

	Category	p-val	Top 5.0%	Total	
GO:	Cellular Components	cell junction	0.002617	25	274
		synapse	0.002857	19	189
		presynaptic membrane	0.003066	4	13
		cytosolic small ribosomal subunit	0.004852	5	23
		synaptic vesicle	0.006483	7	45
		cytoplasmic vesicle	0.01187	15	157
		mitochondrion	0.01494	56	839
		nucleoplasm	0.02505	24	314
		synaptosome	0.02591	6	46
		cytoskeleton	0.02782	29	400
		heterogeneous nuclear ribonucleoprotein complex	0.02987	3	14
		nuclear pore	0.0368	7	63
GO:	Molecular Function	NADH dehydrogenase activity	0.0002805	5	13
		hydrolase activity, acting on ester bonds	0.001142	5	17
		aminoacyl-tRNA ligase activity	0.003063	4	13
		NADH dehydrogenase (ubiquinone) activity	0.005269	6	33
		FMN binding	0.01142	3	10
		double-stranded RNA binding	0.01153	5	28
		actin binding	0.01445	20	236
		caspase activator activity	0.01943	3	12
		4 iron, 4 sulfur cluster binding	0.02195	4	22
		DNA-dependent ATPase activity	0.02434	3	13
		ARF GTPase activator activity	0.02556	4	23
		protein binding	0.03313	227	4136
		DNA-directed DNA polymerase activity	0.03838	4	26
		guanyl nucleotide binding	0.04267	3	16
		protein phosphatase inhibitor activity	0.04267	3	16
PANTHER:	Pathways	Hedgehog signaling pathway	0.004198	6	32
		De novo pyrimidine deoxyribonucleotide biosynthesis	0.02396	3	13
		Parkinson disease	0.02499	9	86
		Ubiquitin proteasome pathway	0.02853	8	74
		Salvage pyrimidine ribonucleotides	0.02941	3	14
		p38 MAPK pathway	0.0326	6	49
		Circadian clock system	0.03545	3	15
PANTHER:	Molecular Function	Nucleic acid binding	0.003532	104	1632
		G-protein modulator	0.003887	26	298
		Ribosomal protein	0.004172	15	140
		Other G-protein modulator	0.00694	16	162
		Transporter	0.00697	34	439
		DNA glycosylase	0.01142	3	10
		DNA strand-pairing protein	0.01397	2	4
		Endodeoxyribonuclease	0.01573	4	20
		DNA-directed DNA polymerase	0.02195	4	22
		Helicase	0.02208	12	125
		Other transporter	0.0487	17	220

Supplementary Table 3