

GeDiPNet Cluster 158 -- 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 12:16:44

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Proteoglycans in cancer	KEGG	18	WNT1, ESR1, FGF2, MMP2, ANK1, IGF2, TGFB2, IGF1, FZD7, ITGA2, ITGB3, WNT16	204	222	4.77	4.133e-8	2.984e-6
Wnt signaling pathway	KEGG	15	AXIN1, RSPO3, SFRP4, TCF7L2, WNT1, FZD7, LRP5, NFATC1, SOST, WNT16, NFATC2, RSPO2	174	222	4.66	7.782e-7	3.898e-5
RUNX1 regulates transcription of genes involved in WNT signaling	Reactome	4	AXIN1, RSPO3, ESR1, CBFB	6	222	36.07	1.656e-6	7.515e-5
Breast cancer	KEGG	13	AXIN1, TCF7L2, WNT1, ESR1, FGF2, JAG1, IGF1, FZD7, LRP5, WNT16, MTOR, WNT2	148	222	4.75	3.501e-6	1.438e-4
Gastric cancer	KEGG	13	AXIN1, TCF7L2, WNT1, FGF2, TGFB2, TGFB2, FZD7, LRP5, WNT16, FGFR2, MTOR, WNT2	150	222	4.69	4.065e-6	1.632e-4
Pathways in cancer	KEGG	26	ABL1, AXIN1, TCF7L2, WNT1, BMP2, CDKN2A, ESR1, FGF2, JAG1, MMP2, TGFB2, CHUK	533	222	2.64	5.812e-6	2.185e-4
Signaling pathways regulating pluripotency of stem cells	KEGG	12	AXIN1, WNT1, FGF2, BMPR1B, DLX5, ZIC3, IGF1, FZD7, WNT16, FGFR2, WNT2, WNT7B	144	222	4.51	1.433e-5	4.594e-4
Hepatocellular carcinoma	KEGG	13	AXIN1, TCF7L2, WNT1, CDKN2A, TGFB2, IGF2, TGFB2, FZD7, LRP5, WNT16, MTOR, WNT2	170	222	4.14	1.594e-5	5.026e-4
Basal cell carcinoma	KEGG	8	AXIN1, TCF7L2, WNT1, BMP2, FZD7, WNT16, WNT2, WNT7B	63	222	6.87	1.941e-5	5.953e-4
Hippo signaling pathway	KEGG	12	AXIN1, TCF7L2, WNT1, BMP2, TGFB2, BMPR1B, TGFB2, FZD7, WNT16, LIMD1, WNT2, WNT7B	157	222	4.13	3.409e-5	9.442e-4
Human papillomavirus infection	KEGG	18	AXIN1, HLA-B, TCF7L2, WNT1, JAG1, CHUK, FZD7, ITGA2, ITGB3, WNT16, IRF1, ITGA11	333	222	2.92	4.614e-5	1.213e-3
RUNX1 regulates estrogen receptor mediated transcription	Reactome	3	AXIN1, ESR1, CBFB	6	222	27.05	1.196e-4	2.614e-3
VEGFA-VEGFR2 Pathway	Reactome	7	PTK2B, ITGB3, ELMO1, KDR, PTK2, PXN, WASF3	62	222	6.11	1.391e-4	2.954e-3
Endocrine resistance	KEGG	8	CDKN2A, ESR1, JAG1, MMP2, IGF1, ADCY4, MTOR, PTK2	99	222	4.37	4.857e-4	7.952e-3
Cushing syndrome	KEGG	10	AXIN1, TCF7L2, WNT1, AHR, CDKN2A, FZD7, WNT16, ADCY4, WNT2, WNT7B	155	222	3.49	6.046e-4	9.424e-3