

GeDiPNet Cluster 31 -- 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: 2026-10-08 03:30:07. · Rows: 15 · Generated: 2026-10-08 21:31:30

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Acetylcholine Neurotransmitter Release Cycle	Reactome	4	CHAT, SLC18A3, SLC5A7, SNAP25	17	63	44.86	1.555e-6	7.116e-5
Highly sodium permeable postsynaptic acetylcholine nicotinic receptors	Reactome	3	CHRNA, CHRNB, CHRNG	7	63	81.70	4.743e-6	1.853e-4
Biosynthesis of the N-glycan precursor (dolichol lipid-linked oligosaccharide, LLO) and transfer to a nascent protein	Reactome	3	ALG14, ALG2, DPAGT1	11	63	51.99	2.203e-5	6.592e-4
N-Glycan biosynthesis	KEGG	3	ALG14, ALG2, DPAGT1	55	63	10.40	2.972e-3	3.107e-2
Defective DPAGT1 causes DPAGT1-CDG (CDG-1j) and CMSTA2	Reactome	1	DPAGT1	1	63	190.63	5.246e-3	4.599e-2
Defective GFPT1 causes CMSTA1	Reactome	1	GFPT1	1	63	190.63	5.246e-3	4.599e-2
Imatinib-resistant PDGFR mutants	Reactome	1	PDGFRA	1	63	190.63	5.246e-3	4.599e-2
Sunitinib-resistant PDGFR mutants	Reactome	1	PDGFRA	1	63	190.63	5.246e-3	4.599e-2
Regorafenib-resistant PDGFR mutants	Reactome	1	PDGFRA	1	63	190.63	5.246e-3	4.599e-2
Sorafenib-resistant PDGFR mutants	Reactome	1	PDGFRA	1	63	190.63	5.246e-3	4.599e-2
PDGFR mutants bind TKIs	Reactome	1	PDGFRA	1	63	190.63	5.246e-3	4.599e-2
Defective SLC5A7 causes distal hereditary motor neuropathy 7A (HMN7A)	Reactome	1	SLC5A7	1	63	190.63	5.246e-3	4.599e-2
Defective SLC22A5 causes systemic primary carnitine deficiency (CDSP)	Reactome	1	SLC22A5	1	63	190.63	5.246e-3	4.599e-2
Defective ALG2 causes ALG2-CDG (CDG-1i)	Reactome	1	ALG2	1	63	190.63	5.246e-3	4.599e-2
Laminin interactions	Reactome	2	LAMA5, LAMB2	28	63	13.62	9.377e-3	6.738e-2