

GeDiPNet Cluster 162 -- 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 14:35:12

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Renin secretion	KEGG	3	EDN1, GNAI3, PLCB4	69	17	30.72	1.165e-4	2.559e-3
PLC beta mediated events	Reactome	2	GNAI3, PLCB4	12	17	117.75	1.234e-4	2.686e-3
Melanogenesis	KEGG	3	EDN1, GNAI3, PLCB4	101	17	20.98	3.603e-4	6.302e-3
Parathyroid hormone synthesis, secretion and action	KEGG	3	GNAI3, PLCB4, RUNX2	115	17	18.43	5.273e-4	8.464e-3
Relaxin signaling pathway	KEGG	3	EDN1, GNAI3, PLCB4	130	17	16.30	7.541e-4	1.121e-2
Estrogen signaling pathway	KEGG	3	GNAI3, PLCB4, HSPA1A	139	17	15.25	9.160e-4	1.299e-2
Signaling pathways regulating pluripotency of stem cells	KEGG	3	PAX6, FGFR2, TBX3	144	17	14.72	1.015e-3	1.405e-2
Signaling by FGFR2 amplification mutants	Reactome	1	FGFR2	1	17	706.47	1.415e-3	1.811e-2
Signaling by FGFR2 fusions	Reactome	1	FGFR2	1	17	706.47	1.415e-3	1.811e-2
Viral RNP Complexes in the Host Cell Nucleus	Reactome	1	HSPA1A	2	17	353.24	2.829e-3	3.003e-2
Rap1 signaling pathway	KEGG	3	GNAI3, PLCB4, FGFR2	211	17	10.04	3.031e-3	3.139e-2
Long-term depression	KEGG	2	GNAI3, PLCB4	60	17	23.55	3.181e-3	3.250e-2
GnRH secretion	KEGG	2	PLCB4, KCNN3	65	17	21.74	3.722e-3	3.643e-2
RUNX2 regulates osteoblast differentiation	Reactome	1	RUNX2	3	17	235.49	4.241e-3	3.983e-2
Gastric acid secretion	KEGG	2	GNAI3, PLCB4	76	17	18.59	5.054e-3	4.484e-2