

GeDiPNet Cluster 28 -- 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 16:57:09

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Defective B3GALT causes Peters-plus syndrome (PpS)	Reactome	5	ADAMTSL2, ADAMTS2, ADAMTSL4, ADAMTS17, ADAMTS10	37	36	45.08	7.372e-8	5.008e-6
O-glycosylation of TSR domain-containing proteins	Reactome	5	ADAMTSL2, ADAMTS2, ADAMTSL4, ADAMTS17, ADAMTS10	38	36	43.90	8.471e-8	5.667e-6
Molecules associated with elastic fibres	Reactome	4	GDF5, FBN1, LTBP3, LTBP2	38	36	35.12	4.667e-6	1.797e-4
TGF-beta signaling pathway	KEGG	4	BMPR1B, GDF5, FBN1, BMPR2	108	36	12.36	2.919e-4	5.247e-3
Hippo signaling pathway	KEGG	4	BMPR1B, GDF5, WNT7B, BMPR2	157	36	8.50	1.195e-3	1.548e-2
Abnormal conversion of 2-oxoglutarate to 2-hydroxyglutarate	Reactome	1	IDH1	1	36	333.61	2.998e-3	3.068e-2
NADPH regeneration	Reactome	1	IDH1	1	36	333.61	2.998e-3	3.068e-2
Signaling by BMP	Reactome	2	BMPR1B, BMPR2	28	36	23.83	3.144e-3	3.184e-2
Hormone signaling	KEGG	4	NPR2, BMPR1B, PRKG2, PTH1R	219	36	6.09	4.011e-3	3.775e-2
Signaling pathways regulating pluripotency of stem cells	KEGG	3	BMPR1B, WNT7B, BMPR2	144	36	6.95	9.026e-3	6.451e-2
Assembly of collagen fibrils and other multimeric structures	Reactome	2	COL10A1, MMP13	51	36	13.08	1.016e-2	6.930e-2
Collagen degradation	Reactome	2	COL10A1, MMP13	52	36	12.83	1.054e-2	7.100e-2
cGMP-PKG signaling pathway	KEGG	3	NPR2, PRKG2, KCNU1	166	36	6.03	1.326e-2	8.074e-2
Glutathione metabolism	KEGG	2	LANCL1, IDH1	59	36	11.31	1.343e-2	8.139e-2
STING mediated induction of host immune responses	Reactome	1	DDX41	5	36	66.72	1.490e-2	8.659e-2