

Table 1: Ontology for the 50 most strongly negatively correlated genes in Prefrontal Cortex

GOBPID	Pvalue	OddsRatio	ExpCount	Count	Size	Term
GO:0099504	0.000001036	21.31	0.34	6	106	synaptic vesicle cycle
GO:0048489	0.000001672	19.54	0.37	6	115	synaptic vesicle transport
GO:0097480	0.000001672	19.54	0.37	6	115	establishment of synaptic vesicle localization
GO:0099003	0.000001672	19.54	0.37	6	115	vesicle-mediated transport in synapse
GO:0097479	0.000002145	18.68	0.38	6	120	synaptic vesicle localization
GO:0016079	0.000002423	27.58	0.22	5	68	synaptic vesicle exocytosis
GO:0017156	0.000011380	19.71	0.30	5	93	calcium ion regulated exocytosis
GO:0051656	0.000034954	7.47	1.28	8	400	establishment of organelle localization
GO:0007269	0.000040720	14.92	0.39	5	121	neurotransmitter secretion
GO:0099643	0.000040720	14.92	0.39	5	121	signal release from synapse
GO:0099531	0.000055315	13.95	0.41	5	129	presynaptic process involved in chemical synaptic transmission
GO:1990504	0.000060030	325.16	0.01	2	4	dense core granule exocytosis
GO:0051650	0.000082787	9.52	0.73	6	228	establishment of vesicle localization
GO:0010256	0.000091600	7.58	1.08	7	338	endomembrane system organization
GO:0051648	0.000109795	9.02	0.77	6	240	vesicle localization
GO:0001505	0.000162317	10.99	0.52	5	162	regulation of neurotransmitter levels
GO:0006836	0.000167055	10.92	0.52	5	163	neurotransmitter transport
GO:1990416	0.000277859	108.36	0.03	2	8	cellular response to brain-derived neurotrophic factor stimulus

GO:1903008	0.000278121	14.25	0.32	4	99	organelle disassembly
GO:0014049	0.000356518	92.87	0.03	2	9	positive regulation of glutamate secretion
GO:0051640	0.000363433	5.24	1.80	8	561	organelle localization
GO:0046928	0.000452400	22.62	0.15	3	47	regulation of neurotransmitter secretion
GO:0048172	0.000542459	72.22	0.04	2	11	regulation of short-term neuronal synaptic plasticity
GO:0016082	0.000649623	65.00	0.04	2	12	synaptic vesicle priming
GO:0051588	0.000798281	18.42	0.18	3	57	regulation of neurotransmitter transport
GO:0017158	0.000882961	17.76	0.19	3	59	regulation of calcium ion-dependent exocytosis
