	
	467	GO:0008293	water homeostasis	3	1	0.0179540114443831	
	469	GO:0030502	negative regulation of bone mineralization	3	1	0.0179540114443831	
	480 482	GO:0042119 GO:0009611	neutrophil activation response to wounding	3 364	6	0.0179540114443831 0.0219587919320345	
	498	GO:0000085	G2 phase of mitotic cell cycle	4	1	0.0238678242462189	
	500		spermidine metabolism	4	1	0.0238678242462189	
	502 513	GO:0046851 GO:0030279	negative regulation of bone remodeling negative regulation of ossification	4	1	0.0238678242462189	
	524	GO:0015851	nucleobase transport	4	1	0.0238678242462189	
	526 528	GO:0051310 GO:0051319	metaphase plate congression  G2 phase	4	1	0.0238678242462189	
	530	GO:0000075	cell cycle checkpoint	41	2	0.0251771787800968	
	533	GO:0019932	second-messenger-mediated signaling	187	4	0.0260419551001039	
	538 542	GO:0008015 GO:0031577	circulation spindle checkpoint	109	1	0.027844360338472	
	544	GO:0006568	tryptophan metabolism	5	1	0.0297465528552524	
	546	GO:0050000	chromosome localization	5	1	0.0297465528552524	
	548 550	GO:0007094 GO:0006072	mitotic spindle checkpoint glycerol-3-phosphate metabolism	5	1	0.0297465528552524 0.0297465528552524	
	552	GO:0042402	biogenic amine catabolism	5	1	0.0297465528552524	
	554 556	GO:0051303 GO:0008283	establishment of chromosome localization cell proliferation	5	7	0.0297465528552524	
	573	GO:0007126	meiosis	47	2	0.0324364841655954	
	576 579	GO:0051321		47	2	0.0324364841655954	
	579 582	GO:0051327 GO:0006935	M phase of meiotic cell cycle chemotaxis	117	3	0.0324364841655954 0.0333591447266675	
	595	GO:0042330	taxis	117	3	0.0333591447266675	
	608	GO:0000226	microtubule cytoskeleton organization and biogenesis	49	2	0.0350181380687131	
	611		NAD metabolism	6	1	0.0355904022762081	
	613	GO:0046580	negative regulation of Ras protein signal transduction	6	1	0.0355904022762081	
	615	GO:0030593	neutrophil chemotaxis	6	1	0.0355904022762081	
	617 619	GO:0009435 GO:0050684	NAD biosynthesis regulation of mRNA processing	6	1	0.0355904022762081 0.0355904022762081	
	621	GO:0019229	regulation of vasoconstriction	6	1	0.0355904022762081	
	623 625	GO:0042219 GO:0007626	amino acid derivative catabolism  locomotory behavior	6 122	3	0.0355904022762081 0.0370742005258308	
	638	GO:0007626 GO:0008284	positive regulation of cell proliferation	125	3	0.0394013721313521	
	651	GO:0006833	water transport	7	1	0.0413995763342399	
	653 655	GO:0006586 GO:0010038	indolalkylamine metabolism response to metal ion	7	1	0.0413995763342399 0.0413995763342399	
	657	GO:0045069	regulation of viral genome replication	7	1	0.0413995763342399	
	659	GO:0030500	regulation of bone mineralization	7	1	0.0413995763342399	
	670 672	GO:0042044 GO:0051058	fluid transport negative regulation of small GTPase	7	1	0.0413995763342399 0.0413995763342399	
			mediated signal transduction	•			
	674 676	GO:0051084 GO:0042430	posttranslational protein folding indole and derivative metabolism	7	1	0.0413995763342399 0.0413995763342399	
	678	GO:0042434	indole derivative metabolism	7	1	0.0413995763342399	
			cell-substrate adhesion cell-matrix adhesion	54 54	2	0.0418054334552816 0.0418054334552816	
			regulation of progression through cell cycle	430	6	0.0418054334552816	
	711		regulation of cell cycle	431	6	0.0446748486408944	
			establishment of organelle localization cell wall catabolism	8	1	0.0471742776816237 0.0471742776816237	
	722		regulation of Ras protein signal transduction	8	1	0.0471742776816237	
	724	GO:0042221	response to chemical stimulus	328	5	0.0472060220094024	
	739	GO:0001525	angiogenesis	58	2	0.0475604030737719	