

GeDiPNet Cluster 11 -- 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 09:42:31

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cytoskeleton in muscle cells	KEGG	43	CAPN3, DAG1, SGCA, SGCB, SGCD, SGCG, TCAP, TTN, PLEC, COL6A2, LAMA2, LMNA	232	216	10.31	1.001e-31	3.001e-28
Striated Muscle Contraction	Reactome	16	TCAP, TTN, NEB, MYL1, TNNT3, TPM2, ACTA1, TNNC2, MYBPC1, TPM3, ACTN2, DES	36	216	24.71	3.648e-19	2.224e-16
Mannose type O-glycan biosynthesis	KEGG	12	CRPPA, FKRPF, POMT1, FKTN, POMT2, POMGNT1, B3GALNT2, LARGE1, POMK, B4GAT1, POMGNT2, RXYLT1	23	216	29.01	9.586e-16	3.355e-13
O-linked glycosylation	Reactome	9	DAG1, POMT1, POMT2, POMGNT1, B3GALNT2, LARGE1, POMK, B4GAT1, POMGNT2	10	216	50.04	1.642e-15	5.538e-13
Dilated cardiomyopathy	KEGG	19	CAV3, DAG1, SGCA, SGCB, SGCD, SGCG, TTN, LAMA2, LMNA, ITGA7, CACNA1S, TPM2	105	216	10.06	2.962e-14	7.881e-12
Hypertrophic cardiomyopathy	KEGG	18	CAV3, DAG1, SGCA, SGCB, SGCD, SGCG, TTN, LAMA2, LMNA, ITGA7, CACNA1S, TPM2	99	216	10.11	1.327e-13	3.145e-11
Arrhythmogenic right ventricular cardiomyopathy	KEGG	14	CAV3, DAG1, SGCA, SGCB, SGCD, SGCG, LAMA2, LMNA, ITGA7, CACNA1S, ACTN2, DES	86	216	9.05	3.521e-10	4.228e-8
Motor proteins	KEGG	17	MYL1, TNNT3, TPM2, ACTA1, MYH7, MYO15B, TNNC2, TUBA4A, TPM3, MYH2, DYNC1H1, TNNI2	194	216	4.87	7.396e-8	5.029e-6
Viral myocarditis	KEGG	9	CAV3, DAG1, SGCA, SGCB, SGCD, SGCG, LAMA2, MYH7, DMD	70	216	7.15	4.188e-6	1.674e-4
Defective POMT2 causes MDDGA2, MDDGB2 and MDDGC2	Reactome	3	DAG1, POMT1, POMT2	3	216	55.60	5.738e-6	2.164e-4
Defective POMT1 causes MDDGA1, MDDGB1 and MDDGC1	Reactome	3	DAG1, POMT1, POMT2	3	216	55.60	5.738e-6	2.164e-4
NCAM1 interactions	Reactome	5	COL6A2, COL6A6, COL6A1, COL6A3, COL4A1	21	216	13.24	2.890e-5	8.243e-4
Assembly of collagen fibrils and other multimeric structures	Reactome	7	PLEC, COL6A2, COL6A6, COL6A1, COL6A3, CTSB, COL4A1	51	216	7.63	3.265e-5	9.091e-4
ECM-receptor interaction	KEGG	8	DAG1, COL6A2, LAMA2, ITGA7, COL6A6, COL6A1, COL6A3, COL4A1	89	216	5.00	1.946e-4	3.863e-3
Signaling by PDGF	Reactome	5	COL6A2, COL6A6, COL6A1, COL6A3, COL4A1	33	216	8.42	2.828e-4	5.196e-3