

GeDiPNet Cluster 19 -- 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](https://gedipnet.bicnirrh.res.in/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 01:35:18

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Intraflagellar transport	Reactome	16	DYNC2H1, DYNC2LI1, IFT140, IFT172, IFT52, TTC21B, WDR19, WDR35, IFT80, IFT122, IFT43, IFT27	54	71	50.12	6.462e-24	8.962e-21
Hedgehog 'off' state	Reactome	11	DYNC2H1, IFT140, IFT172, IFT52, INTU, TTC21B, WDR19, WDR35, IFT122, FUZ, IFT88	56	71	33.23	1.658e-14	4.599e-12
Activation of SMO	Reactome	3	GRK2, EVC2, EVC	18	71	28.19	1.516e-4	3.161e-3
Noncanonical activation of NOTCH3	Reactome	2	PSEN1, PSEN2	8	71	42.29	9.429e-4	1.331e-2
Detoxification of Reactive Oxygen Species	Reactome	3	CAT, SOD1, SOD2	34	71	14.93	1.039e-3	1.430e-2
Regulated proteolysis of p75NTR	Reactome	2	PSEN1, PSEN2	11	71	30.76	1.831e-3	2.182e-2
Vasopressin-regulated water reabsorption	KEGG	3	DYNC2H1, DYNC2LI1, DYNC1H1	44	71	11.53	2.204e-3	2.504e-2
Anchoring of the basal body to the plasma membrane	Reactome	4	B9D1, C2CD3, DYNC1H1, KIF24	98	71	6.90	2.666e-3	2.884e-2
Anchoring fibril formation	Reactome	2	BMP1, COL1A1	15	71	22.55	3.443e-3	3.441e-2
NRIF signals cell death from the nucleus	Reactome	2	PSEN1, PSEN2	15	71	22.55	3.443e-3	3.441e-2
Hedgehog signaling pathway	KEGG	3	GRK2, EVC2, EVC	56	71	9.06	4.386e-3	4.077e-2
Crosslinking of collagen fibrils	Reactome	2	BMP1, COL1A1	18	71	18.79	4.959e-3	4.437e-2
NOTCH3 Activation and Transmission of Signal to the Nucleus	Reactome	2	PSEN1, PSEN2	19	71	17.81	5.522e-3	4.768e-2
Longevity regulating pathway - multiple species	KEGG	3	CAT, SOD1, SOD2	62	71	8.18	5.835e-3	4.954e-2
Biosynthesis of EPA-derived SPMs	Reactome	1	PTGS2	1	71	169.15	5.912e-3	5.003e-2