

GeDiPNet Cluster 487 -- Enriched Pathways

Pathway enrichment: KEGG + Reactome, upper-tail hypergeometric test, Benjamini-Hochberg FDR-corrected. Fold enrichment = (overlap / cluster gene count) / (pathway gene count / universe size). Top 15 pathways per cluster by q-value. See [scripts/build_cluster_enrichment.php](#) on [gedipnet.bicnirrh.res.in](#). Data as of: 2026-10-20 03:30:09. · Rows: 15 · Generated: 2026-10-20 00:02:25

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cholinergic synapse	KEGG	3	GNAO1, CHRN2, GNB1	115	11	28.48	1.334e-4	2.381e-3
Dopaminergic synapse	KEGG	3	GNAO1, GNB1, SCN1A	132	11	24.81	2.008e-4	3.293e-3
G-protein activation	Reactome	2	GNAO1, GNB1	28	11	77.99	2.846e-4	4.329e-3
Cooperation of PDCL (PhLP1) and TRiC/CCT in G-protein beta folding	Reactome	2	GNAO1, GNB1	42	11	51.99	6.437e-4	8.122e-3
Phase 0 - rapid depolarisation	Reactome	2	SCN8A, SCN1A	44	11	49.63	7.065e-4	8.708e-3
Defective SLC2A1 causes GLUT1 deficiency syndrome 1 (GLUT1DS1)	Reactome	1	SLC2A1	1	11	1091.82	9.159e-4	1.060e-2
Ca2+ pathway	Reactome	2	GNAO1, GNB1	56	11	38.99	1.143e-3	1.255e-2
Lactose synthesis	Reactome	1	SLC2A1	3	11	363.94	2.745e-3	2.394e-2
GABAergic synapse	KEGG	2	GNAO1, GNB1	89	11	24.54	2.860e-3	2.463e-2
Morphine addiction	KEGG	2	GNAO1, GNB1	91	11	24.00	2.987e-3	2.538e-2
Circadian entrainment	KEGG	2	GNAO1, GNB1	97	11	22.51	3.386e-3	2.776e-2
Serotonergic synapse	KEGG	2	GNAO1, GNB1	115	11	18.99	4.725e-3	3.518e-2
Glutamatergic synapse	KEGG	2	GNAO1, GNB1	116	11	18.82	4.805e-3	3.559e-2
Relaxin signaling pathway	KEGG	2	GNAO1, GNB1	130	11	16.80	5.999e-3	4.105e-2
Highly sodium permeable postsynaptic acetylcholine nicotinic receptors	Reactome	1	CHRN2	7	11	155.97	6.395e-3	4.283e-2