

GeDiPNet Cluster 160 -- 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: 2026-10-07 03:30:09. · Rows: 15 · Generated: 2026-10-07 20:41:12

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Phototransduction	KEGG	7	GNAT1, PDE6B, RHO, SLC24A1, GRK1, SAG, GUCY2D	29	38	76.29	2.625e-12	5.301e-10
The canonical retinoid cycle in rods (twilight vision)	Reactome	6	RHO, ABCA4, RBP3, RDH5, RLBP1, LRAT	20	38	94.82	2.489e-11	4.067e-9
Inactivation, recovery and regulation of the phototransduction cascade	Reactome	6	GNAT1, PDE6B, RHO, GRK1, SAG, GUCY2D	33	38	57.46	6.905e-10	8.053e-8
Retinoid cycle disease events	Reactome	4	ABCA4, RDH5, RLBP1, LRAT	13	38	97.25	5.968e-8	4.182e-6
Activation of the phototransduction cascade	Reactome	3	GNAT1, PDE6B, RHO	9	38	105.35	2.423e-6	1.040e-4
The retinoid cycle in cones (daylight vision)	Reactome	2	RBP3, RLBP1	8	38	79.01	2.697e-4	4.941e-3
MPS IIIC - Sanfilippo syndrome C	Reactome	1	HGSNAT	1	38	316.05	3.164e-3	3.196e-2
Defective SLC24A1 causes congenital stationary night blindness 1D (CSNB1D)	Reactome	1	SLC24A1	1	38	316.05	3.164e-3	3.196e-2
G-protein activation	Reactome	2	GNAT1, GNB3	28	38	22.58	3.499e-3	3.425e-2
TRP channels	Reactome	2	TRPM1, TRPV3	28	38	22.58	3.499e-3	3.425e-2
G alpha (i) signalling events	Reactome	4	GNAT1, GNB3, GRM6, RHO	249	38	5.08	7.657e-3	5.799e-2
Cooperation of PDCL (PhLP1) and TRIC/CCT in G-protein beta folding	Reactome	2	GNAT1, GNB3	42	38	15.05	7.750e-3	5.846e-2
Ca2+ pathway	Reactome	2	GNB3, PDE6B	56	38	11.29	1.348e-2	8.161e-2
Retinol metabolism	KEGG	2	RDH5, LRAT	68	38	9.30	1.948e-2	1.014e-1
G alpha (12/13) signalling events	Reactome	2	GNB3, ARHGEF18	80	38	7.90	2.638e-2	1.200e-1