

GeDiPNet Cluster 263 -- 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 19:19:31

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Melanin biosynthesis	Reactome	3	SLC45A2, TYR, OCA2	5	81	88.96	2.927e-6	1.216e-4
Thromboxane signalling through TP receptor	Reactome	3	GNA11, GNAQ, GNB5	24	81	18.53	5.401e-4	8.452e-3
ADP signalling through P2Y purinoceptor 1	Reactome	3	GNA11, GNAQ, GNB5	25	81	17.79	6.108e-4	9.322e-3
Interleukin-4 and Interleukin-13 signaling	Reactome	5	IL13, IL23R, IRF4, TYK2, TP53	108	81	6.86	7.981e-4	1.149e-2
GnRH secretion	KEGG	4	GNA11, GNAQ, KCNJ3, PLCB4	65	81	9.12	9.513e-4	1.307e-2
G alpha (q) signalling events	Reactome	6	TACR1, CYSLTR2, GNA11, GNAQ, GNB5, PLCB4	172	81	5.17	1.056e-3	1.414e-2
Cholinergic synapse	KEGG	5	GNA11, GNAQ, GNB5, KCNJ3, PLCB4	115	81	6.45	1.059e-3	1.417e-2
Glutamatergic synapse	KEGG	5	GRM3, GNAQ, GNB5, KCNJ3, PLCB4	116	81	6.39	1.101e-3	1.458e-2
Fatty Acids bound to GPR40 (FFAR1) regulate insulin secretion	Reactome	2	GNA11, GNAQ	8	81	37.07	1.225e-3	1.580e-2
Thrombin signalling through proteinase activated receptors (PARs)	Reactome	3	GNA11, GNAQ, GNB5	32	81	13.90	1.273e-3	1.625e-2
Interleukin-23 signaling	Reactome	2	IL23R, TYK2	9	81	32.95	1.568e-3	1.909e-2
Acetylcholine regulates insulin secretion	Reactome	2	GNA11, GNAQ	9	81	32.95	1.568e-3	1.909e-2
Circadian entrainment	KEGG	4	GNAQ, GNB5, KCNJ3, PLCB4	97	81	6.11	4.138e-3	3.865e-2
Human cytomegalovirus infection	KEGG	6	TAP2, TP53, GNA11, GNAQ, GNB5, PLCB4	226	81	3.94	4.168e-3	3.880e-2
Melanogenesis	KEGG	4	MC1R, TYR, GNAQ, PLCB4	101	81	5.87	4.778e-3	4.256e-2