

GO ID	robust pval.	normal pval.	GO Name	process type
Alzheimer				
Intersect:				
GO:0005344	0.00014656	2.5249e-13	oxygen transporter activity	molecular_function
GO:0005833	0.00014656	2.5249e-13	hemoglobin complex	cellular_component
GO:0015669	0.00023572	1.1502e-12	gas transport	biological_process
GO:0015671	0.00014656	2.5249e-13	oxygen transport	biological_process
GO:0019825	0.0010499	3.3415e-08	oxygen binding	molecular_function
GO:0020037	0.0056749	1.2689e-05	heme binding	molecular_function
GO:0030185	0.002101	0.0018265	nitric oxide transport	biological_process
GO:0030492	0.011594	0.011505	hemoglobin binding	molecular_function
GO:0046906	0.0056749	1.2689e-05	tetrapyrrole binding	molecular_function
Differences:				
GO:0045429	0.036103		positive regulation of nitric oxide biosynthetic process	biological_process
GO:0051173	0.036541		positive regulation of nitrogen compound metabolic process	biological_process
GO:0005506		0.0048786	iron ion binding	molecular_function
GO:0005882		0.050402	intermediate filament	cellular_component
GO:0005883		9.3124e-08	neurofilament	cellular_component
GO:0006113		0.015933	fermentation	biological_process
GO:0006114		0.015933	glycerol biosynthetic process	biological_process
GO:0006810		0.011699	transport	biological_process
GO:0007017		0.027231	microtubule-based process	biological_process
GO:0007018		0.017842	microtubule-based movement	biological_process
GO:0007399		0.001582	nervous system development	biological_process
GO:0008088		0.030413	axon cargo transport	biological_process
GO:0008089		0.014422	anterograde axon cargo transport	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0008090		0.070899	retrograde axon cargo transport	biological_process
GO:0014012		0.00021099	axon regeneration in the peripheral nervous system	biological_process
GO:0019896		0.0053856	axon transport of mitochondrion	biological_process
GO:0030424		2.144e-05	axon	cellular_component
GO:0030705		0.073521	cytoskeleton-dependent intracellular transport	biological_process
GO:0031099		0.059309	regeneration	biological_process
GO:0031102		0.011505	neuron projection regeneration	biological_process
GO:0031103		0.011505	axon regeneration	biological_process
GO:0031133		1.2689e-05	regulation of axon diameter	biological_process
GO:0031346		0.083158	positive regulation of cell projection organization	biological_process
GO:0032393		0.055117	MHC class I receptor activity	molecular_function
GO:0033596		0.0033421	TSC1-TSC2 complex	cellular_component
GO:0033693		0.00021099	neurofilament bundle assembly	biological_process
GO:0042995		8.1736e-05	cell projection	cellular_component
GO:0043005		0.00021099	neuron projection	cellular_component
GO:0043234		0.011699	protein complex	cellular_component
GO:0044430		0.0028739	cytoskeletal part	cellular_component
GO:0044445		9.064e-06	cytosolic part	cellular_component
GO:0045103		3.2157e-05	intermediate filament-based process	biological_process
GO:0045104		2.144e-05	intermediate filament cytoskeleton organization	biological_process
GO:0045109		1.6453e-07	intermediate filament organization	biological_process
GO:0045110		2.3144e-09	intermediate filament bundle assembly	biological_process
GO:0045111		0.073521	intermediate filament cytoskeleton	cellular_component
GO:0045202		0.060963	synapse	cellular_component
GO:0048306		0.012452	calcium-dependent protein binding	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0048678		0.017842	response to axon injury	biological_process
GO:0060052		4.8678e-08	neurofilament cytoskeleton organization	biological_process
GO:0060053		1.4301e-05	neurofilament cytoskeleton	cellular_component

Arabidopsis Salinity Time course
Intersect:

GO:0000160	0.021089	0.021547	two-component signal transduction system (phosphorelay)	biological_process
GO:0000302	3.6315e-05	3.5484e-06	response to reactive oxygen species	biological_process
GO:0004497	4.302e-05	2.7043e-06	monooxygenase activity	molecular_function
GO:0004553	0.023191	0.025158	hydrolase activity, hydrolyzing O-glycosyl compounds	molecular_function
GO:0004601	0.022751	0.042495	peroxidase activity	molecular_function
GO:0005199	0.0148	9.554e-06	structural constituent of cell wall	molecular_function
GO:0005506	0.00025155	4.7519e-06	iron ion binding	molecular_function
GO:0005576	3.9806e-05	3.43e-09	extracellular region	cellular_component
GO:0005618	0.00049794	2.8254e-06	cell wall	cellular_component
GO:0005975	0.002922	0.0054155	carbohydrate metabolic process	biological_process
GO:0005976	0.0059941	0.0061248	polysaccharide metabolic process	biological_process
GO:0006073	0.0003911	0.0049279	cellular glucan metabolic process	biological_process
GO:0006091	0.010538	0.0089474	generation of precursor metabolites and energy	biological_process
GO:0006811	0.032707	0.015892	ion transport	biological_process
GO:0006950	6.8309e-19	1.5097e-23	response to stress	biological_process
GO:0006952	0.0067397	1.104e-05	defense response	biological_process
GO:0006970	0.0016523	0.0018341	response to osmotic stress	biological_process
GO:0006972	0.0020291	0.0082019	hyperosmotic response	biological_process
GO:0006979	1.5388e-05	7.4694e-09	response to oxidative stress	biological_process
GO:0007047	2.9135e-06	4.4562e-09	cell wall organization	biological_process
GO:0009055	9.1798e-05	3.1166e-06	electron carrier activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009266	8.4911e-12	5.2456e-15	response to temperature stimulus	biological_process
GO:0009314	0.024072	0.00014325	response to radiation	biological_process
GO:0009408	3.2058e-11	3.2655e-12	response to heat	biological_process
GO:0009409	0.00045245	3.5484e-06	response to cold	biological_process
GO:0009414	8.3106e-13	3.2029e-13	response to water deprivation	biological_process
GO:0009415	8.3106e-13	3.9798e-13	response to water	biological_process
GO:0009416	0.017893	7.8078e-05	response to light stimulus	biological_process
GO:0009521	3.2058e-11	2.5605e-16	photosystem	cellular_component
GO:0009522	1.5046e-08	5.2814e-09	photosystem I	cellular_component
GO:0009523	0.00029875	1.9035e-08	photosystem II	cellular_component
GO:0009534	5.6158e-08	4.8028e-12	chloroplast thylakoid	cellular_component
GO:0009535	5.3901e-09	4.1612e-13	chloroplast thylakoid membrane	cellular_component
GO:0009538	0.0093701	0.0010077	photosystem I reaction center	cellular_component
GO:0009579	2.3662e-06	1.0006e-09	thylakoid	cellular_component
GO:0009607	0.032248	0.0012923	response to biotic stimulus	biological_process
GO:0009611	0.036813	0.0004346	response to wounding	biological_process
GO:0009628	3.2058e-11	4.1804e-14	response to abiotic stimulus	biological_process
GO:0009631	0.000798	0.0026302	cold acclimation	biological_process
GO:0009642	0.00045245	1.0479e-07	response to light intensity	biological_process
GO:0009644	0.0020291	6.7229e-07	response to high light intensity	biological_process
GO:0009651	0.024072	0.031454	response to salt stress	biological_process
GO:0009664	0.0019086	4.4562e-09	plant-type cell wall organization	biological_process
GO:0009719	6.0828e-08	3.1566e-09	response to endogenous stimulus	biological_process
GO:0009723	0.017273	0.021971	response to ethylene stimulus	biological_process
GO:0009725	5.9445e-07	3.1529e-08	response to hormone stimulus	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009737	8.8952e-09	3.5764e-10	response to abscisic acid stimulus	biological_process
GO:0009743	1.1835e-08	1.4129e-09	response to carbohydrate stimulus	biological_process
GO:0009765	3.3015e-07	2.6278e-06	photosynthesis, light harvesting	biological_process
GO:0009768	0.0148	0.021701	photosynthesis, light harvesting in photosystem I	biological_process
GO:0009873	0.040421	0.021971	ethylene mediated signaling pathway	biological_process
GO:0010033	1.61e-08	2.1919e-09	response to organic substance	biological_process
GO:0010196	0.00024861	0.00045844	nonphotochemical quenching	biological_process
GO:0010200	7.656e-13	3.9798e-13	response to chitin	biological_process
GO:0010286	0.0060808	0.013326	heat acclimation	biological_process
GO:0010287	1.1642e-05	4.5163e-08	plastoglobule	cellular_component
GO:0010683	0.029915	0.040144	tricyclic triterpenoid metabolic process	biological_process
GO:0012505	0.00020405	3.1773e-06	endomembrane system	cellular_component
GO:0015979	4.752e-11	1.4605e-14	photosynthesis	biological_process
GO:0016137	0.018276	0.002145	glycoside metabolic process	biological_process
GO:0016138	0.0024779	0.0011001	glycoside biosynthetic process	biological_process
GO:0016168	2.9721e-06	1.3954e-05	chlorophyll binding	molecular_function
GO:0016209	0.049913	0.089657	antioxidant activity	molecular_function
GO:0016491	2.3985e-05	6.5941e-09	oxidoreductase activity	molecular_function
GO:0016563	0.0027044	0.0080159	transcription activator activity	molecular_function
GO:0016684	0.022751	0.042495	oxidoreductase activity, acting on peroxide as acceptor oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, NADH or NADPH as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016709	0.0062227	0.0060306	transferase activity, transferring hexosyl groups	molecular_function
GO:0016758	0.018276	0.030378	xyloglucan:xyloglucosyl transferase activity	molecular_function
GO:0016762	4.4807e-06	3.0214e-05	hydrolase activity, acting on glycosyl bonds	molecular_function
GO:0019684	4.2212e-07	3.6128e-08	5 photosynthesis, light reaction	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0019748	0.0067397	1.104e-05	secondary metabolic process	biological_process
GO:0019757	0.018276	0.002145	glucosinolate metabolic process	biological_process
GO:0019758	0.0024779	0.0011001	glucosinolate biosynthetic process	biological_process
GO:0019760	0.018276	0.002145	glucosinolate metabolic process	biological_process
GO:0019761	0.0024779	0.0011001	glucosinolate biosynthetic process	biological_process
GO:0019825	0.00085293	5.941e-05	oxygen binding	molecular_function
GO:0020037	1.2209e-05	2.2927e-07	heme binding	molecular_function
GO:0030076	2.9721e-06	1.3954e-05	light-harvesting complex	cellular_component
GO:0031090	0.016086	0.0064177	organelle membrane	cellular_component
GO:0031347	0.037694	0.031454	regulation of defense response	biological_process
GO:0031976	6.7792e-08	6.6965e-12	plastid thylakoid	cellular_component
GO:0031984	7.8091e-08	8.1937e-12	organelle subcompartment	cellular_component
GO:0034357	5.3901e-09	5.1073e-13	photosynthetic membrane	cellular_component
GO:0042221	1.7686e-13	3.6796e-17	response to chemical stimulus	biological_process
GO:0042538	0.0067397	0.021971	hyperosmotic salinity response	biological_process
GO:0042542	8.3222e-06	2.7543e-06	response to hydrogen peroxide	biological_process
GO:0042651	1.1835e-08	1.3568e-12	thylakoid membrane	cellular_component
GO:0042742	0.034251	0.0070216	defense response to bacterium	biological_process
GO:0042744	0.040811	0.048572	hydrogen peroxide catabolic process	biological_process
GO:0043167	0.015367	0.018222	ion binding	molecular_function
GO:0043169	0.037694	0.031454	cation binding	molecular_function
GO:0044042	0.0034564	0.013775	glucan metabolic process	biological_process
GO:0044262	0.00045884	0.00043376	cellular carbohydrate metabolic process	biological_process
GO:0044264	0.0024287	0.022942	cellular polysaccharide metabolic process	biological_process
GO:0044436	1.1787e-07	1.4675e-11	thylakoid part	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0045229	9.3008e-06	2.2672e-08	external encapsulating structure organization	biological_process
GO:0046872	0.014039	0.014011	metal ion binding	molecular_function
GO:0046906	7.5103e-10	1.5857e-11	tetrapyrrole binding	molecular_function
GO:0048046	0.0044855	0.00074784	apoplast	cellular_component
GO:0050832	0.044236	0.052885	defense response to fungus	biological_process
GO:0050896	2.0051e-18	1.7108e-23	response to stimulus	biological_process
GO:0055035	5.3901e-09	4.1612e-13	plastid thylakoid membrane	cellular_component
GO:0055114	0.00045245	6.3304e-06	oxidation reduction	biological_process
GO:0080003	0.0148	0.021701	thalianol metabolic process	biological_process
Differences:				
GO:0016564	0.030549		transcription repressor activity	molecular_function
GO:0016757	0.047558		transferase activity, transferring glycosyl groups	molecular_function
GO:0001871		0.082711	pattern binding	molecular_function
GO:0003978		0.048553	UDP-glucose 4-epimerase activity	molecular_function
GO:0004364		0.057508	glutathione transferase activity	molecular_function
GO:0004657		0.073204	proline dehydrogenase activity	molecular_function
GO:0005215		0.057577	transporter activity	molecular_function
GO:0005342		0.034732	organic acid transmembrane transporter activity	molecular_function
GO:0005509		0.031454	calcium ion binding	molecular_function
GO:0006470		0.027178	protein amino acid dephosphorylation	biological_process
GO:0006569		0.073204	tryptophan catabolic process	biological_process
GO:0006812		0.037346	cation transport	biological_process
GO:0006949		0.003653	syncytium formation	biological_process
GO:0006955		0.0061248	immune response	biological_process
GO:0009404		0.040144	toxin metabolic process	biological_process
GO:0009407		0.040144	toxin catabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009512		0.073204	cytochrome b6f complex	cellular_component
GO:0009533		0.040144	chloroplast stromal thylakoid	cellular_component
GO:0009543		0.0061248	chloroplast thylakoid lumen	cellular_component
GO:0009605		0.025158	response to external stimulus	biological_process
GO:0009617		0.016067	response to bacterium	biological_process
GO:0009636		0.051383	response to toxin	biological_process
GO:0009654		0.030697	oxygen evolving complex	cellular_component
GO:0009700		0.025158	indole phytoalexin biosynthetic process	biological_process
GO:0009738		0.044837	abscisic acid mediated signaling	biological_process
GO:0009755		0.06861	hormone-mediated signaling	biological_process
GO:0009767		0.012546	photosynthetic electron transport chain	biological_process
GO:0009783		0.073204	photosystem II antenna complex	cellular_component
GO:0009825		0.094331	multidimensional cell growth	biological_process
GO:0009826		0.033768	unidimensional cell growth	biological_process
GO:0009827		0.00013246	plant-type cell wall modification	biological_process
GO:0009828		2.1751e-05	plant-type cell wall loosening	biological_process
GO:0009831		0.031906	plant-type cell wall modification during multidimensional cell growth	biological_process
GO:0010120		0.016903	camalexin biosynthetic process	biological_process
GO:0010177		0.073204	methylthioalkylmalate synthase activity	molecular_function
GO:0010205		0.099777	photoinhibition	biological_process
GO:0010242		0.073204	oxygen evolving activity	molecular_function
GO:0015103		0.082711	inorganic anion transmembrane transporter activity	molecular_function
GO:0015140		0.073204	malate transmembrane transporter activity	molecular_function
GO:0015291		0.05095	secondary active transmembrane transporter activity	molecular_function
GO:0015849		0.06861	organic acid transport	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0016020		0.00094685	membrane	cellular_component
GO:0016021		0.0037111	integral to membrane	cellular_component
GO:0016051		0.040144	carbohydrate biosynthetic process	biological_process
GO:0016311		0.026315	dephosphorylation	biological_process
GO:0016620		0.065324	oxidoreductase activity, acting on the aldehyde or oxo group of donors, NAD or NADP as acceptor	molecular_function
			oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	molecular_function
GO:0016705		0.0038847	transmembrane transporter activity	molecular_function
GO:0022857		0.030244	substrate-specific transmembrane transporter activity	molecular_function
GO:0022891		0.031454	metal ion transport	biological_process
GO:0030001		0.026158	chloroplast photosystem II	cellular_component
GO:0030095		7.463e-05	manganese ion binding	molecular_function
GO:0030145		0.041456	polysaccharide binding	molecular_function
GO:0030247		0.082711	intrinsic to membrane	cellular_component
GO:0031224		0.00054999	thylakoid lumen	cellular_component
GO:0031977		0.0064177	plastid thylakoid lumen	cellular_component
GO:0031978		0.0061248	cellular carbohydrate biosynthetic process	biological_process
GO:0034637		0.096967	regulation of dephosphorylation	biological_process
GO:0035303		0.073204	regulation of protein amino acid dephosphorylation	biological_process
GO:0035304		0.073204	indole metabolic process	biological_process
GO:0042431		0.025158	indole derivative catabolic process	biological_process
GO:0042436		0.073204	cell wall modification	biological_process
GO:0042545		0.0038577	cell wall modification during multi-dimensional cell growth	biological_process
GO:0042547		0.044914	regulation of photosynthesis, light reaction	biological_process
GO:0042548		0.082711	hydrogen peroxide metabolic process	biological_process
GO:0042743		0.082711	negative regulation of photosynthesis, light reaction	biological_process
GO:0043155		0.099777		

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0043467		0.030697	regulation of generation of precursor metabolites and energy	biological_process
GO:0044425		0.00087869	membrane part	cellular_component
GO:0044434		0.018203	chloroplast part	cellular_component
GO:0044435		0.033205	plastid part	cellular_component
GO:0045087		0.021971	innate immune response	biological_process
GO:0046217		0.025158	indole phytoalexin metabolic process	biological_process
GO:0046218		0.073204	indolalkylamine catabolic process	biological_process
GO:0046914		0.073204	transition metal ion binding	molecular_function
GO:0046942		0.06861	carboxylic acid transport	biological_process
GO:0046943		0.034732	carboxylic acid transmembrane transporter activity	molecular_function
GO:0048583		0.095377	regulation of response to stimulus	biological_process
GO:0050691		0.073204	regulation of defense response to virus by host	biological_process
GO:0051707		0.0098105	response to other organism	biological_process
GO:0052314		0.025158	phytoalexin metabolic process	biological_process
GO:0052315		0.025158	phytoalexin biosynthetic process	biological_process
GO:0052317		0.016903	camalexin metabolic process	biological_process
GO:0080134		0.042508	regulation of response to stress	biological_process
Arabidopsis Selenate				
Intersect:				
GO:0000103	0.00022269	0.00025683	sulfate assimilation	biological_process
GO:0000160	2.6264e-06	1.5281e-05	two-component signal transduction system (phosphorelay)	biological_process
GO:0000302	1.0105e-09	4.2155e-10	response to reactive oxygen species	biological_process
GO:0002252	0.00090649	0.0010982	immune effector process	biological_process
GO:0002679	0.0063967	0.007273	respiratory burst during defense response	biological_process
GO:0003700	1.7691e-06	6.342e-07	transcription factor activity	molecular_function
GO:0004089	0.0073223	0.063592	carbonate dehydratase activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0004601	1.6022e-05	9.102e-05	peroxidase activity	molecular_function
GO:0004779	0.049817	0.05546	sulfate adenyllyltransferase activity	molecular_function
GO:0004781	0.049817	0.05546	sulfate adenyllyltransferase (ATP) activity	molecular_function
GO:0005199	0.000888	6.664e-06	structural constituent of cell wall	molecular_function
GO:0005488	0.049031	0.063298	binding	molecular_function
GO:0005506	0.0052749	0.0062578	iron ion binding	molecular_function
GO:0005509	4.0189e-06	1.6728e-06	calcium ion binding	molecular_function
GO:0005516	0.0025843	0.00058199	calmodulin binding	molecular_function
GO:0005576	3.0915e-10	2.5406e-12	extracellular region	cellular_component
GO:0005618	4.8063e-05	1.5586e-05	cell wall	cellular_component
GO:0006091	0.0059635	0.037782	generation of precursor metabolites and energy	biological_process
GO:0006350	0.00033599	0.00093706	transcription	biological_process
GO:0006351	0.0021164	0.0019332	transcription, DNA-dependent	biological_process
GO:0006355	0.001342	0.00080442	regulation of transcription, DNA-dependent	biological_process
GO:0006534	0.040227	0.0474	cysteine metabolic process	biological_process
GO:0006791	0.00035044	0.00043315	sulfur utilization	biological_process
GO:0006800	1.0496e-05	6.0165e-05	oxygen and reactive oxygen species metabolic process	biological_process
GO:0006950	8.6946e-38	2.5848e-38	response to stress	biological_process
GO:0006952	1.1204e-20	3.1159e-21	defense response	biological_process
GO:0006955	5.6872e-11	1.6185e-10	immune response	biological_process
GO:0006970	1.2343e-05	4.8435e-06	response to osmotic stress	biological_process
GO:0006979	1.2717e-12	1.0037e-12	response to oxidative stress	biological_process
GO:0007047	0.0012019	9.9898e-05	cell wall organization	biological_process
GO:0007165	0.029727	0.017231	signal transduction	biological_process
GO:0007242	0.033641	0.09436	intracellular signaling cascade	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0008152	3.1415e-07	0.00015091	metabolic process	biological_process
GO:0008271	0.010301	0.099475	secondary active sulfate transmembrane transporter activity	molecular_function
GO:0008453	0.022511	0.024866	alanine-glyoxylate transaminase activity	molecular_function
GO:0009055	2.3164e-05	1.4254e-05	electron carrier activity	molecular_function
GO:0009266	2.434e-10	2.2726e-11	response to temperature stimulus	biological_process
GO:0009408	3.8034e-10	1.6185e-10	response to heat	biological_process
GO:0009409	0.00024995	6.8689e-05	response to cold	biological_process
GO:0009414	1.624e-08	1.1889e-07	response to water deprivation	biological_process
GO:0009415	7.297e-08	5.2208e-07	response to water	biological_process
GO:0009521	3.3908e-14	8.9676e-13	photosystem	cellular_component
GO:0009522	5.429e-11	1.5799e-09	photosystem I	cellular_component
GO:0009523	9.0676e-07	1.1867e-06	photosystem II	cellular_component
GO:0009534	3.0638e-07	9.0564e-08	chloroplast thylakoid	cellular_component
GO:0009535	4.721e-08	3.5682e-08	chloroplast thylakoid membrane	cellular_component
GO:0009538	5.0528e-05	0.0013081	photosystem I reaction center	cellular_component
GO:0009579	2.8767e-05	2.9034e-05	thylakoid	cellular_component
GO:0009605	1.4986e-06	3.103e-06	response to external stimulus	biological_process
GO:0009607	6.7191e-08	8.8468e-08	response to biotic stimulus	biological_process
GO:0009611	6.0258e-14	2.351e-14	response to wounding	biological_process
GO:0009617	0.0041138	0.015381	response to bacterium	biological_process
GO:0009620	0.0088177	0.0013859	response to fungus	biological_process
GO:0009626	0.00058248	0.00078946	plant-type hypersensitive response	biological_process
GO:0009628	1.0431e-11	6.0696e-12	response to abiotic stimulus	biological_process
GO:0009642	3.4217e-06	9.7198e-07	response to light intensity	biological_process
GO:0009644	0.00010606	2.3435e-05	response to high light intensity	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009646	0.048563	0.054489	response to absence of light	biological_process
GO:0009651	2.6528e-05	1.016e-05	response to salt stress	biological_process
GO:0009664	0.021749	0.00066361	plant-type cell wall organization	biological_process
GO:0009694	0.00030827	0.00039489	jasmonic acid metabolic process	biological_process
GO:0009695	0.00022269	0.00025683	jasmonic acid biosynthetic process	biological_process
GO:0009700	0.0021869	0.0025524	indole phytoalexin biosynthetic process	biological_process
GO:0009719	1.881e-11	3.1644e-12	response to endogenous stimulus	biological_process
GO:0009723	5.0563e-10	3.7863e-10	response to ethylene stimulus	biological_process
GO:0009725	7.2189e-08	1.5394e-08	response to hormone stimulus	biological_process
GO:0009737	4.0158e-07	2.7379e-07	response to abscisic acid stimulus	biological_process
GO:0009743	1.7361e-28	1.0915e-29	response to carbohydrate stimulus	biological_process
GO:0009751	7.8269e-05	4.0603e-05	response to salicylic acid stimulus	biological_process
GO:0009753	4.2806e-11	8.806e-11	response to jasmonic acid stimulus	biological_process
GO:0009755	0.00022269	0.00042848	hormone-mediated signaling	biological_process
GO:0009765	6.7196e-06	9.2006e-07	photosynthesis, light harvesting	biological_process
GO:0009814	0.0021869	0.0092421	defense response, incompatible interaction	biological_process
GO:0009861	0.0010381	0.0012846	jasmonic acid and ethylene-dependent systemic resistance	biological_process
GO:0009867	0.0091985	0.011644	jasmonic acid mediated signaling pathway	biological_process
GO:0009873	1.7756e-06	9.2006e-07	ethylene mediated signaling pathway	biological_process
GO:0009889	7.8269e-05	0.00015404	regulation of biosynthetic process	biological_process
GO:0009973	0.0063967	0.007273	adenylyl-sulfate reductase activity	molecular_function
GO:0009987	0.00076815	0.0031673	cellular process	biological_process
GO:0010033	4.1075e-28	2.6999e-29	response to organic substance	biological_process
GO:0010120	0.00116	0.0013081	camalexin biosynthetic process	biological_process
GO:0010200	5.1364e-39	8.8755e-41	response to chitin	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0010287	1.7756e-06	1.5297e-05	plastoglobule	cellular_component
GO:0010468	0.00023091	0.00044378	regulation of gene expression	biological_process
GO:0010556	7.0782e-05	0.00013765	regulation of macromolecule biosynthetic process	biological_process
GO:0010941	0.049607	0.057633	regulation of cell death	biological_process
GO:0012505	0.00030827	4.8865e-05	endomembrane system	cellular_component
GO:0015116	0.00022269	0.0027205	sulfate transmembrane transporter activity	molecular_function
GO:0015979	5.6872e-11	2.4935e-09	photosynthesis	biological_process
GO:0016020	0.018711	0.063298	membrane	cellular_component
GO:0016168	2.6264e-06	2.4955e-07	chlorophyll binding	molecular_function
GO:0016209	2.3164e-05	0.00012227	antioxidant activity	molecular_function
GO:0016491	0.00024407	0.00022252	oxidoreductase activity	molecular_function
GO:0016563	0.00024812	0.00011704	transcription activator activity	molecular_function
			oxidoreductase activity, acting on sulfur group of donors, disulfide as acceptor	molecular_function
GO:0016671	0.0036527	0.0046005	oxidoreductase activity, acting on peroxide as acceptor	molecular_function
GO:0016684	1.6022e-05	9.102e-05	xyloglucan:xyloglucosyl transferase activity	molecular_function
GO:0016762	1.0722e-05	1.7442e-06	lyase activity	molecular_function
GO:0016829	0.018022	0.016108	regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolic process	biological_process
GO:0019219	0.0001185	0.00022484	regulation of metabolic process	biological_process
GO:0019222	0.00023091	0.00069882	cysteine biosynthetic process	biological_process
GO:0019344	0.024195	0.028786	photosynthesis, light reaction	biological_process
GO:0019684	3.2368e-05	1.1405e-05	secondary metabolic process	biological_process
GO:0019748	0.0028905	0.0026524	heme binding	molecular_function
GO:0020037	3.1965e-05	1.2039e-05	light-harvesting complex	cellular_component
GO:0030076	0.00030827	4.119e-05	transcription regulator activity	molecular_function
GO:0030528	2.8767e-05	2.2381e-05	intrinsic to membrane	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0031225	0.022193	0.033538	anchored to membrane	cellular_component
GO:0031323	1.728e-05	6.0165e-05	regulation of cellular metabolic process	biological_process
GO:0031326	7.8269e-05	0.00015404	regulation of cellular biosynthetic process	biological_process
GO:0031347	0.0036527	0.019591	regulation of defense response	biological_process
GO:0031407	0.0012242	0.0014831	oxylipin metabolic process	biological_process
GO:0031408	0.00090649	0.0010982	oxylipin biosynthetic process	biological_process
GO:0031976	3.9256e-07	1.1809e-07	plastid thylakoid	cellular_component
GO:0031977	0.041808	0.0054095	thylakoid lumen	cellular_component
GO:0031984	4.5439e-07	1.3755e-07	organelle subcompartment	cellular_component
GO:0032774	0.0021869	0.0020352	RNA biosynthetic process	biological_process
GO:0033741	0.0063967	0.007273	adenylyl-sulfate reductase (glutathione) activity	molecular_function
GO:0034050	0.00069609	0.0009331	host programmed cell death induced by symbiont	biological_process
GO:0034357	5.4796e-08	4.2951e-08	photosynthetic membrane	cellular_component
GO:0042221	9.0523e-30	5.6525e-31	response to chemical stimulus	biological_process
GO:0042431	0.0021869	0.0025524	indole metabolic process	biological_process
GO:0042542	4.2468e-10	1.6185e-10	response to hydrogen peroxide	biological_process
GO:0042651	1.1342e-07	9.0564e-08	thylakoid membrane	cellular_component
GO:0042742	0.0028905	0.011422	defense response to bacterium	biological_process
GO:0042743	2.6264e-06	1.8745e-05	hydrogen peroxide metabolic process	biological_process
GO:0042744	3.2069e-06	5.1931e-06	hydrogen peroxide catabolic process	biological_process
GO:0043067	0.049607	0.057633	regulation of programmed cell death	biological_process
GO:0043167	0.00014224	0.00012556	ion binding	molecular_function
GO:0043169	0.00058885	0.0004546	cation binding	molecular_function
GO:0044237	1.8052e-06	0.00013524	cellular metabolic process	biological_process
GO:0044248	0.0036527	0.0091848	cellular catabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0044425	0.0036527	0.020849	membrane part	cellular_component
GO:0044436	7.262e-07	2.2552e-07	thylakoid part	cellular_component
GO:0045087	1.0679e-08	2.6442e-08	innate immune response	biological_process
GO:0045229	0.0030875	0.00030363	external encapsulating structure organization	biological_process
GO:0045449	5.8991e-05	0.00011704	regulation of transcription	biological_process
GO:0045730	0.00049194	0.00056143	respiratory burst	biological_process
GO:0045735	0.0018273	0.0024393	nutrient reservoir activity	molecular_function
GO:0046217	0.0021869	0.0025524	indole phytoalexin metabolic process	biological_process
GO:0046872	0.00049134	0.00041368	metal ion binding	molecular_function
GO:0046906	1.4218e-08	1.4698e-09	tetrapyrrole binding	molecular_function
GO:0046914	0.018172	0.025775	transition metal ion binding	molecular_function
GO:0048046	4.3021e-05	2.5916e-06	apoplast	cellular_component
GO:0050776	0.01422	0.017316	regulation of immune response	biological_process
GO:0050794	0.0003693	0.00050349	regulation of cellular process	biological_process
GO:0050832	0.00030827	0.00011704	defense response to fungus	biological_process
GO:0050896	4.4899e-36	2.0145e-37	response to stimulus	biological_process
GO:0051252	0.0015833	0.00093768	regulation of RNA metabolic process	biological_process
GO:0051707	9.8042e-07	1.06e-06	response to other organism	biological_process
GO:0051865	0.0063967	0.007273	protein autoubiquitination	biological_process
GO:0052314	0.0021869	0.0025524	phytoalexin metabolic process	biological_process
GO:0052315	0.0021869	0.0025524	phytoalexin biosynthetic process	biological_process
GO:0052317	0.00116	0.0013081	camalexin metabolic process	biological_process
GO:0055035	4.721e-08	3.5682e-08	plastid thylakoid membrane	cellular_component
GO:0055114	8.52e-07	1.8845e-05	oxidation reduction	biological_process
GO:0060255	0.0010957	0.0020837	regulation of macromolecule metabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0080090	0.00040937	0.00081487	regulation of primary metabolic process	biological_process
GO:0080134	0.0014826	0.0079542	regulation of response to stress	biological_process
Differences:				
GO:0008272	0.022511		sulfate transport	biological_process
GO:0015698	0.0081482		inorganic anion transport	biological_process
GO:0022900	0.024195		electron transport chain	biological_process
GO:0000249		0.09436	C-22 sterol desaturase activity	molecular_function
GO:0003677		0.088459	DNA binding	molecular_function
GO:0005776		0.09436	autophagic vacuole	cellular_component
GO:0006073		0.044276	cellular glucan metabolic process	biological_process
GO:0007154		0.054489	cell communication	biological_process
GO:0009505		0.085469	plant-type cell wall	cellular_component
GO:0009543		0.015381	chloroplast thylakoid lumen	cellular_component
GO:0009783		0.09436	photosystem II antenna complex	cellular_component
GO:0009853		0.099475	photorespiration	biological_process
GO:0010193		0.082048	response to ozone	biological_process
GO:0010604		0.080518	positive regulation of macromolecule metabolic process	biological_process
GO:0010942		0.09436	positive regulation of cell death	biological_process
GO:0016137		0.088459	glycoside metabolic process	biological_process
GO:0016667		0.070288	oxidoreductase activity, acting on sulfur group of donors	molecular_function
GO:0019757		0.088459	glucosinolate metabolic process	biological_process
GO:0019760		0.088459	glucosinolate metabolic process	biological_process
GO:0019825		0.018015	oxygen binding	molecular_function
GO:0030095		0.012362	chloroplast photosystem II	cellular_component
GO:0031978		0.015381	plastid thylakoid lumen	cellular_component
GO:0042430		0.088459	indole and derivative metabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0042434		0.088459	indole derivative metabolic process	biological_process
GO:0042435		0.065676	indole derivative biosynthetic process	biological_process
GO:0043068		0.09436	positive regulation of programmed cell death	biological_process
GO:0044042		0.049983	glucan metabolic process	biological_process
GO:0050691		0.09436	regulation of defense response to virus by host	biological_process
GO:0051245		0.09436	negative regulation of cellular defense response	biological_process
Zebrafish Retina regeneration Time course				
Intersect:				
GO:0001654	0.040761	0.076172	eye development	biological_process
GO:0004872	0.042374	0.076172	receptor activity	molecular_function
GO:0005488	0.042374	0.076172	binding	molecular_function
GO:0005515	0.045764	0.092211	protein binding	molecular_function
GO:0006464	0.040761	0.076172	protein modification process	biological_process
GO:0009628	0.034686	0.076172	response to abiotic stimulus	biological_process
GO:0009653	0.042374	0.076172	anatomical structure morphogenesis	biological_process
GO:0016020	0.041817	0.084725	membrane	cellular_component
GO:0048598	0.034686	0.076172	embryonic morphogenesis	biological_process
GO:0048731	0.045764	0.076172	system development	biological_process
GO:0050896	0.045764	0.076172	response to stimulus	biological_process
Differences:				
GO:0006575	0.049925		amino acid derivative metabolic process	biological_process
GO:0003824		0.084725	catalytic activity	molecular_function
GO:0004871		0.076172	signal transducer activity	molecular_function
GO:0006950		0.079018	response to stress	biological_process
GO:0007369		0.092211	gastrulation	biological_process
GO:0009887		0.079018	organ morphogenesis	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0016021		0.076172	integral to membrane	cellular_component
GO:0031101		0.076172	fin regeneration	biological_process
GO:0031224		0.076172	intrinsic to membrane	cellular_component
GO:0042398		0.093715	amino acid derivative biosynthetic process	biological_process
GO:0043412		0.076172	biopolymer modification	biological_process
GO:0043687		0.079018	post-translational protein modification	biological_process
GO:0048513		0.076172	organ development	biological_process
GO:0048589		0.076172	developmental growth	biological_process
Drosophila Sleep deprivation final time point				
Intersect:				
GO:0005550	0.0019151	7.4072e-05	pheromone binding	molecular_function
GO:0005576	8.4384e-06	1.8262e-07	extracellular region	cellular_component
GO:0006950	0.044448	0.00019272	response to stress	biological_process
GO:0006952	0.0042644	2.7658e-05	defense response	biological_process
GO:0009607	0.034943	4.7894e-06	response to biotic stimulus	biological_process
GO:0019731	0.0025782	4.3872e-08	antibacterial humoral response	biological_process
GO:0042742	0.034943	1.1129e-05	defense response to bacterium	biological_process
GO:0045087	0.0025782	3.4806e-06	innate immune response	biological_process
GO:0050877	0.019917	5.3476e-08	neurological system process	biological_process
GO:0050896	0.0042644	3.4153e-08	response to stimulus	biological_process
GO:0051707	0.033148	1.1129e-05	response to other organism	biological_process
Differences:				
GO:0000902		0.00069781	cell morphogenesis	biological_process
GO:0000904		0.0038533	cell morphogenesis involved in differentiation	biological_process
GO:0001505		2.523e-05	regulation of neurotransmitter levels	biological_process
GO:0001654		0.077565	eye development	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0003001	1.5661e-05	generation of a signal involved in cell-cell signaling		biological_process
GO:0005488	0.0032219	binding		molecular_function
GO:0005515	0.065238	protein binding		molecular_function
GO:0005543	0.028447	phospholipid binding		molecular_function
GO:0005615	0.0004054	extracellular space		cellular_component
GO:0005886	0.025691	plasma membrane		cellular_component
GO:0006457	0.043831	protein folding		biological_process
GO:0006528	0.030401	asparagine metabolic process		biological_process
GO:0006805	0.083966	xenobiotic metabolic process		biological_process
GO:0006810	0.0002194	transport		biological_process
GO:0006836	3.8341e-05	neurotransmitter transport		biological_process
GO:0006887	4.773e-05	exocytosis		biological_process
GO:0006928	0.024209	cell motion		biological_process
GO:0006955	6.9138e-06	immune response		biological_process
GO:0006959	5.5458e-06	humoral immune response		biological_process
GO:0007154	4.8172e-05	cell communication		biological_process
GO:0007165	0.087542	signal transduction		biological_process
GO:0007267	5.5458e-06	cell-cell signaling		biological_process
GO:0007268	1.5264e-06	synaptic transmission		biological_process
GO:0007269	1.1129e-05	neurotransmitter secretion		biological_process
GO:0007399	0.023472	nervous system development		biological_process
GO:0007409	0.0033055	axonogenesis		biological_process
GO:0007411	0.0090787	axon guidance		biological_process
GO:0007600	0.070891	sensory perception		biological_process
GO:0007610	0.00029095	behavior		biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0007626		0.009215	locomotory behavior	biological_process
GO:0008021		0.0046242	synaptic vesicle	cellular_component
GO:0008037		0.086247	cell recognition	biological_process
GO:0008038		0.086247	neuron recognition	biological_process
GO:0008145		0.0075403	phenylalkylamine binding	molecular_function
GO:0008200		0.074291	ion channel inhibitor activity	molecular_function
GO:0008344		0.037775	adult locomotory behavior	biological_process
GO:0009410		0.083966	response to xenobiotic stimulus	biological_process
GO:0009617		3.3425e-05	response to bacterium	biological_process
GO:0009620		0.017372	response to fungus	biological_process
GO:0009653		0.00036691	anatomical structure morphogenesis	biological_process
GO:0009987		0.00015176	cellular process	biological_process
GO:0016023		0.0057769	cytoplasmic membrane-bounded vesicle	cellular_component
GO:0016043		0.0073154	cellular component organization	biological_process
GO:0016079		0.00037357	synaptic vesicle exocytosis	biological_process
GO:0016192		4.3475e-05	vesicle-mediated transport	biological_process
GO:0016248		0.074291	channel inhibitor activity	molecular_function
GO:0016601		0.074291	Rac protein signal transduction	biological_process
GO:0019226		1.9611e-06	transmission of nerve impulse	biological_process
GO:0019730		3.4888e-06	antimicrobial humoral response	biological_process
GO:0022008		0.016578	neurogenesis	biological_process
GO:0030030		0.053352	cell projection organization	biological_process
GO:0030135		0.023472	coated vesicle	cellular_component
GO:0030136		0.0072519	clathrin-coated vesicle	cellular_component
GO:0030154		0.0013513	cell differentiation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0030182		0.0032704	neuron differentiation	biological_process
GO:0030534		0.016578	adult behavior	biological_process
GO:0031175		0.014918	neuron projection development	biological_process
GO:0031225		0.083966	anchored to membrane	cellular_component
GO:0031410		0.00905	cytoplasmic vesicle	cellular_component
GO:0031982		0.012177	vesicle	cellular_component
GO:0031988		0.0072588	membrane-bounded vesicle	cellular_component
GO:0032268		0.041707	regulation of cellular protein metabolic process	biological_process
GO:0032269		0.077565	negative regulation of cellular protein metabolic process	biological_process
GO:0032940		7.4072e-05	secretion by cell	biological_process
GO:0032989		0.0010944	cellular component morphogenesis	biological_process
GO:0032990		0.0075403	cell part morphogenesis	biological_process
GO:0035249		0.030401	synaptic transmission, glutamatergic	biological_process
GO:0044267		0.066721	cellular protein metabolic process	biological_process
GO:0044421		0.0028613	extracellular region part	cellular_component
GO:0044456		0.0010944	synapse part	cellular_component
GO:0044459		0.047621	plasma membrane part	cellular_component
GO:0045202		0.0010272	synapse	cellular_component
GO:0046903		0.00015176	secretion	biological_process
GO:0048468		0.00038287	cell development	biological_process
GO:0048489		0.00043998	synaptic vesicle transport	biological_process
GO:0048666		0.0065646	neuron development	biological_process
GO:0048667		0.014918	cell morphogenesis involved in neuron differentiation	biological_process
GO:0048699		0.013696	generation of neurons	biological_process
GO:0048731		0.023138	system development	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0048812		0.014918	neuron projection morphogenesis	biological_process
GO:0048856		0.00249	anatomical structure development	biological_process
GO:0048858		0.014918	cell projection morphogenesis	biological_process
GO:0048869		0.0010944	cellular developmental process	biological_process
GO:0050794		0.075408	regulation of cellular process	biological_process
GO:0050803		0.070891	regulation of synapse structure and activity	biological_process
GO:0050807		0.070891	regulation of synapse organization	biological_process
GO:0050808		0.074291	synapse organization	biological_process
GO:0050829		0.0065037	defense response to Gram-negative bacterium	biological_process
GO:0050832		0.013696	defense response to fungus	biological_process
GO:0050890		0.015205	cognition	biological_process
GO:0051128		0.048846	regulation of cellular component organization	biological_process
GO:0051246		0.060193	regulation of protein metabolic process	biological_process
GO:0051248		0.083441	negative regulation of protein metabolic process	biological_process
GO:0051641		0.00019272	cellular localization	biological_process
GO:0051649		0.00053303	establishment of localization in cell	biological_process
GO:0060341		0.06175	regulation of cellular localization	biological_process

Drosophila Sleep deprivation Time course

Intersect:

Differences:

GO:0050896	0.021692	response to stimulus	biological_process
GO:0009607	0.03978	response to biotic stimulus	biological_process
GO:0006959	0.064406	humoral immune response	biological_process
GO:0019730	0.064406	antimicrobial humoral response	biological_process
GO:0050829	0.064406	defense response to Gram-negative bacterium	biological_process
GO:0019731	0.087727	antibacterial humoral response	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
Melanoma				
Intersect:				
GO:0001501	0.024728	0.0080717	skeletal system development	biological_process
GO:0001533	0.016028	0.00019421	cornified envelope	cellular_component
GO:0001568	0.0096322	0.00093373	blood vessel development	biological_process
GO:0001725	0.012909	0.0020237	stress fiber	cellular_component
GO:0001871	0.0078725	0.0028527	pattern binding	molecular_function
GO:0001944	0.012292	0.0010636	vasculature development	biological_process
GO:0003700	0.016047	0.0032525	transcription factor activity	molecular_function
GO:0003779	5.5779e-05	1.2702e-10	actin binding	molecular_function
GO:0003824	5.7114e-05	2.4672e-05	catalytic activity	molecular_function
GO:0004601	0.046389	0.034847	peroxidase activity	molecular_function
GO:0004867	0.019228	0.00073666	serine-type endopeptidase inhibitor activity	molecular_function
GO:0005083	0.013729	0.075565	GTPase regulator activity	molecular_function
GO:0005488	6.3558e-16	2.5389e-14	binding	molecular_function
GO:0005515	1.401e-25	4.7468e-19	protein binding	molecular_function
GO:0005523	0.018767	0.0069864	tropomyosin binding	molecular_function
GO:0005539	0.0030331	0.0016837	glycosaminoglycan binding	molecular_function
GO:0005578	2.5365e-05	2.4587e-11	proteinaceous extracellular matrix	cellular_component
GO:0005622	1.3247e-27	1.9857e-17	intracellular	cellular_component
GO:0005623	4.6945e-28	5.9428e-25	cell	cellular_component
GO:0005737	4.6945e-28	2.7456e-22	cytoplasm	cellular_component
GO:0005783	0.00010324	1.9045e-05	endoplasmic reticulum	cellular_component
GO:0005789	0.03432	0.003914	endoplasmic reticulum membrane	cellular_component
GO:0005792	0.030739	0.00076587	microsome	cellular_component
GO:0005794	0.019228	0.044551	Golgi apparatus	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0005856	6.2203e-07	1.9795e-11	cytoskeleton	cellular_component
GO:0005886	0.030739	8.9844e-06	plasma membrane	cellular_component
GO:0005911	0.019228	0.0001477	cell-cell junction	cellular_component
GO:0006357	0.0068187	0.00019421	regulation of transcription from RNA polymerase II promoter	biological_process
GO:0006583	0.044308	0.022925	melanin biosynthetic process from tyrosine	biological_process
GO:0006629	0.0017817	2.7834e-07	lipid metabolic process	biological_process
GO:0006633	0.017151	0.00013602	fatty acid biosynthetic process	biological_process
GO:0006886	0.0022669	0.062815	intracellular protein transport	biological_process
GO:0006915	3.3485e-05	4.1551e-06	apoptosis	biological_process
GO:0006917	0.049852	0.023913	induction of apoptosis	biological_process
GO:0006928	0.018385	5.5735e-06	cell motion	biological_process
GO:0006996	0.00043199	1.256e-05	organelle organization	biological_process
GO:0006997	0.013729	0.098938	nucleus organization	biological_process
GO:0007010	0.0029771	1.6689e-06	cytoskeleton organization	biological_process
GO:0007049	0.015498	0.0026147	cell cycle	biological_process
GO:0007154	0.030739	0.00018275	cell communication	biological_process
GO:0007155	0.0012167	9.1889e-10	cell adhesion	biological_process
GO:0007165	0.017474	0.00012793	signal transduction	biological_process
GO:0007167	0.0032023	2.3212e-05	enzyme linked receptor protein signaling pathway	biological_process
GO:0007242	0.017151	0.050892	intracellular signaling cascade	biological_process
GO:0007264	0.00079839	0.0066498	GTPase mediated signal transduction	biological_process
GO:0007265	0.0040106	0.06814	Ras protein signal transduction	biological_process
GO:0007266	0.0098047	0.06814	Rho protein signal transduction	biological_process
GO:0007275	2.3813e-05	3.4457e-14	multicellular organismal development	biological_process
GO:0007398	2.1202e-07	1.7237e-10	ectoderm development	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0007517	0.044584	0.012147	muscle organ development	biological_process
GO:0008092	0.00023672	5.3518e-10	cytoskeletal protein binding	molecular_function
GO:0008134	0.045268	0.033169	transcription factor binding	molecular_function
GO:0008152	0.0095231	0.044551	metabolic process	biological_process
GO:0008201	0.0020008	0.02615	heparin binding	molecular_function
GO:0008219	2.3813e-05	6.2358e-06	cell death	biological_process
GO:0008283	0.00062726	2.8978e-07	cell proliferation	biological_process
GO:0008360	0.015687	0.0073298	regulation of cell shape	biological_process
GO:0008544	2.0941e-08	1.9795e-11	epidermis development	biological_process
GO:0008565	0.024728	0.041134	protein transporter activity	molecular_function
GO:0008610	0.0065878	0.00023875	lipid biosynthetic process	biological_process
GO:0008656	0.020959	0.069964	caspase activator activity	molecular_function
GO:0009653	2.3975e-05	1.347e-10	anatomical structure morphogenesis	biological_process
GO:0009887	0.00016587	1.9682e-09	organ morphogenesis	biological_process
GO:0009888	1.6983e-07	3.9027e-10	tissue development	biological_process
GO:0009892	0.028478	0.015972	negative regulation of metabolic process	biological_process
GO:0009966	0.0022101	0.038301	regulation of signal transduction	biological_process
GO:0009987	6.8382e-14	1.043e-14	cellular process	biological_process
GO:0010558	0.021834	0.012035	negative regulation of macromolecule biosynthetic process	biological_process
GO:0010605	0.0099447	0.0073177	negative regulation of macromolecule metabolic process	biological_process
GO:0010628	0.015329	0.0073177	positive regulation of gene expression	biological_process
GO:0010629	0.012835	0.0085589	negative regulation of gene expression	biological_process
GO:0010646	0.0036495	0.028544	regulation of cell communication	biological_process
GO:0010941	0.0055189	0.00020796	regulation of cell death	biological_process
GO:0012501	3.1644e-05	4.2586e-06	programmed cell death	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0012505	0.00027034	0.00018393	endomembrane system	cellular_component
GO:0014896	0.024432	0.0037176	muscle hypertrophy	biological_process
GO:0015629	0.030739	0.0031793	actin cytoskeleton	cellular_component
GO:0016020	5.1704e-09	1.621e-15	membrane	cellular_component
GO:0016023	0.024432	0.0032375	cytoplasmic membrane-bounded vesicle	cellular_component
GO:0016043	0.0001645	0.00019981	cellular component organization	biological_process
GO:0016265	2.3813e-05	7.0843e-06	death	biological_process
GO:0016323	0.017474	1.8953e-05	basolateral plasma membrane	cellular_component
GO:0016477	0.010945	5.2407e-05	cell migration	biological_process
GO:0016481	0.016047	0.0071099	negative regulation of transcription	biological_process
GO:0016504	0.012034	0.024018	peptidase activator activity	molecular_function
GO:0016564	0.0036495	0.00020796	transcription repressor activity	molecular_function
GO:0016614	0.035228	0.0018884	oxidoreductase activity, acting on CH-OH group of donors	molecular_function
GO:0016616	0.029322	0.00092026	oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	molecular_function
GO:0016684	0.046389	0.034847	oxidoreductase activity, acting on peroxide as acceptor	molecular_function
GO:0018149	0.033894	0.0034832	peptide cross-linking	biological_process
GO:0019199	0.032359	0.0075747	transmembrane receptor protein kinase activity	molecular_function
GO:0019838	0.016047	4.402e-05	growth factor binding	molecular_function
GO:0030029	0.0057118	2.5986e-06	actin filament-based process	biological_process
GO:0030036	0.0037466	7.7719e-07	actin cytoskeleton organization	biological_process
GO:0030154	0.0011891	2.885e-09	cell differentiation	biological_process
GO:0030216	1.1363e-05	2.6023e-08	keratinocyte differentiation	biological_process
GO:0030234	0.0012341	1.3974e-05	enzyme regulator activity	molecular_function
GO:0030246	0.0011978	0.00016573	carbohydrate binding	molecular_function
GO:0030247	0.0033382	0.00087921	polysaccharide binding	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0030262	0.018607	0.017517	apoptotic nuclear changes	biological_process
GO:0031012	4.9892e-06	3.2982e-12	extracellular matrix	cellular_component
GO:0031090	0.0011978	0.0076113	organelle membrane	cellular_component
GO:0031324	0.046591	0.022589	negative regulation of cellular metabolic process	biological_process
GO:0031325	0.032499	0.0012484	positive regulation of cellular metabolic process	biological_process
GO:0031410	0.015687	0.001102	cytoplasmic vesicle	cellular_component
GO:0031424	0.018767	1.5673e-05	keratinization	biological_process
GO:0031982	0.0050707	0.00019421	vesicle	cellular_component
GO:0031988	0.016028	0.0015381	membrane-bounded vesicle	cellular_component
GO:0032432	0.012909	0.0020237	actin filament bundle	cellular_component
GO:0032787	0.033522	1.9609e-05	monocarboxylic acid metabolic process	biological_process
GO:0034613	0.00095828	0.033138	cellular protein localization	biological_process
GO:0042127	0.044438	3.5019e-05	regulation of cell proliferation	biological_process
GO:0042175	0.049994	0.0074351	nuclear envelope-endoplasmic reticulum network	cellular_component
GO:0042221	0.024974	5.1668e-06	response to chemical stimulus	biological_process
GO:0042246	0.020959	0.069964	tissue regeneration	biological_process
GO:0042470	0.0012167	0.00031354	melanosome	cellular_component
GO:0042598	0.029552	0.00040633	vesicular fraction	cellular_component
GO:0042641	0.0037425	0.00070586	actomyosin	cellular_component
GO:0042692	0.02393	0.0011767	muscle cell differentiation	biological_process
GO:0042803	0.034283	0.090127	protein homodimerization activity	molecular_function
GO:0042981	0.0058774	0.0001689	regulation of apoptosis	biological_process
GO:0043066	0.049852	0.038655	negative regulation of apoptosis	biological_process
GO:0043067	0.0060006	0.00019421	regulation of programmed cell death	biological_process
GO:0043069	0.045453	0.045748	negative regulation of programmed cell death	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0043227	2.6397e-08	0.0055873	membrane-bounded organelle	cellular_component
GO:0043229	1.1535e-10	5.9763e-05	intracellular organelle	cellular_component
GO:0043231	2.9439e-08	0.005301	intracellular membrane-bounded organelle	cellular_component
GO:0043473	0.002726	0.001473	pigmentation	biological_process
GO:0044255	0.017151	7.3897e-05	cellular lipid metabolic process	biological_process
GO:0044420	0.0012167	1.3951e-05	extracellular matrix part	cellular_component
GO:0044421	0.00064603	5.6187e-12	extracellular region part	cellular_component
GO:0044424	2.3943e-25	1.0078e-15	intracellular part	cellular_component
GO:0044425	0.02393	2.7249e-05	membrane part	cellular_component
GO:0044430	0.0033119	0.0002563	cytoskeletal part	cellular_component
GO:0044432	0.0068187	0.00093236	endoplasmic reticulum part	cellular_component
GO:0044444	6.5303e-07	0.00019421	cytoplasmic part	cellular_component
GO:0044464	4.6945e-28	5.9428e-25	cell part	cellular_component
GO:0045892	0.017314	0.017	negative regulation of transcription, DNA-dependent	biological_process
GO:0045893	0.0036389	0.0019197	positive regulation of transcription, DNA-dependent	biological_process
GO:0045941	0.0071374	0.0032375	positive regulation of transcription	biological_process
GO:0046456	0.047514	0.0012223	icosanoid biosynthetic process	biological_process
GO:0046907	0.024728	0.044241	intracellular transport	biological_process
GO:0046983	0.00011396	0.0032902	protein dimerization activity	molecular_function
GO:0048066	0.0029771	0.0001438	pigmentation during development	biological_process
GO:0048513	8.6678e-08	2.5182e-14	organ development	biological_process
GO:0048522	1.0093e-05	1.3077e-07	positive regulation of cellular process	biological_process
GO:0048523	0.0078355	7.2318e-05	negative regulation of cellular process	biological_process
GO:0048731	2.1202e-07	1.621e-15	system development	biological_process
GO:0048770	0.0012167	0.00031354	pigment granule	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0048856	2.1351e-08	6.0781e-17	anatomical structure development	biological_process
GO:0048869	0.00016939	1.7237e-10	cellular developmental process	biological_process
GO:0048870	0.019228	0.0001477	cell motility	biological_process
GO:0050793	0.0005152	8.7014e-06	regulation of developmental process	biological_process
GO:0050794	0.0047627	3.908e-05	regulation of cellular process	biological_process
GO:0051094	0.044308	0.0030064	positive regulation of developmental process	biological_process
GO:0051253	0.025424	0.02615	negative regulation of RNA metabolic process	biological_process
GO:0051254	0.0055011	0.0026629	positive regulation of RNA metabolic process	biological_process
GO:0051301	0.030739	0.017246	cell division	biological_process
GO:0060548	0.045453	0.045748	negative regulation of cell death	biological_process
GO:0060589	0.015727	0.075773	nucleoside-triphosphatase regulator activity	molecular_function
Differences:				
GO:0001783	0.044308		B cell apoptosis	biological_process
GO:0005085	0.0045106		guanyl-nucleotide exchange factor activity	molecular_function
GO:0005088	0.012378		Ras guanyl-nucleotide exchange factor activity	molecular_function
GO:0005089	0.018371		Rho guanyl-nucleotide exchange factor activity	molecular_function
GO:0005581	0.014943		collagen	cellular_component
GO:0005583	0.0099447		fibrillar collagen	cellular_component
GO:0005634	0.032359		nucleus	cellular_component
GO:0005874	0.030739		microtubule	cellular_component
GO:0008104	0.016028		protein localization	biological_process
GO:0009249	0.016028		protein lipoylation	biological_process
GO:0015031	0.0092493		protein transport	biological_process
GO:0016505	0.020673		apoptotic protease activator activity	molecular_function
GO:0022604	0.030739		regulation of cell morphogenesis	biological_process
GO:0030140	0.0063582		trans-Golgi network transport vesicle	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0030695	0.01751		GTPase regulator activity	molecular_function
GO:0031970	0.041629		organelle envelope lumen	cellular_component
GO:0035023	0.018607		regulation of Rho protein signal transduction	biological_process
GO:0043588	0.014943		skin development	biological_process
GO:0044419	0.018607		interspecies interaction between organisms	biological_process
GO:0044446	0.0028032		intracellular organelle part	cellular_component
GO:0045184	0.010945		establishment of protein localization	biological_process
GO:0046578	0.016047		regulation of Ras protein signal transduction	biological_process
GO:0050650	0.029766		chondroitin sulfate proteoglycan biosynthetic process	biological_process
GO:0050654	0.029766		chondroitin sulfate proteoglycan metabolic process	biological_process
GO:0051056	0.0027566		regulation of GTPase mediated signal transduction	biological_process
GO:0000085		0.038368	G2 phase of mitotic cell cycle	biological_process
GO:0000122		0.01517	negative regulation of transcription from RNA polymerase II promoter	biological_process
GO:0000267		0.055741	cell fraction	cellular_component
GO:0000307		0.042764	cyclin-dependent protein kinase holoenzyme complex	cellular_component
GO:0000902		0.048162	cell morphogenesis	biological_process
GO:0000910		0.0074351	cytokinesis	biological_process
GO:0001516		0.042764	prostaglandin biosynthetic process	biological_process
GO:0001525		0.011613	angiogenesis	biological_process
GO:0001527		0.011511	microfibril	cellular_component
GO:0001558		0.015884	regulation of cell growth	biological_process
GO:0001666		0.080718	response to hypoxia	biological_process
GO:0001709		0.098938	cell fate determination	biological_process
GO:0001818		0.08995	negative regulation of cytokine production	biological_process
GO:0001934		0.033138	positive regulation of protein amino acid phosphorylation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0001959		0.031988	regulation of cytokine-mediated signaling pathway	biological_process
GO:0002250		0.080477	adaptive immune response	biological_process
GO:0002327		0.049808	immature B cell differentiation	biological_process
GO:0002329		0.049808	pre-B cell differentiation	biological_process
GO:0002376		0.06814	immune system process	biological_process
GO:0002424		0.081989	T cell mediated immune response to tumor cell	biological_process
			antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	
GO:0002504		0.014714	regulation of immune system process	biological_process
GO:0002682		0.035941	regulation of T cell mediated immune response to tumor cell	biological_process
GO:0002840		0.081989	positive regulation of T cell mediated immune response to tumor cell	biological_process
GO:0002842		0.081989	positive regulation of B cell apoptosis	biological_process
GO:0002902		0.044551	transcription corepressor activity	molecular_function
GO:0002904		0.049808	glutathione transferase activity	molecular_function
GO:0003714		0.056028	prephenate dehydratase activity	molecular_function
GO:0004364		0.0078478	transmembrane receptor protein tyrosine kinase activity	molecular_function
GO:0004664		0.049808	enzyme inhibitor activity	molecular_function
GO:0004714		0.049808	phosphoprotein phosphatase inhibitor activity	molecular_function
GO:0004857		0.00021548	endopeptidase inhibitor activity	molecular_function
GO:0004864		0.017147	transmembrane receptor protein tyrosine phosphatase activity	molecular_function
GO:0004866		0.00054248	fibroblast growth factor receptor binding	molecular_function
GO:0005001		0.090377	interleukin-1 receptor antagonist activity	molecular_function
GO:0005104		0.010598	structural constituent of cytoskeleton	molecular_function
GO:0005152		0.022925	calcium ion binding	molecular_function
GO:0005200		0.044551	insulin-like growth factor binding	molecular_function
GO:0005509		0.023		
GO:0005520		0.009712		

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0005576		1.1367e-09	extracellular region	cellular_component
GO:0005604		0.00031753	basement membrane	cellular_component
GO:0005615		4.01e-05	extracellular space	cellular_component
GO:0005819		0.0083005	spindle	cellular_component
GO:0005876		0.022428	spindle microtubule	cellular_component
GO:0005882		0.00016491	intermediate filament	cellular_component
GO:0005884		0.052383	actin filament	cellular_component
GO:0005896		0.081989	interleukin-6 receptor complex	cellular_component
GO:0005901		0.049808	caveola	cellular_component
GO:0005912		0.0053658	adherens junction	cellular_component
GO:0005924		0.00059803	cell-substrate adherens junction	cellular_component
GO:0005925		0.00070931	focal adhesion	cellular_component
GO:0005938		0.038301	cell cortex	cellular_component
GO:0006082		0.0013467	organic acid metabolic process	biological_process
GO:0006366		0.0042863	transcription from RNA polymerase II promoter	biological_process
GO:0006509		0.0093687	membrane protein ectodomain proteolysis	biological_process
GO:0006516		0.017655	glycoprotein catabolic process	biological_process
GO:0006631		0.00022512	fatty acid metabolic process	biological_process
GO:0006690		0.0020237	icosanoid metabolic process	biological_process
GO:0006691		0.029222	leukotriene metabolic process	biological_process
GO:0006692		0.010114	prostanoid metabolic process	biological_process
GO:0006693		0.010114	prostaglandin metabolic process	biological_process
GO:0006726		0.049808	eye pigment biosynthetic process	biological_process
GO:0006892		0.055098	post-Golgi vesicle-mediated transport	biological_process
GO:0006903		0.055098	vesicle targeting	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0006916		0.012035	anti-apoptosis	biological_process
GO:0006950		0.0071908	response to stress	biological_process
GO:0006954		0.052183	inflammatory response	biological_process
GO:0006979		0.068895	response to oxidative stress	biological_process
GO:0006986		0.049808	response to unfolded protein	biological_process
GO:0007015		0.0083882	actin filament organization	biological_process
GO:0007051		0.049808	spindle organization	biological_process
GO:0007166		0.0090853	cell surface receptor linked signal transduction	biological_process
GO:0007169		0.0083005	transmembrane receptor protein tyrosine kinase signaling pathway	biological_process
GO:0007178		0.030272	transmembrane receptor protein serine/threonine kinase signaling pathway	biological_process
GO:0007179		0.084588	transforming growth factor beta receptor signaling pathway	biological_process
GO:0007219		0.022925	Notch signaling pathway	biological_process
GO:0007220		0.081989	Notch receptor processing	biological_process
GO:0007399		0.0036584	nervous system development	biological_process
GO:0007507		0.080718	heart development	biological_process
GO:0008013		0.043987	beta-catenin binding	molecular_function
GO:0008045		0.023991	motor axon guidance	biological_process
GO:0008047		0.08995	enzyme activator activity	molecular_function
GO:0008131		0.081989	amine oxidase activity	molecular_function
GO:0008139		0.047448	nuclear localization sequence binding	molecular_function
GO:0008195		0.042764	phosphatidate phosphatase activity	molecular_function
GO:0008233		0.08995	peptidase activity	molecular_function
GO:0008236		0.032354	serine-type peptidase activity	molecular_function
GO:0008285		0.0028174	negative regulation of cell proliferation	biological_process
GO:0008289		0.062918	lipid binding	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0008361		0.0013052	regulation of cell size	biological_process
GO:0008624		0.051283	induction of apoptosis by extracellular signals	biological_process
GO:0008637		0.033138	apoptotic mitochondrial changes	biological_process
GO:0009056		0.046818	catabolic process	biological_process
GO:0009094		0.049808	L-phenylalanine biosynthetic process	biological_process
GO:0009605		5.9763e-05	response to external stimulus	biological_process
GO:0009611		0.00019421	response to wounding	biological_process
GO:0009719		0.08995	response to endogenous stimulus	biological_process
GO:0009725		0.027529	response to hormone stimulus	biological_process
GO:0009790		0.062918	embryonic development	biological_process
GO:0009792		0.045533	embryonic development ending in birth or egg hatching	biological_process
GO:0009880		0.041134	embryonic pattern specification	biological_process
GO:0009890		0.044551	negative regulation of biosynthetic process	biological_process
GO:0009891		0.021072	positive regulation of biosynthetic process	biological_process
GO:0009893		0.0075203	positive regulation of metabolic process	biological_process
GO:0009913		0.0014784	epidermal cell differentiation	biological_process
GO:0009986		0.0055873	cell surface	cellular_component
GO:0010466		0.029913	negative regulation of peptidase activity	biological_process
GO:0010557		0.061385	positive regulation of macromolecule biosynthetic process	biological_process
GO:0010562		0.0098522	positive regulation of phosphorus metabolic process	biological_process
GO:0010604		0.01249	positive regulation of macromolecule metabolic process	biological_process
GO:0010613		0.081989	positive regulation of cardiac muscle hypertrophy	biological_process
GO:0010942		0.034666	positive regulation of cell death	biological_process
GO:0012502		0.022859	induction of programmed cell death	biological_process
GO:0014706		0.048481	striated muscle tissue development	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0014742		0.081989	positive regulation of muscle hypertrophy	biological_process
GO:0014866		0.081989	skeletal myofibril assembly	biological_process
GO:0015166		0.081989	polyol transmembrane transporter activity	molecular_function
GO:0015630		0.08986	microtubule cytoskeleton	cellular_component
GO:0015665		0.081989	alcohol transmembrane transporter activity	molecular_function
GO:0016021		0.0075324	integral to membrane	cellular_component
GO:0016049		0.0020237	cell growth	biological_process
GO:0016053		0.0020237	organic acid biosynthetic process	biological_process
GO:0016055		0.0031177	Wnt receptor signaling pathway	biological_process
GO:0016209		0.029303	antioxidant activity	molecular_function
GO:0016327		0.04948	apicolateral plasma membrane	cellular_component
GO:0016337		0.037898	cell-cell adhesion	biological_process
GO:0016485		0.042639	protein processing	biological_process
GO:0016491		0.0010514	oxidoreductase activity	molecular_function
GO:0016563		0.052383	transcription activator activity	molecular_function
GO:0016566		0.038655	specific transcriptional repressor activity	molecular_function
GO:0016600		0.044551	flotillin complex	cellular_component
GO:0016615		0.062918	malate dehydrogenase activity	molecular_function
GO:0016620		0.052183	oxidoreductase activity, acting on the aldehyde or oxo group of donors, NAD or NADP as acceptor	molecular_function
GO:0016765		0.098938	transferase activity, transferring alkyl or aryl (other than methyl) groups	molecular_function
GO:0016787		0.0018288	hydrolase activity	molecular_function
GO:0016791		0.086799	phosphatase activity	molecular_function
GO:0017171		0.042017	serine hydrolase activity	molecular_function
GO:0019198		0.090377	transmembrane receptor protein phosphatase activity	molecular_function
GO:0019212		0.02531	phosphatase inhibitor activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0019221		0.013834	cytokine-mediated signaling pathway	biological_process
GO:0019319		0.049808	hexose biosynthetic process	biological_process
GO:0019369		0.049808	arachidonic acid metabolic process	biological_process
GO:0019370		0.017655	leukotriene biosynthetic process	biological_process
GO:0019752		0.0010636	carboxylic acid metabolic process	biological_process
GO:0019888		0.081989	protein phosphatase regulator activity	molecular_function
GO:0022008		0.0083005	neurogenesis	biological_process
GO:0022402		0.025999	cell cycle process	biological_process
GO:0022403		0.01249	cell cycle phase	biological_process
GO:0022409		0.028544	positive regulation of cell-cell adhesion	biological_process
GO:0030016		0.02256	myofibril	cellular_component
GO:0030017		0.04948	sarcomere	cellular_component
GO:0030018		0.066652	Z disc	cellular_component
GO:0030054		0.042298	cell junction	cellular_component
GO:0030055		0.00089134	cell-substrate junction	cellular_component
GO:0030057		0.023991	desmosome	cellular_component
GO:0030100		0.030621	regulation of endocytosis	biological_process
GO:0030323		0.072841	respiratory tube development	biological_process
GO:0030353		0.022925	fibroblast growth factor receptor antagonist activity	molecular_function
GO:0030414		0.00044684	peptidase inhibitor activity	molecular_function
GO:0030435		0.049808	sporulation resulting in formation of a cellular spore	biological_process
GO:0030509		0.044551	BMP signaling pathway	biological_process
GO:0030510		0.073724	regulation of BMP signaling pathway	biological_process
GO:0030514		0.062918	negative regulation of BMP signaling pathway	biological_process
GO:0030528		0.04948	transcription regulator activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0030595		0.018573	leukocyte chemotaxis	biological_process
GO:0031032		0.042017	actomyosin structure organization	biological_process
GO:0031105		0.0086449	septin complex	cellular_component
GO:0031175		0.0075203	neuron projection development	biological_process
GO:0031224		0.0066363	intrinsic to membrane	cellular_component
GO:0031327		0.046117	negative regulation of cellular biosynthetic process	biological_process
GO:0031328		0.0076113	positive regulation of cellular biosynthetic process	biological_process
GO:0031401		0.090701	positive regulation of protein modification process	biological_process
GO:0031528		0.049808	microvillus membrane	cellular_component
GO:0031674		0.029303	I band	cellular_component
GO:0031941		0.028544	filamentous actin	cellular_component
GO:0032103		0.054301	positive regulation of response to external stimulus	biological_process
GO:0032156		0.0086449	septin cytoskeleton	cellular_component
GO:0032395		0.065361	MHC class II receptor activity	molecular_function
GO:0032465		0.062918	regulation of cytokinesis	biological_process
GO:0032526		0.052183	response to retinoic acid	biological_process
GO:0032594		0.049808	protein transport within lipid bilayer	biological_process
GO:0032595		0.049808	B cell receptor transport within lipid bilayer	biological_process
GO:0032596		0.049808	protein transport into membrane raft	biological_process
GO:0032597		0.049808	B cell receptor transport into membrane raft	biological_process
GO:0032599		0.049808	protein transport out of membrane raft	biological_process
GO:0032600		0.049808	chemokine receptor transport out of membrane raft	biological_process
GO:0032907		0.049808	transforming growth factor-beta3 production	biological_process
GO:0032910		0.049808	regulation of transforming growth factor-beta3 production	biological_process
GO:0032913		0.049808	negative regulation of transforming growth factor-beta3 production	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0032989		0.025109	cellular component morphogenesis	biological_process
GO:0033162		0.031988	melanosome membrane	cellular_component
GO:0033189		0.075565	response to vitamin A	biological_process
GO:0033606		0.049808	chemokine receptor transport within lipid bilayer	biological_process
GO:0033619		0.0093687	membrane protein proteolysis	biological_process
GO:0033622		0.049808	integrin activation	biological_process
GO:0033623		0.049808	regulation of integrin activation	biological_process
GO:0033625		0.049808	positive regulation of integrin activation	biological_process
GO:0033632		0.053319	regulation of cell-cell adhesion mediated by integrin	biological_process
GO:0033634		0.049808	positive regulation of cell-cell adhesion mediated by integrin	biological_process
GO:0034102		0.049808	erythrocyte clearance	biological_process
GO:0034106		0.049808	regulation of erythrocyte clearance	biological_process
GO:0034107		0.049808	negative regulation of erythrocyte clearance	biological_process
GO:0034110		0.049808	regulation of homotypic cell-cell adhesion	biological_process
GO:0034111		0.049808	negative regulation of homotypic cell-cell adhesion	biological_process
GO:0034117		0.049808	erythrocyte aggregation	biological_process
GO:0034118		0.049808	regulation of erythrocyte aggregation	biological_process
GO:0034119		0.049808	negative regulation of erythrocyte aggregation	biological_process
GO:0034637		0.044241	cellular carbohydrate biosynthetic process	biological_process
GO:0035295		0.013309	tube development	biological_process
GO:0040007		5.0646e-05	growth	biological_process
GO:0040008		0.063146	regulation of growth	biological_process
GO:0040011		0.0019324	locomotion	biological_process
GO:0042060		0.015591	wound healing	biological_process
GO:0042103		0.049808	positive regulation of T cell homeostatic proliferation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0042327		0.022403	positive regulation of phosphorylation	biological_process
GO:0042438		0.038368	melanin biosynthetic process	biological_process
GO:0042441		0.049808	eye pigment metabolic process	biological_process
GO:0042445		0.0053453	hormone metabolic process	biological_process
GO:0042578		0.028544	phosphoric ester hydrolase activity	molecular_function
GO:0042802		0.0036389	identical protein binding	molecular_function
GO:0042987		0.016162	amyloid precursor protein catabolic process	biological_process
GO:0043009		0.038301	chordate embryonic development	biological_process
GO:0043065		0.028976	positive regulation of apoptosis	biological_process
GO:0043068		0.03226	positive regulation of programmed cell death	biological_process
GO:0043121		0.015998	neurotrophin binding	molecular_function
GO:0043154		0.047448	negative regulation of caspase activity	biological_process
GO:0043232		0.03455	intracellular non-membrane-bounded organelle	cellular_component
GO:0043292		0.033138	contractile fiber	cellular_component
GO:0043296		0.049808	apical junction complex	cellular_component
GO:0043449		0.043987	cellular alkene metabolic process	biological_process
GO:0043450		0.017655	alkene biosynthetic process	biological_process
GO:0043616		0.042764	keratinocyte proliferation	biological_process
GO:0044449		0.084756	contractile fiber part	cellular_component
GO:0044459		0.062956	plasma membrane part	cellular_component
GO:0045009		0.031988	chitosome	cellular_component
GO:0045111		0.00031086	intermediate filament cytoskeleton	cellular_component
GO:0045445		0.0090853	myoblast differentiation	biological_process
GO:0045595		0.017655	regulation of cell differentiation	biological_process
GO:0045597		0.022611	positive regulation of cell differentiation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0045639		0.075773	positive regulation of myeloid cell differentiation	biological_process
GO:0045667		0.023	regulation of osteoblast differentiation	biological_process
GO:0045669		0.075565	positive regulation of osteoblast differentiation	biological_process
GO:0045785		0.033593	positive regulation of cell adhesion	biological_process
			negative regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolic process	biological_process
GO:0045934		0.077145	positive regulation of nucleobase, nucleoside, nucleotide and nucleic acid metabolic process	biological_process
GO:0045935		0.023333	positive regulation of phosphate metabolic process	biological_process
GO:0045937		0.0098522	positive regulation of transcription from RNA polymerase II promoter	biological_process
GO:0045944		0.031901	negative regulation of T cell homeostatic proliferation	biological_process
GO:0046014		0.049808	alcohol biosynthetic process	biological_process
GO:0046165		0.04948	monosaccharide biosynthetic process	biological_process
GO:0046364		0.033341	carboxylic acid biosynthetic process	biological_process
GO:0046394		0.0020237	prostanoid biosynthetic process	biological_process
GO:0046457		0.042764	eye pigmentation	biological_process
GO:0048069		0.081989	cell development	biological_process
GO:0048468		0.00035904	blood vessel morphogenesis	biological_process
GO:0048514		0.013822	developmental growth	biological_process
GO:0048589		0.05276	anatomical structure formation involved in morphogenesis	biological_process
GO:0048646		0.0023009	generation of neurons	biological_process
GO:0048699		0.060094	tissue morphogenesis	biological_process
GO:0048729		0.004153	epidermis morphogenesis	biological_process
GO:0048730		0.046111	NADP or NADPH binding	molecular_function
GO:0050661		0.081989	epithelial cell proliferation	biological_process
GO:0050673		0.077145	positive regulation of epithelial cell proliferation	biological_process
GO:0050679		0.0093687	positive regulation of inflammatory	biological_process
GO:0050729		0.097725	response	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0050896		0.035699	response to stimulus	biological_process
GO:0050900		0.0015094	leukocyte migration	biological_process
GO:0051015		0.012385	actin filament binding	molecular_function
GO:0051043		0.073752	regulation of membrane protein ectodomain proteolysis	biological_process
GO:0051093		0.055098	negative regulation of developmental process	biological_process
GO:0051128		0.001559	regulation of cellular component organization	biological_process
GO:0051287		0.041134	NAD or NADH binding	molecular_function
GO:0051302		0.042764	regulation of cell division	biological_process
GO:0051319		0.038368	G2 phase	biological_process
GO:0051325		0.097208	interphase	biological_process
GO:0051329		0.099609	interphase of mitotic cell cycle	biological_process
GO:0051346		0.059695	negative regulation of hydrolase activity	biological_process
GO:0051604		0.019244	protein maturation	biological_process
GO:0051641		0.043987	cellular localization	biological_process
GO:0051648		0.049808	vesicle localization	biological_process
GO:0051649		0.061484	establishment of localization in cell	biological_process
GO:0051650		0.049808	establishment of vesicle localization	biological_process
GO:0051789		0.067857	response to protein stimulus	biological_process
GO:0055008		0.064644	cardiac muscle tissue morphogenesis	biological_process
GO:0055114		0.0011851	oxidation reduction	biological_process
GO:0060170		0.011511	cilium membrane	cellular_component
GO:0060326		0.018573	cell chemotaxis	biological_process
GO:0060415		0.064644	muscle tissue morphogenesis	biological_process
GO:0060537		0.049808	muscle tissue development	biological_process
GO:0070161		0.00044684	anchoring junction	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0070228		0.044551	regulation of lymphocyte apoptosis	biological_process
GO:0070230		0.049808	positive regulation of lymphocyte apoptosis	biological_process
Mouse diet				
Intersect:				
GO:0000267	1.544e-05	0.00011191	cell fraction	cellular_component
GO:0000271	0.0052759	0.018715	polysaccharide biosynthetic process	biological_process
GO:0001523	0.0019709	0.006675	retinoid metabolic process	biological_process
GO:0001775	0.018754	0.0016109	cell activation	biological_process
GO:0001823	0.018754	0.035681	mesonephros development	biological_process
GO:0003824	2.8037e-05	5.5659e-05	catalytic activity	molecular_function
GO:0003912	0.013324	0.027248	DNA nucleotidylexotransferase activity	molecular_function
GO:0004112	0.01227	0.03695	cyclic-nucleotide phosphodiesterase activity	molecular_function
GO:0004114	0.010227	0.034468	3',5'-cyclic-nucleotide phosphodiesterase activity	molecular_function
GO:0004115	0.012452	0.032387	3',5'-cyclic-AMP phosphodiesterase activity	molecular_function
GO:0004163	0.0032521	0.006675	diphosphomevalonate decarboxylase activity	molecular_function
GO:0004340	0.0032521	0.006675	glucokinase activity	molecular_function
GO:0004497	8.0857e-08	8.9886e-09	monooxygenase activity	molecular_function
GO:0005488	0.026686	0.00017416	binding	molecular_function
GO:0005506	0.0019828	0.013212	iron ion binding	molecular_function
GO:0005536	0.0075962	0.016117	glucose binding	molecular_function
GO:0005622	0.019664	0.0054674	intracellular	cellular_component
GO:0005623	0.0026032	0.00021339	cell	cellular_component
GO:0005624	4.3087e-05	0.00021339	membrane fraction	cellular_component
GO:0005626	8.1139e-05	0.00044226	insoluble fraction	cellular_component
GO:0005737	4.7655e-05	7.2718e-05	cytoplasm	cellular_component
GO:0005783	0.00012891	6.7444e-05	endoplasmic reticulum	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0005789	0.0001628	7.2718e-05	endoplasmic reticulum membrane	cellular_component
GO:0005792	1.8583e-05	3.2254e-05	microsome	cellular_component
GO:0005975	0.010222	0.032387	carbohydrate metabolic process	biological_process
GO:0005977	0.014669	0.045614	glycogen metabolic process	biological_process
GO:0005978	0.00064562	0.0022807	glycogen biosynthetic process	biological_process
GO:0005979	0.018754	0.035681	regulation of glycogen biosynthetic process	biological_process
GO:0005996	0.0062129	0.045614	monosaccharide metabolic process	biological_process
GO:0006066	2.7044e-06	2.147e-05	cellular alcohol metabolic process	biological_process
GO:0006073	0.014669	0.045614	cellular glucan metabolic process	biological_process
GO:0006112	0.021904	0.073408	energy reserve metabolic process	biological_process
GO:0006629	8.0857e-08	1.3218e-07	lipid metabolic process	biological_process
GO:0006694	3.1658e-05	7.2718e-05	steroid biosynthetic process	biological_process
GO:0006695	0.0019431	0.0006738	cholesterol biosynthetic process	biological_process
GO:0006720	2.9104e-05	3.2254e-05	isoprenoid metabolic process	biological_process
GO:0006721	0.00015861	5.8615e-05	terpenoid metabolic process	biological_process
GO:0006733	0.018792	0.061942	oxidoreduction coenzyme metabolic process	biological_process
GO:0006766	1.8583e-05	0.0001742	vitamin metabolic process	biological_process
GO:0006775	0.00026011	0.001246	fat-soluble vitamin metabolic process	biological_process
GO:0006776	0.0024012	0.0080022	vitamin A metabolic process	biological_process
GO:0008152	1.8583e-05	5.8615e-05	metabolic process	biological_process
GO:0008202	1.8583e-05	8.8091e-05	steroid metabolic process	biological_process
GO:0008203	0.00015861	0.00021339	cholesterol metabolic process	biological_process
GO:0008356	0.041481	0.079664	asymmetric cell division	biological_process
GO:0008610	1.8583e-05	7.9007e-05	lipid biosynthetic process	biological_process
GO:0009055	9.7669e-06	3.3849e-06	electron carrier activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009250	0.00064562	0.0022807	glucan biosynthetic process	biological_process
GO:0009730	0.0032521	0.006675	detection of carbohydrate stimulus	biological_process
GO:0009732	0.0032521	0.006675	detection of hexose stimulus	biological_process
GO:0009968	0.035175	0.020348	negative regulation of signal transduction	biological_process
GO:0009987	0.0032521	0.00013683	cellular process	biological_process
GO:0010466	0.0019709	0.068864	negative regulation of peptidase activity	biological_process
GO:0010677	0.013324	0.027248	negative regulation of cellular carbohydrate metabolic process	biological_process
GO:0010962	0.018754	0.035681	regulation of glucan biosynthetic process	biological_process
GO:0016051	0.0003999	0.0045325	carbohydrate biosynthetic process	biological_process
GO:0016101	0.0019709	0.006675	diterpenoid metabolic process	biological_process
GO:0016125	3.1658e-05	7.2718e-05	sterol metabolic process	biological_process
GO:0016126	0.000265	0.00016288	sterol biosynthetic process	biological_process
GO:0016491	8.4262e-05	0.00063668	oxidoreductase activity	molecular_function
GO:0016705	8.0857e-08	8.9886e-09	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	molecular_function
GO:0016712	0.0012347	0.0057106	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016713	0.033663	0.064573	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced iron-sulfur protein as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0017022	0.0032521	6.5303e-05	myosin binding	molecular_function
GO:0017159	0.0075962	0.016117	pantetheine hydrolase activity	molecular_function
GO:0018685	0.0032521	0.006675	alkane 1-monoxygenase activity	molecular_function
GO:0019318	0.0057182	0.043488	hexose metabolic process	biological_process
GO:0019362	0.0076517	0.027591	pyridine nucleotide metabolic process	biological_process
GO:0019748	0.0021271	0.0008694	secondary metabolic process	biological_process
GO:0020037	2.3534e-06	9.3744e-06	heme binding	molecular_function
GO:0030497	0.018754	0.035681	fatty acid elongation	biological_process
GO:0032020	0.041481	0.079664	ISG15-protein conjugation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0032881	0.025306	0.04762	regulation of polysaccharide metabolic process	biological_process
GO:0032885	0.018754	0.035681	regulation of polysaccharide biosynthetic process	biological_process
GO:0033089	0.041481	0.079664	positive regulation of T cell differentiation in the thymus	biological_process
GO:0033692	0.0038307	0.014719	cellular polysaccharide biosynthetic process	biological_process
GO:0034235	0.018754	0.035681	GPI anchor binding	molecular_function
GO:0034287	0.0032521	0.006675	detection of monosaccharide stimulus	biological_process
GO:0035110	0.018754	0.035681	leg morphogenesis	biological_process
GO:0042078	0.0075962	0.016117	germ-line stem cell division	biological_process
GO:0042175	0.00019902	8.5011e-05	nuclear envelope-endoplasmic reticulum network	cellular_component
GO:0042445	0.0047774	0.032387	hormone metabolic process	biological_process
GO:0042572	0.00015861	0.00053592	retinol metabolic process	biological_process
GO:0042598	2.9104e-05	5.5659e-05	vesicular fraction	cellular_component
GO:0043154	0.0019709	0.068864	negative regulation of caspase activity	biological_process
GO:0043281	0.018795	0.079142	regulation of caspase activity	biological_process
GO:0044042	0.014669	0.045614	glucan metabolic process	biological_process
GO:0044237	0.0044923	0.005986	cellular metabolic process	biological_process
GO:0044238	0.0040214	0.035681	primary metabolic process	biological_process
GO:0044255	8.0857e-08	6.7282e-07	cellular lipid metabolic process	biological_process
GO:0044262	0.0015083	0.02228	cellular carbohydrate metabolic process	biological_process
GO:0044424	0.020899	0.0041512	intracellular part	cellular_component
GO:0044432	0.00019902	8.5011e-05	endoplasmic reticulum part	cellular_component
GO:0044444	0.026686	0.0089799	cytoplasmic part	cellular_component
GO:0044464	0.0026032	0.00021339	cell part	cellular_component
GO:0045321	0.012105	0.0006738	leukocyte activation	biological_process
GO:0045721	0.0075962	0.016117	negative regulation of gluconeogenesis	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0045725	0.018754	0.035681	positive regulation of glycogen biosynthetic process	biological_process
GO:0045912	0.013324	0.027248	negative regulation of carbohydrate metabolic process	biological_process
GO:0046649	0.018795	0.011265	lymphocyte activation	biological_process
GO:0046906	2.3534e-06	9.3744e-06	tetrapyrrole binding	molecular_function
GO:0048029	0.037071	0.091746	monosaccharide binding	molecular_function
GO:0048133	0.0075962	0.016117	male germ-line stem cell division	biological_process
GO:0051156	0.0075962	0.016117	glucose 6-phosphate metabolic process	biological_process
GO:0051594	0.0032521	0.006675	detection of glucose	biological_process
GO:0052547	0.019664	0.082043	regulation of peptidase activity	biological_process
GO:0052548	0.019302	0.07969	regulation of endopeptidase activity	biological_process
GO:0055114	4.3479e-05	0.00021339	oxidation reduction	biological_process
Differences:				
GO:0004683	0.044602		calmodulin-dependent protein kinase activity	molecular_function
GO:0006006	0.041481		glucose metabolic process	biological_process
GO:0006732	0.0047774		coenzyme metabolic process	biological_process
GO:0006739	0.018754		NADP metabolic process	biological_process
GO:0006769	0.0057068		nicotinamide metabolic process	biological_process
GO:0010941	0.041464		regulation of cell death	biological_process
GO:0016790	0.025306		thiolester hydrolase activity	molecular_function
GO:0032787	0.012105		monocarboxylic acid metabolic process	biological_process
GO:0034637	0.0068583		cellular carbohydrate biosynthetic process	biological_process
GO:0042981	0.037659		regulation of apoptosis	biological_process
GO:0043067	0.041464		regulation of programmed cell death	biological_process
GO:0044264	0.033202		cellular polysaccharide metabolic process	biological_process
GO:0046165	0.027388		alcohol biosynthetic process	biological_process
GO:0046364	0.020899		monosaccharide biosynthetic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0051186	0.016229		cofactor metabolic process	biological_process
GO:0051346	0.014669		negative regulation of hydrolase activity	biological_process
GO:0000723		0.04762	telomere maintenance	biological_process
GO:0002526		0.032247	acute inflammatory response	biological_process
GO:0004022		0.096293	alcohol dehydrogenase activity	molecular_function
GO:0004452		0.016117	isopentenyl-diphosphate delta-isomerase activity	molecular_function
GO:0005576		0.095157	extracellular region	cellular_component
GO:0005615		0.040165	extracellular space	cellular_component
GO:0006909		0.057616	phagocytosis	biological_process
GO:0006916		0.098142	anti-apoptosis	biological_process
GO:0007041		0.084649	lysosomal transport	biological_process
GO:0008299		0.018715	isoprenoid biosynthetic process	biological_process
GO:0008333		0.032387	endosome to lysosome transport	biological_process
GO:0008398		0.016117	sterol 14-demethylase activity	molecular_function
GO:0008499		0.017537	UDP-galactose:beta-N-acetylglucosamine beta-1,3-galactosyltransferase activity	molecular_function
GO:0009266		0.073408	response to temperature stimulus	biological_process
GO:0009311		0.035681	oligosaccharide metabolic process	biological_process
GO:0009312		0.013304	oligosaccharide biosynthetic process	biological_process
GO:0009408		0.0251	response to heat	biological_process
GO:0010648		0.032387	negative regulation of cell communication	biological_process
GO:0016108		0.04762	tetraterpenoid metabolic process	biological_process
GO:0016109		0.035681	tetraterpenoid biosynthetic process	biological_process
GO:0016114		0.035681	terpenoid biosynthetic process	biological_process
GO:0016116		0.04762	carotenoid metabolic process	biological_process
GO:0016117		0.035681	carotenoid biosynthetic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0016566		0.035681	specific transcriptional repressor activity	molecular_function
GO:0016709		8.8091e-05	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, NADH or NADPH as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016860		0.064573	intramolecular oxidoreductase activity	molecular_function
GO:0016863		0.023417	intramolecular oxidoreductase activity, transposing C=C bonds	molecular_function
GO:0019882		0.095157	antigen processing and presentation	biological_process
GO:0031225		0.04382	anchored to membrane	cellular_component
GO:0032200		0.04762	telomere organization	biological_process
GO:0035034		0.027248	histone acetyltransferase regulator activity	molecular_function
GO:0043167		0.032387	ion binding	molecular_function
GO:0046627		0.096293	negative regulation of insulin receptor signaling pathway	biological_process
GO:0046872		0.020348	metal ion binding	molecular_function
GO:0046914		0.069318	transition metal ion binding	molecular_function
GO:0048531		0.027004	beta-1,3-galactosyltransferase activity	molecular_function
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Mouse glycerol				
Intersect:				
GO:0000307	0.02936	0.040664	cyclin-dependent protein kinase holoenzyme complex	cellular_component
GO:0003824	3.9491e-05	7.7587e-11	catalytic activity	molecular_function
GO:0004370	0.001043	0.0017282	glycerol kinase activity	molecular_function
GO:0004648	0.0071501	0.0091411	O-phospho-L-serine:2-oxoglutarate aminotransferase activity	molecular_function
GO:0006066	0.00049411	8.9891e-05	cellular alcohol metabolic process	biological_process
GO:0006071	0.00039298	9.5165e-05	glycerol metabolic process	biological_process
GO:0006072	2.0894e-05	6.5376e-05	glycerol-3-phosphate metabolic process	biological_process
GO:0006082	0.0016293	0.00018486	organic acid metabolic process	biological_process
GO:0009055	0.022491	8.9891e-05	electron carrier activity	molecular_function
GO:0009987	0.044168	0.065729	49 cellular process	biological_process
GO:0010811	0.039535	0.015717	positive regulation of cell-substrate adhesion	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0015362	0.032872	0.029543	high affinity sodium:dicarboxylate symporter activity	molecular_function
GO:0016290	0.0021651	0.065729	palmitoyl-CoA hydrolase activity	molecular_function
GO:0016291	0.0035196	0.084848	acyl-CoA thioesterase activity	molecular_function
GO:0016491	0.00091826	1.1325e-05	oxidoreductase activity	molecular_function
GO:0019751	3.9491e-05	6.5376e-05	polyol metabolic process	biological_process
GO:0019752	0.0016293	0.00018486	carboxylic acid metabolic process	biological_process
GO:0019867	0.0041465	0.03093	outer membrane	cellular_component
GO:0020037	0.032872	7.6409e-05	heme binding	molecular_function
GO:0031968	0.0040298	0.029186	organelle outer membrane	cellular_component
GO:0032787	0.0082978	0.007854	monocarboxylic acid metabolic process	biological_process
GO:0046906	0.032872	7.6409e-05	tetrapyrrole binding	molecular_function
GO:0051786	0.0071501	0.0091411	all-trans-retinol 13,14-reductase activity	molecular_function
GO:0055114	3.9491e-05	3.8524e-08	oxidation reduction	biological_process
Differences:				
GO:0006637	0.0071501		acyl-CoA metabolic process	biological_process
GO:0016289	0.0081003		CoA hydrolase activity	molecular_function
GO:0000064		0.00048185	L-ornithine transmembrane transporter activity	molecular_function
GO:0000267		0.01938	cell fraction	cellular_component
GO:0002526		0.034897	acute inflammatory response	biological_process
GO:0002532		0.01938	production of molecular mediator of acute inflammatory response	biological_process
GO:0002537		0.0042124	production of nitric oxide during acute inflammatory response	biological_process
GO:0004091		0.012269	carboxylesterase activity	molecular_function
GO:0004252		0.098068	serine-type endopeptidase activity	molecular_function
GO:0004368		0.074414	glycerol-3-phosphate dehydrogenase activity	molecular_function
GO:0004497		0.00018749	monooxygenase activity	molecular_function
GO:0004798		0.01938	thymidylate kinase activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0004833		0.01938	tryptophan 2,3-dioxygenase activity	molecular_function
GO:0004867		0.025549	serine-type endopeptidase inhibitor activity	molecular_function
GO:0005287		0.00048185	high affinity basic amino acid transmembrane transporter activity	molecular_function
GO:0005289		0.00048185	high affinity arginine transmembrane transporter activity	molecular_function
GO:0005342		0.024374	organic acid transmembrane transporter activity	molecular_function
GO:0005488		0.061169	binding	molecular_function
GO:0005496		0.025008	steroid binding	molecular_function
GO:0005506		0.005756	iron ion binding	molecular_function
GO:0005576		0.00085871	extracellular region	cellular_component
GO:0005604		0.034389	basement membrane	cellular_component
GO:0005624		0.034793	membrane fraction	cellular_component
GO:0005626		0.056788	insoluble fraction	cellular_component
GO:0005792		0.0032866	microsome	cellular_component
GO:0006233		0.01938	dTDP biosynthetic process	biological_process
GO:0006519		0.005304	cellular amino acid and derivative metabolic process	biological_process
GO:0006520		0.095282	amino acid metabolic process	biological_process
GO:0006559		0.074414	L-phenylalanine catabolic process	biological_process
GO:0006572		0.060532	tyrosine catabolic process	biological_process
GO:0006575		0.016339	amino acid derivative metabolic process	biological_process
GO:0006576		0.005215	biogenic amine metabolic process	biological_process
GO:0006584		0.079006	catecholamine metabolic process	biological_process
GO:0006629		0.02137	lipid metabolic process	biological_process
GO:0006725		0.00074218	cellular aromatic compound metabolic process	biological_process
GO:0006807		8.341e-06	nitrogen compound metabolic process	biological_process
GO:0006809		0.087147	nitric oxide biosynthetic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0006814		0.095282	sodium ion transport	biological_process
GO:0006929		0.087147	substrate-bound cell migration	biological_process
GO:0006931		0.0091411	substrate-bound cell migration, cell attachment to substrate	biological_process
GO:0007586		0.070397	digestion	biological_process
GO:0008152		6.5376e-05	metabolic process	biological_process
GO:0008278		0.043643	cohesin complex	cellular_component
GO:0008289		0.01938	lipid binding	molecular_function
GO:0008483		0.06791	transaminase activity	molecular_function
GO:0009063		0.040977	amino acid catabolic process	biological_process
GO:0009072		0.025549	aromatic amino acid family metabolic process	biological_process
GO:0009074		0.0013217	aromatic amino acid family catabolic process	biological_process
GO:0009133		0.029543	nucleoside diphosphate biosynthetic process	biological_process
GO:0009138		0.01938	pyrimidine nucleoside diphosphate metabolic process	biological_process
GO:0009139		0.01938	pyrimidine nucleoside diphosphate biosynthetic process	biological_process
GO:0009189		0.01938	deoxyribonucleoside diphosphate biosynthetic process	biological_process
GO:0009196		0.01938	pyrimidine deoxyribonucleoside diphosphate metabolic process	biological_process
GO:0009197		0.01938	pyrimidine deoxyribonucleoside diphosphate biosynthetic process	biological_process
GO:0009308		0.0013914	cellular amine metabolic process	biological_process
GO:0009310		0.06791	amine catabolic process	biological_process
GO:0010466		0.079006	negative regulation of peptidase activity	biological_process
GO:0010810		0.073875	regulation of cell-substrate adhesion	biological_process
GO:0015174		0.01165	basic amino acid transmembrane transporter activity	molecular_function
GO:0015181		0.0042124	arginine transmembrane transporter activity	molecular_function
GO:0015189		0.00096837	L-lysine transmembrane transporter activity	molecular_function
GO:0015802		0.01165	basic amino acid transport	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0015809		0.0073768	arginine transport	biological_process
GO:0015819		0.00096837	lysine transport	biological_process
GO:0015822		0.00048185	ornithine transport	biological_process
GO:0015849		0.022284	organic acid transport	biological_process
GO:0016151		0.023666	nickel ion binding	molecular_function
GO:0016705		0.00018486	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016712		0.00070967	hydrolase activity hydrolase activity, acting on ester bonds hydrolase activity, acting on carbon-nitrogen (but not peptide) bonds lyase activity pantetheine hydrolase activity	molecular_function
GO:0016787		0.004327	phenol metabolic process	biological_process
GO:0016788		0.06791	aromatic compound catabolic process	biological_process
GO:0016810		0.095856	tryptophan catabolic process to kynurenone	biological_process
GO:0016829		0.02137	vitamin binding	molecular_function
GO:0017159		0.01938	respiratory electron transport chain	biological_process
GO:0018958		0.081591	pyridoxal phosphate binding	molecular_function
GO:0019439		0.0023853	negative regulation of epithelial cell differentiation	biological_process
GO:0019441		0.087147	sodium ion binding	molecular_function
GO:0019842		0.031655	cell-substrate adhesion	biological_process
GO:0022904		0.005756	positive regulation of T cell differentiation in the thymus	biological_process
GO:0030170		0.024374	GPI anchor binding	molecular_function
GO:0030857		0.087147	cellular nitrogen compound metabolic process	biological_process
GO:0031402		0.027713	macrophage activation	biological_process
GO:0031589		0.02137		
GO:0033089		0.087147		
GO:0034235		0.043643		
GO:0034641		6.5376e-05	53	
GO:0042116		0.094795		

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0042598		0.0050221	vesicular fraction	cellular_component
GO:0043129		0.087147	surfactant homeostasis	biological_process
GO:0043154		0.079006	negative regulation of caspase activity	biological_process
GO:0043394		0.060532	proteoglycan binding	molecular_function
GO:0043395		0.060532	heparan sulfate proteoglycan binding	molecular_function
GO:0043618		0.060532	regulation of transcription from RNA polymerase II promoter in response to stress	biological_process
GO:0043619		0.060532	regulation of transcription from RNA polymerase II promoter in response to oxidative stress	biological_process
GO:0043620		0.060532	regulation of transcription in response to stress	biological_process
GO:0044237		0.074414	cellular metabolic process	biological_process
GO:0044255		0.039195	cellular lipid metabolic process	biological_process
GO:0044270		0.06791	nitrogen compound catabolic process	biological_process
GO:0044271		0.02611	nitrogen compound biosynthetic process	biological_process
GO:0044420		0.08244	extracellular matrix part	cellular_component
GO:0045333		0.024356	cellular respiration	biological_process
GO:0045682		0.069815	regulation of epidermis development	biological_process
GO:0045785		0.073875	positive regulation of cell adhesion	biological_process
GO:0046072		0.01938	dTDP metabolic process	biological_process
GO:0046165		0.098331	alcohol biosynthetic process	biological_process
GO:0046209		0.087147	nitric oxide metabolic process	biological_process
GO:0046942		0.02137	carboxylic acid transport	biological_process
GO:0046943		0.023666	carboxylic acid transmembrane transporter activity	molecular_function
GO:0048875		0.087147	chemical homeostasis within a tissue	biological_process
GO:0070279		0.024374	vitamin B6 binding	molecular_function

Rat liver

Intersect:

GO:0000267	0.0067958	0.0080526	cell fraction	cellular_component
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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0001523	0.029115	0.037422	retinoid metabolic process	biological_process
GO:0003824	1.5283e-06	6.2778e-09	catalytic activity	molecular_function
GO:0004091	0.011616	6.2234e-05	carboxylesterase activity	molecular_function
GO:0004497	0.011743	0.00071695	monooxygenase activity	molecular_function
GO:0004745	0.033978	0.039649	retinol dehydrogenase activity	molecular_function
GO:0005344	1.4005e-05	1.9639e-05	oxygen transporter activity	molecular_function
GO:0005488	0.0072849	0.00043611	binding	molecular_function
GO:0005506	2.1042e-05	2.8949e-05	iron ion binding	molecular_function
GO:0005622	0.0071437	0.00042455	intracellular	cellular_component
GO:0005623	0.017435	0.0059457	cell	cellular_component
GO:0005737	0.011575	7.8519e-05	cytoplasm	cellular_component
GO:0005783	0.026047	0.0045545	endoplasmic reticulum	cellular_component
GO:0005792	0.00026228	0.0001016	microsome	cellular_component
GO:0005829	0.048962	0.0095421	cytosol	cellular_component
GO:0005833	1.7755e-06	2.4498e-06	hemoglobin complex	cellular_component
GO:0006066	0.00017065	1.1721e-08	cellular alcohol metabolic process	biological_process
GO:0006082	1.3569e-09	2.0475e-09	organic acid metabolic process	biological_process
GO:0006519	7.763e-05	0.011316	cellular amino acid and derivative metabolic process	biological_process
GO:0006520	0.002817	0.024923	amino acid metabolic process	biological_process
GO:0006536	0.0050106	0.0063112	glutamate metabolic process	biological_process
GO:0006629	1.2696e-08	8.1389e-14	lipid metabolic process	biological_process
GO:0006631	3.5153e-06	1.2438e-07	fatty acid metabolic process	biological_process
GO:0006633	9.9389e-05	3.668e-05	fatty acid biosynthetic process	biological_process
GO:0006720	0.010439	0.0019314	isoprenoid metabolic process	biological_process
GO:0006721	0.00028473	0.00043611	terpenoid metabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0006732	0.025564	0.051141	coenzyme metabolic process	biological_process
GO:0006807	1.5283e-06	0.00019266	nitrogen compound metabolic process	biological_process
GO:0006950	0.0051164	0.00089658	response to stress	biological_process
GO:0007584	4.4722e-05	0.00017311	response to nutrient	biological_process
GO:0008152	0.00013201	2.4498e-06	metabolic process	biological_process
GO:0008202	0.0086333	9.4581e-05	steroid metabolic process	biological_process
GO:0008395	0.036915	0.047895	steroid hydroxylase activity	molecular_function
GO:0008610	0.00014857	4.9533e-06	lipid biosynthetic process	biological_process
GO:0009308	1.7755e-06	0.00034398	cellular amine metabolic process	biological_process
GO:0009309	0.041778	0.064213	amine biosynthetic process	biological_process
GO:0009605	0.0076655	0.00029397	response to external stimulus	biological_process
GO:0009719	4.5409e-05	9.7621e-09	response to endogenous stimulus	biological_process
GO:0009725	2.0359e-05	6.7519e-09	response to hormone stimulus	biological_process
GO:0009987	0.036613	0.029435	cellular process	biological_process
GO:0009991	1.8789e-05	6.6213e-06	response to extracellular stimulus	biological_process
GO:0010033	0.00053523	6.2316e-05	response to organic substance	biological_process
GO:0010035	0.023236	0.021708	response to inorganic substance	biological_process
GO:0014070	0.002817	0.0023991	response to organic cyclic substance	biological_process
GO:0015669	7.4346e-05	6.4493e-06	gas transport	biological_process
GO:0015671	2.3817e-05	3.668e-05	oxygen transport	biological_process
GO:0016053	2.9641e-05	1.2597e-05	organic acid biosynthetic process	biological_process
GO:0016101	0.029115	0.037422	diterpenoid metabolic process	biological_process
GO:0016125	0.017435	0.00022003	sterol metabolic process	biological_process
GO:0016491	9.6343e-05	2.0416e-05	oxidoreductase activity	molecular_function
GO:0016614	0.023567	0.0099493	oxidoreductase activity, acting on CH-OH group of donors	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0016616	0.019404	0.0080096	oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	molecular_function
GO:0016705	0.00019726	2.4097e-05	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	molecular_function
GO:0016712	0.040247	0.057023	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016717	0.020252	0.023235	oxidoreductase activity, acting on paired donors, with oxidation of a pair of donors resulting in the reduction of molecular oxygen to two molecules of water	molecular_function
GO:0016787	0.032351	0.0052192	hydrolase activity	molecular_function
GO:0016788	0.00067376	0.00019266	hydrolase activity, acting on ester bonds	molecular_function
GO:0016829	0.0012273	3.668e-05	lyase activity	molecular_function
GO:0019748	3.7266e-05	6.656e-05	secondary metabolic process	biological_process
GO:0019752	1.3569e-09	2.0475e-09	carboxylic acid metabolic process	biological_process
GO:0019825	0.0012314	0.0018614	oxygen binding	molecular_function
GO:0019842	0.0058611	0.0027052	vitamin binding	molecular_function
GO:0020037	1.6499e-06	9.0717e-07	heme binding	molecular_function
GO:0031667	2.1042e-05	2.8949e-05	response to nutrient levels	biological_process
GO:0031960	2.0359e-05	4.4273e-08	response to corticosteroid stimulus	biological_process
GO:0032355	0.013227	0.02195	response to estradiol stimulus	biological_process
GO:0032787	1.5441e-06	1.4569e-08	monocarboxylic acid metabolic process	biological_process
GO:0032868	0.032538	0.00020349	response to insulin stimulus	biological_process
GO:0032870	0.0013845	6.3639e-06	cellular response to hormone stimulus	biological_process
GO:0034641	2.4919e-06	0.00045331	cellular nitrogen compound metabolic process	biological_process
GO:0042221	6.0412e-06	6.7519e-09	response to chemical stimulus	biological_process
GO:0042493	0.013569	0.0059457	response to drug	biological_process
GO:0042598	0.00040327	0.0001653	vesicular fraction	cellular_component
GO:0043167	0.031157	0.010325	ion binding	molecular_function
GO:0043434	0.00025689	2.0416e-05	response to peptide hormone stimulus	biological_process
GO:0043627	0.026822	0.00105	response to estrogen stimulus	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0044237	0.0010286	3.8401e-05	cellular metabolic process	biological_process
GO:0044238	0.0024476	6.2234e-05	primary metabolic process	biological_process
GO:0044255	7.0914e-08	3.3477e-12	cellular lipid metabolic process	biological_process
GO:0044262	0.02646	0.00020423	cellular carbohydrate metabolic process	biological_process
GO:0044424	0.0020725	6.0378e-05	intracellular part	cellular_component
GO:0044444	0.017296	0.00049702	cytoplasmic part	cellular_component
GO:0044464	0.017435	0.0059457	cell part	cellular_component
GO:0046394	2.9641e-05	1.2597e-05	carboxylic acid biosynthetic process	biological_process
GO:0046872	0.017296	0.0047434	metal ion binding	molecular_function
GO:0046906	1.6499e-06	9.0717e-07	tetrapyrrole binding	molecular_function
GO:0048037	0.013436	0.00036061	cofactor binding	molecular_function
GO:0048545	2.0359e-05	6.2778e-09	response to steroid hormone stimulus	biological_process
GO:0050896	4.4041e-05	3.257e-07	response to stimulus	biological_process
GO:0051186	0.0075282	0.01829	cofactor metabolic process	biological_process
GO:0051384	6.6643e-06	9.7621e-09	response to glucocorticoid stimulus	biological_process
GO:0051412	0.036915	0.047895	response to corticosterone stimulus	biological_process
GO:0051716	0.011539	0.00040727	cellular response to stimulus	biological_process
GO:0055114	7.3198e-05	8.7085e-06	oxidation reduction	biological_process
Differences:				
GO:0006575	0.025564		amino acid derivative metabolic process	biological_process
GO:0016407	0.040643		acetyltransferase activity	molecular_function
GO:0019966	0.010261		interleukin-1 binding	molecular_function
GO:0004056		0.057344	argininosuccinate lyase activity	molecular_function
GO:0004313		0.057344	[acyl-carrier-protein] S-acetyltransferase activity	molecular_function
GO:0004315		0.057344	3-oxoacyl-[acyl-carrier-protein] synthase activity	molecular_function
GO:0004316		0.057344	3-oxoacyl-[acyl-carrier-protein] reductase activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0004317		0.057344	3-hydroxypalmitoyl-[acyl-carrier-protein] dehydratase activity	molecular_function
GO:0004319		0.057344	enoyl-[acyl-carrier-protein] reductase (NADPH, B-specific) activity	molecular_function
GO:0004806		0.023235	triacylglycerol lipase activity	molecular_function
GO:0005549		0.0015416	odorant binding	molecular_function
GO:0005550		0.00015736	pheromone binding	molecular_function
GO:0005789		0.047895	endoplasmic reticulum membrane	cellular_component
GO:0005865		0.080306	striated muscle thin filament	cellular_component
GO:0005975		0.003431	carbohydrate metabolic process	biological_process
GO:0005977		0.047895	glycogen metabolic process	biological_process
GO:0005996		0.010453	monosaccharide metabolic process	biological_process
GO:0006006		0.030157	glucose metabolic process	biological_process
GO:0006073		0.047895	cellular glucan metabolic process	biological_process
GO:0006112		0.069411	energy reserve metabolic process	biological_process
GO:0006694		0.0343	steroid biosynthetic process	biological_process
GO:0006695		0.069411	cholesterol biosynthetic process	biological_process
GO:0006766		0.099553	vitamin metabolic process	biological_process
GO:0006776		0.068522	vitamin A metabolic process	biological_process
GO:0006790		0.031348	sulfur metabolic process	biological_process
GO:0007586		3.8899e-05	digestion	biological_process
GO:0008203		0.00095834	cholesterol metabolic process	biological_process
GO:0008645		0.064213	hexose transport	biological_process
GO:0008652		0.080306	amino acid biosynthetic process	biological_process
GO:0009055		0.081653	electron carrier activity	molecular_function
GO:0009056		3.1646e-05	catabolic process	biological_process
GO:0009058		0.047895	biosynthetic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009628		0.031313	response to abiotic stimulus	biological_process
GO:0015749		0.064213	monosaccharide transport	biological_process
GO:0015758		0.057344	glucose transport	biological_process
GO:0016042		6.2234e-05	lipid catabolic process	biological_process
GO:0016114		0.057344	terpenoid biosynthetic process	biological_process
GO:0016126		0.015479	sterol biosynthetic process	biological_process
GO:0016298		0.019357	lipase activity	molecular_function
GO:0016418		0.057344	S-acetyltransferase activity	molecular_function
GO:0016631		0.057344	enoyl-[acyl-carrier-protein] reductase activity oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, NADH or NADPH as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016709		0.00076464		molecular_function
GO:0016835		0.091747	carbon-oxygen lyase activity	molecular_function
GO:0016836		0.057023	hydro-lyase activity	molecular_function
GO:0016840		0.080306	carbon-nitrogen lyase activity	molecular_function
GO:0019171		0.057344	3-hydroxyacyl-[acyl-carrier-protein] dehydratase activity	molecular_function
GO:0019318		0.026963	hexose metabolic process	biological_process
GO:0030299		0.039649	intestinal cholesterol absorption	biological_process
GO:0032269		0.077944	negative regulation of cellular protein metabolic process	biological_process
GO:0032869		0.0028996	cellular response to insulin stimulus	biological_process
GO:0042175		0.030157	nuclear envelope-endoplasmic reticulum network	cellular_component
GO:0042450		0.057344	arginine biosynthetic process via ornithine	biological_process
GO:0043169		0.021902	cation binding	molecular_function
GO:0043177		0.057344	organic acid binding	molecular_function
GO:0043227		0.03219	membrane-bounded organelle	cellular_component
GO:0043229		0.014828	intracellular organelle	cellular_component
GO:0043231		0.030157	intracellular membrane-bounded organelle	cellular_component

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0044042		0.047895	glucan metabolic process	biological_process
GO:0044240		0.057344	multicellular organismal catabolic process	lipid biological_process
GO:0044241		0.0032335	lipid digestion	biological_process
GO:0044248		0.0093903	cellular catabolic process	biological_process
GO:0044249		0.034219	cellular biosynthetic process	biological_process
GO:0044432		0.023235	endoplasmic reticulum part	cellular_component
GO:0046165		0.089578	alcohol biosynthetic process	biological_process
GO:0046470		0.068522	phosphatidylcholine metabolic process	biological_process
GO:0046914		0.057344	transition metal ion binding	molecular_function
GO:0048002		0.018625	antigen processing and presentation of peptide antigen	biological_process
GO:0050662		0.057344	coenzyme binding	molecular_function
GO:0050667		0.057344	homocysteine metabolic process	biological_process
GO:0051248		0.091747	negative regulation of protein metabolic process	biological_process
GO:0051258		0.091534	protein polymerization	biological_process
Rat obesity				
Intersect:				
GO:0005488	0.0040334	2.5184e-05	binding	molecular_function
GO:0005515	0.0040334	0.00020715	protein binding	molecular_function
GO:0005622	0.0057218	5.0024e-06	intracellular	cellular_component
GO:0005623	0.0013386	1.4395e-06	cell	cellular_component
GO:0005737	0.013155	3.0132e-06	cytoplasm	cellular_component
GO:0005996	0.032849	0.018653	monosaccharide metabolic process	biological_process
GO:0006006	0.015818	0.0096188	glucose metabolic process	biological_process
GO:0008152	0.03209	1.1047e-05	metabolic process	biological_process
GO:0009987	0.030044	1.0462e-05	cellular process	biological_process
GO:0019318	0.031394	0.016118	hexose metabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0032787	0.013155	0.00070822	monocarboxylic acid metabolic process	biological_process
GO:0044424	0.0049752	1.4395e-06	intracellular part	cellular_component
GO:0044464	0.0013386	1.4395e-06	cell part	cellular_component
GO:0050794	0.041882	9.5471e-05	regulation of cellular process	biological_process
Differences:				
GO:0000003		0.091011	reproduction	biological_process
GO:0000267		0.023063	cell fraction	cellular_component
GO:0000323		0.0059477	lytic vacuole	cellular_component
GO:0001501		0.010074	skeletal system development	biological_process
GO:0001503		0.022761	ossification	biological_process
GO:0001726		0.083962	ruffle	cellular_component
GO:0001775		0.013549	cell activation	biological_process
GO:0001794		0.013549	type IIa hypersensitivity	biological_process
GO:0001796		0.013549	regulation of type IIa hypersensitivity	biological_process
GO:0001798		0.013549	positive regulation of type IIa hypersensitivity	biological_process
GO:0001802		0.0071134	type III hypersensitivity	biological_process
GO:0001803		0.0071134	regulation of type III hypersensitivity	biological_process
GO:0001805		0.0071134	positive regulation of type III hypersensitivity	biological_process
GO:0001810		0.013549	regulation of type I hypersensitivity	biological_process
GO:0001812		0.0071134	positive regulation of type I hypersensitivity	biological_process
GO:0001816		0.0014324	cytokine production	biological_process
GO:0001817		0.0028419	regulation of cytokine production	biological_process
GO:0001894		0.0071134	tissue homeostasis	biological_process
GO:0002250		0.059205	adaptive immune response	biological_process
GO:0002252		0.013023	immune effector process	biological_process
GO:0002274		8.0938e-05	myeloid leukocyte activation	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0002367		0.002002	cytokine production during immune response	biological_process
GO:0002438		0.031401	acute inflammatory response to antigenic stimulus	biological_process
GO:0002440		0.00081624	production of molecular mediator of immune response	biological_process
GO:0002443		0.015369	leukocyte mediated immunity	biological_process
GO:0002444		0.0087171	myeloid leukocyte mediated immunity	biological_process
GO:0002445		0.013549	type II hypersensitivity	biological_process
GO:0002448		0.065241	mast cell mediated immunity	biological_process
GO:0002449		0.052343	lymphocyte mediated immunity	biological_process
GO:0002460		0.059205	adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	biological_process
GO:0002495		0.077624	antigen processing and presentation of peptide antigen via MHC class II	biological_process
GO:0002524		0.031401	hypersensitivity	biological_process
GO:0002526		0.00046634	acute inflammatory response	biological_process
GO:0002673		0.01243	regulation of acute inflammatory response	biological_process
GO:0002675		0.002002	positive regulation of acute inflammatory response	biological_process
GO:0002682		0.015369	regulation of immune system process	biological_process
GO:0002683		0.013549	negative regulation of immune system process	biological_process
GO:0002684		0.024698	positive regulation of immune system process	biological_process
GO:0002694		0.026112	regulation of leukocyte activation	biological_process
GO:0002695		0.031796	negative regulation of leukocyte activation	biological_process
GO:0002697		0.00093293	regulation of immune effector process	biological_process
GO:0002699		0.050993	positive regulation of immune effector process	biological_process
GO:0002700		0.00015552	regulation of production of molecular mediator of immune response	biological_process
GO:0002702		0.052735	positive regulation of production of molecular mediator of immune response	biological_process
GO:0002703		0.0017097	regulation of leukocyte mediated immunity	biological_process
GO:0002705		0.022911	positive regulation of leukocyte mediated immunity	biological_process

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regulation of leukocyte mediated immunity
positive regulation of leukocyte mediated immunity

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0002706		0.0090308	regulation of lymphocyte mediated immunity	biological_process
GO:0002708		0.022911	positive regulation of lymphocyte mediated immunity	biological_process
GO:0002712		0.00093293	regulation of B cell mediated immunity	biological_process
GO:0002714		0.0029588	positive regulation of B cell mediated immunity	biological_process
GO:0002718		0.0011475	regulation of cytokine production during immune response	biological_process
GO:0002819		0.010656	regulation of adaptive immune response	biological_process
GO:0002821		0.02061	positive regulation of adaptive immune response	biological_process
GO:0002822		0.010656	regulation of adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	biological_process
GO:0002824		0.02061	positive regulation of adaptive immune response based on somatic recombination of immune receptors built from immunoglobulin superfamily domains	biological_process
GO:0002861		0.077624	regulation of inflammatory response to antigenic stimulus	biological_process
GO:0002863		0.031401	positive regulation of inflammatory response to antigenic stimulus	biological_process
GO:0002864		0.031401	regulation of acute inflammatory response to antigenic stimulus	biological_process
GO:0002866		0.013549	positive regulation of acute inflammatory response to antigenic stimulus	biological_process
GO:0002883		0.031401	regulation of hypersensitivity	biological_process
GO:0002885		0.013549	positive regulation of hypersensitivity	biological_process
GO:0002886		0.0042953	regulation of myeloid leukocyte mediated immunity	biological_process
GO:0002888		0.013549	positive regulation of myeloid leukocyte mediated immunity	biological_process
GO:0002889		0.00093293	regulation of immunoglobulin mediated immune response	biological_process
GO:0002891		0.0029588	positive regulation of immunoglobulin mediated immune response	biological_process
GO:0002892		0.013549	64 regulation of type II hypersensitivity	biological_process
GO:0002894		0.013549	positive regulation of type II hypersensitivity	biological_process
GO:0003824		0.028456	catalytic activity	molecular_function
GO:0005215		0.018653	transporter activity	molecular_function
GO:0005319		0.00091731	lipid transporter activity	molecular_function
GO:0005324		0.013549	long-chain fatty acid transporter activity	molecular_function

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0005391		0.052735	sodium:potassium-exchanging ATPase activity	molecular_function
GO:0005504		0.089091	fatty acid binding	molecular_function
GO:0005506		0.083045	iron ion binding	molecular_function
GO:0005576		3.3213e-08	extracellular region	cellular_component
GO:0005615		8.0938e-05	extracellular space	cellular_component
GO:0005764		0.0059477	lysosome	cellular_component
GO:0005773		0.0091108	vacuole	cellular_component
GO:0005783		0.0030661	endoplasmic reticulum	cellular_component
GO:0005792		0.012203	microsome	cellular_component
GO:0005886		0.089793	plasma membrane	cellular_component
GO:0006066		0.00093293	cellular alcohol metabolic process	biological_process
GO:0006082		0.0023368	organic acid metabolic process	biological_process
GO:0006090		0.077624	pyruvate metabolic process	biological_process
GO:0006094		0.050993	gluconeogenesis	biological_process
GO:0006629		1.4629e-05	lipid metabolic process	biological_process
GO:0006631		0.0327	fatty acid metabolic process	biological_process
GO:0006643		0.077624	membrane lipid metabolic process	biological_process
GO:0006644		0.042714	phospholipid metabolic process	biological_process
GO:0006650		0.053642	glycerophospholipid metabolic process	biological_process
GO:0006656		0.0087171	phosphatidylcholine biosynthetic process	biological_process
GO:0006700		0.089793	C21-steroid hormone biosynthetic process	biological_process
GO:0006810		0.009203	transport	biological_process
GO:0006869		0.00081624	lipid transport	biological_process
GO:0006909		0.0062207	phagocytosis	biological_process
GO:0006911		0.052735	phagocytosis, engulfment	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0006915		0.017935	apoptosis	biological_process
GO:0006950		0.003137	response to stress	biological_process
GO:0006952		7.4448e-05	defense response	biological_process
GO:0006954		1.2698e-05	inflammatory response	biological_process
GO:0006955		0.051207	immune response	biological_process
GO:0006996		0.040046	organelle organization	biological_process
GO:0007154		0.0087312	cell communication	biological_process
GO:0007165		0.0076533	signal transduction	biological_process
GO:0007275		0.01243	multicellular organismal development	biological_process
GO:0007584		0.030377	response to nutrient	biological_process
GO:0007586		0.068809	digestion	biological_process
GO:0008191		0.04207	metalloendopeptidase inhibitor activity	molecular_function
GO:0008202		0.0071134	steroid metabolic process	biological_process
GO:0008219		0.022361	cell death	biological_process
GO:0008233		0.01817	peptidase activity	molecular_function
GO:0008289		0.063796	lipid binding	molecular_function
GO:0008610		0.03108	lipid biosynthetic process	biological_process
GO:0009056		0.0045609	catabolic process	biological_process
GO:0009058		0.0030923	biosynthetic process	biological_process
GO:0009266		0.068275	response to temperature stimulus	biological_process
GO:0009605		9.8153e-05	response to external stimulus	biological_process
GO:0009611		6.2026e-05	response to wounding	biological_process
GO:0009719		0.00081624	response to endogenous stimulus	biological_process
GO:0009725		0.00028224	response to hormone stimulus	biological_process
GO:0009888		0.088247	tissue development	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0009889		0.044421	regulation of biosynthetic process	biological_process
GO:0009894		0.086638	regulation of catabolic process	biological_process
GO:0009897		0.039858	external side of plasma membrane	cellular_component
GO:0009966		0.096366	regulation of signal transduction	biological_process
GO:0009986		0.0076533	cell surface	cellular_component
GO:0009991		0.033722	response to extracellular stimulus	biological_process
GO:0010033		0.00074869	response to organic substance	biological_process
GO:0010035		0.019462	response to inorganic substance	biological_process
GO:0010522		0.01243	regulation of calcium ion transport into cytosol	biological_process
GO:0010524		0.065241	positive regulation of calcium ion transport into cytosol	biological_process
GO:0010556		0.077624	regulation of macromolecule biosynthetic process	biological_process
GO:0010576		0.04207	metalloenzyme regulator activity	molecular_function
GO:0010646		0.09582	regulation of cell communication	biological_process
GO:0010769		0.050022	regulation of cell morphogenesis involved in differentiation	biological_process
GO:0010941		0.024302	regulation of cell death	biological_process
GO:0010959		0.083225	regulation of metal ion transport	biological_process
GO:0012501		0.018653	programmed cell death	biological_process
GO:0014070		0.013549	response to organic cyclic substance	biological_process
GO:0015245		0.022361	fatty acid transporter activity	molecular_function
GO:0015248		0.089793	sterol transporter activity	molecular_function
GO:0015908		0.089793	fatty acid transport	biological_process
GO:0015909		0.065241	long-chain fatty acid transport	biological_process
GO:0015914		0.015569	phospholipid transport	biological_process
GO:0016020		0.0059385	membrane	cellular_component
GO:0016042		0.036136	lipid catabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0016043		0.00020237	cellular component organization	biological_process
GO:0016064		0.013549	immunoglobulin mediated immune response	biological_process
GO:0016068		0.013549	type I hypersensitivity	biological_process
GO:0016125		0.056715	sterol metabolic process	biological_process
GO:0016265		0.022951	death	biological_process
GO:0016491		0.0071134	oxidoreductase activity	molecular_function
GO:0016614		0.065241	oxidoreductase activity, acting on CH-OH group of donors	molecular_function
GO:0016616		0.059205	oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor	molecular_function
GO:0016705		0.026112	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	molecular_function
GO:0016712		0.04675	oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen	molecular_function
GO:0016787		0.049722	hydrolase activity	molecular_function
GO:0017127		0.089793	cholesterol transporter activity	molecular_function
GO:0017147		0.031401	Wnt-protein binding	molecular_function
GO:0019216		0.056715	regulation of lipid metabolic process	biological_process
GO:0019222		0.0052684	regulation of metabolic process	biological_process
GO:0019319		0.068809	hexose biosynthetic process	biological_process
GO:0019724		0.013549	B cell mediated immunity	biological_process
GO:0019752		0.0023026	carboxylic acid metabolic process	biological_process
GO:0019763		0.022361	immunoglobulin receptor activity	molecular_function
GO:0019864		0.022361	IgG binding	molecular_function
GO:0019865		0.052735	immunoglobulin binding	molecular_function
GO:0019886		0.077624	antigen processing and presentation of exogenous peptide antigen via MHC class II	biological_process
GO:0019953		0.098929	68 sexual reproduction	biological_process
GO:0022414		0.086638	reproductive process	biological_process
GO:0022600		0.028988	digestive system process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0022607		0.074674	cellular component assembly	biological_process
GO:0022892		0.058427	substrate-specific transporter activity	molecular_function
GO:0030017		0.089421	sarcomere	cellular_component
GO:0030018		0.018653	Z disc	cellular_component
GO:0030100		0.027632	regulation of endocytosis	biological_process
GO:0030279		0.077624	negative regulation of ossification	biological_process
GO:0030282		0.007417	bone mineralization	biological_process
GO:0030336		0.059205	negative regulation of cell migration	biological_process
GO:0031012		0.013549	extracellular matrix	cellular_component
GO:0031099		0.0089813	regeneration	biological_process
GO:0031100		0.0096861	organ regeneration	biological_process
GO:0031214		0.010656	biomineral formation	biological_process
GO:0031323		0.002002	regulation of cellular metabolic process	biological_process
GO:0031326		0.042714	regulation of cellular biosynthetic process	biological_process
GO:0031347		0.0087171	regulation of defense response	biological_process
GO:0031349		0.042302	positive regulation of defense response	biological_process
GO:0031430		0.022361	M band	cellular_component
GO:0031667		0.024276	response to nutrient levels	biological_process
GO:0031672		0.052735	A band	cellular_component
GO:0031674		0.031152	I band	cellular_component
GO:0032101		0.009203	regulation of response to external stimulus	biological_process
GO:0032103		0.013549	positive regulation of response to external stimulus	biological_process
GO:0032403		0.086599	protein complex binding	molecular_function
GO:0032502		0.0014654	developmental process	biological_process
GO:0032640		0.077624	tumor necrosis factor production	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0032680		0.077624	regulation of tumor necrosis factor production	biological_process
GO:0032762		0.0071134	mast cell cytokine production	biological_process
GO:0032763		0.0071134	regulation of mast cell cytokine production	biological_process
GO:0032844		0.0024515	regulation of homeostatic process	biological_process
GO:0032846		0.0023026	positive regulation of homeostatic process	biological_process
GO:0033003		0.052735	regulation of mast cell activation	biological_process
GO:0033273		0.053642	response to vitamin	biological_process
GO:0033700		0.065241	phospholipid efflux	biological_process
GO:0034105		0.042302	positive regulation of tissue remodeling	biological_process
GO:0034405		0.089793	response to fluid shear stress	biological_process
GO:0035020		0.065241	regulation of Rac protein signal transduction	biological_process
GO:0042035		0.050993	regulation of cytokine biosynthetic process	biological_process
GO:0042089		0.074074	cytokine biosynthetic process	biological_process
GO:0042107		0.074074	cytokine metabolic process	biological_process
GO:0042127		0.089091	regulation of cell proliferation	biological_process
GO:0042221		1.2698e-05	response to chemical stimulus	biological_process
GO:0042493		9.1253e-05	response to drug	biological_process
GO:0042590		0.013549	antigen processing and presentation of exogenous peptide antigen via MHC class I	biological_process
GO:0042592		0.0023026	homeostatic process	biological_process
GO:0042598		0.013549	vesicular fraction	cellular_component
GO:0042981		0.022951	regulation of apoptosis	biological_process
GO:0042995		0.005855	cell projection	cellular_component
GO:0043005		0.091329	neuron projection	cellular_component
GO:0043066		0.041318	negative regulation of apoptosis	biological_process
GO:0043067		0.024091	regulation of programmed cell death	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0043069		0.041318	negative regulation of programmed cell death	biological_process
GO:0043169		0.071747	cation binding	molecular_function
GO:0043170		0.069775	macromolecule metabolic process	biological_process
GO:0043227		9.5471e-05	membrane-bounded organelle	cellular_component
GO:0043229		1.7021e-05	intracellular organelle	cellular_component
GO:0043231		9.3512e-05	intracellular membrane-bounded organelle	cellular_component
GO:0043269		0.094946	regulation of ion transport	biological_process
GO:0043270		0.093137	positive regulation of ion transport	biological_process
GO:0043299		0.089793	leukocyte degranulation	biological_process
GO:0043300		0.04207	regulation of leukocyte degranulation	biological_process
GO:0043303		0.065241	mast cell degranulation	biological_process
GO:0043304		0.04207	regulation of mast cell degranulation	biological_process
GO:0043434		0.052735	response to peptide hormone stimulus	biological_process
GO:0044237		0.00081624	cellular metabolic process	biological_process
GO:0044238		0.00027216	primary metabolic process	biological_process
GO:0044248		0.096366	cellular catabolic process	biological_process
GO:0044249		0.0025277	cellular biosynthetic process	biological_process
GO:0044255		6.2026e-05	cellular lipid metabolic process	biological_process
GO:0044262		0.072789	cellular carbohydrate metabolic process	biological_process
GO:0044421		3.0132e-06	extracellular region part	cellular_component
GO:0044425		0.0091108	membrane part	cellular_component
GO:0044444		8.0938e-05	cytoplasmic part	cellular_component
GO:0044459		0.024698	plasma membrane part	cellular_component
GO:0045321		0.086638	leukocyte activation	biological_process
GO:0045453		0.012985	bone resorption	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0045576		0.0015398	mast cell activation	biological_process
GO:0045780		0.04207	positive regulation of bone resorption	biological_process
GO:0045807		0.022911	positive regulation of endocytosis	biological_process
GO:0046364		0.089091	monosaccharide biosynthetic process	biological_process
GO:0046470		0.018182	phosphatidylcholine metabolic process	biological_process
GO:0046474		0.064695	glycerophospholipid biosynthetic process	biological_process
GO:0046486		0.039858	glycerolipid metabolic process	biological_process
GO:0046849		0.0049973	bone remodeling	biological_process
GO:0046852		0.028988	positive regulation of bone remodeling	biological_process
GO:0046914		0.070471	transition metal ion binding	molecular_function
GO:0048468		0.044421	cell development	biological_process
GO:0048513		0.0327	organ development	biological_process
GO:0048522		0.036074	positive regulation of cellular process	biological_process
GO:0048523		0.00057217	negative regulation of cellular process	biological_process
GO:0048545		0.035873	response to steroid hormone stimulus	biological_process
GO:0048551		0.04207	metalloenzyme inhibitor activity	molecular_function
GO:0048583		0.0034247	regulation of response to stimulus	biological_process
GO:0048584		0.02007	positive regulation of response to stimulus	biological_process
GO:0048585		0.047354	negative regulation of response to stimulus	biological_process
GO:0048679		0.022361	regulation of axon regeneration	biological_process
GO:0048731		0.013549	system development	biological_process
GO:0048771		0.0046586	tissue remodeling	biological_process
GO:0048856		0.019671	anatomical structure development	biological_process
GO:0048869		0.077624	cellular developmental process	biological_process
GO:0048871		0.0071134	multicellular organismal homeostasis	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0048872		0.016118	homeostasis of number of cells	biological_process
GO:0050727		0.017856	regulation of inflammatory response	biological_process
GO:0050729		0.018182	positive regulation of inflammatory response	biological_process
GO:0050764		0.00081624	regulation of phagocytosis	biological_process
GO:0050766		0.0071134	positive regulation of phagocytosis	biological_process
GO:0050776		0.00070822	regulation of immune response	biological_process
GO:0050778		0.013549	positive regulation of immune response	biological_process
GO:0050793		0.093261	regulation of developmental process	biological_process
GO:0050865		0.029924	regulation of cell activation	biological_process
GO:0050866		0.039858	negative regulation of cell activation	biological_process
GO:0050892		0.089793	intestinal absorption	biological_process
GO:0050896		0.00020981	response to stimulus	biological_process
GO:0050994		0.052735	regulation of lipid catabolic process	biological_process
GO:0051049		0.0054944	regulation of transport	biological_process
GO:0051050		0.0080584	positive regulation of transport	biological_process
GO:0051093		0.012203	negative regulation of developmental process	biological_process
GO:0051128		0.015369	regulation of cellular component organization	biological_process
GO:0051130		0.013549	positive regulation of cellular component organization	biological_process
GO:0051234		0.0096481	establishment of localization	biological_process
GO:0051271		0.077624	negative regulation of cell motion	biological_process
GO:0055066		0.074346	di-, tri-valent inorganic cation homeostasis	biological_process
GO:0055080		0.047726	cation homeostasis	biological_process
GO:0055114		0.0054944	oxidation reduction	biological_process
GO:0060249		0.04207	anatomical structure homeostasis	biological_process
GO:0060255		0.0030989	regulation of macromolecule metabolic process	biological_process

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GO ID	robust pval.	normal pval.	GO Name	process type
GO:0060284		0.042302	regulation of cell development	biological_process
GO:0060341		0.036136	regulation of cellular localization	biological_process
GO:0060348		0.022761	bone development	biological_process
GO:0060401		0.028988	cytosolic calcium ion transport	biological_process
GO:0060402		0.028988	calcium ion transport into cytosol	biological_process
GO:0060548		0.041318	negative regulation of cell death	biological_process
GO:0070011		0.039858	peptidase activity, acting on L-amino acid peptides	molecular_function
GO:0070570		0.022361	regulation of neuron projection regeneration	biological_process
GO:0080090		0.0045609	regulation of primary metabolic process	biological_process
GO:0080134		0.018653	regulation of response to stress	biological_process

Table 0.1: Table of GO terms and their p-values, shared by the methods or differing between methods