

GeDiPNet Cluster 423 -- Enriched GO Terms (Biological Process)

GO term enrichment: Biological Process terms (gene2go, human/tax_id=9606 only), upper-tail hypergeometric test, fold enrichment = (overlap / cluster gene count) / (term gene count / universe size), Benjamini-Hochberg FDR-corrected. Top 15 terms per cluster by q-value. See scripts/build_cluster_go_enrichment.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-07 03:23:06. · Rows: 15 · Generated: 2026-10-07 11:57:19

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
monoatomic ion transport	GO:0006811	7	CHRNA2, CHRNA4, CHRN2, GABRG2, KCNT1, ATP6V0C, SLC4A10	667	12	16.34	4.847e-8	6.614e-6
synaptic transmission, cholinergic	GO:0007271	3	CHRNA2, CHRNA4, CHRN2	25	12	186.87	4.616e-7	4.367e-5
acetylcholine receptor signaling pathway	GO:0095500	3	CHRNA2, CHRNA4, CHRN2	28	12	166.85	6.568e-7	5.883e-5
membrane depolarization	GO:0051899	3	CHRNA2, CHRNA4, CHRN2	32	12	145.99	9.930e-7	8.249e-5
response to nicotine	GO:0035094	3	CHRNA2, CHRNA4, CHRN2	40	12	116.79	1.972e-6	1.425e-4
monoatomic ion transmembrane transport	GO:0034220	5	CHRNA2, CHRNA4, CHRN2, GABRG2, KCNT1	404	12	19.27	3.220e-6	2.115e-4
regulation of postsynaptic membrane potential	GO:0060078	3	CHRNA2, CHRN2, GABRG2	59	12	79.18	6.445e-6	3.674e-4
excitatory postsynaptic potential	GO:0060079	3	CHRNA2, CHRNA4, CHRN2	69	12	67.71	1.035e-5	5.352e-4
response to acetylcholine	GO:1905144	2	CHRNA2, CHRN2	8	12	389.31	1.056e-5	5.431e-4
chemical synaptic transmission	GO:0007268	4	CHRNA4, CHRN2, CRH, GABRG2	236	12	26.39	1.134e-5	5.737e-4
behavioral response to nicotine	GO:0035095	2	CHRNA4, CHRN2	9	12	346.06	1.357e-5	6.620e-4
regulation of dopamine secretion	GO:0014059	2	CHRNA4, CHRN2	15	12	207.63	3.951e-5	1.506e-3
locomotory exploration behavior	GO:0035641	2	CRH, SLC4A10	16	12	194.66	4.514e-5	1.669e-3
neuromuscular synaptic transmission	GO:0007274	2	CHRNA2, CHRNA4	31	12	100.47	1.740e-4	4.576e-3
response to cocaine	GO:0042220	2	CHRN2, CRH	35	12	88.99	2.223e-4	5.431e-3