

GeDiPNet Cluster 309 -- 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: 2026-10-07 23:57:24

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Hypertrophic cardiomyopathy	KEGG	3	MYH7, TTN, CAV3	99	15	24.26	2.301e-4	4.406e-3
Dilated cardiomyopathy	KEGG	3	MYH7, TTN, CAV3	105	15	22.88	2.737e-4	5.053e-3
Smooth Muscle Contraction	Reactome	2	DYSF, CAV3	34	15	47.10	7.982e-4	1.172e-2
Defective GNE causes sialuria, Nonaka myopathy and inclusion body myopathy 2	Reactome	1	GNE	1	15	800.67	1.249e-3	1.645e-2
Cytoskeleton in muscle cells	KEGG	3	MYH7, TTN, FLNC	232	15	10.35	2.727e-3	2.929e-2
Viral myocarditis	KEGG	2	MYH7, CAV3	70	15	22.88	3.348e-3	3.365e-2
Mitophagy - animal	KEGG	2	VCP, SQSTM1	105	15	15.25	7.381e-3	5.776e-2
Amyotrophic lateral sclerosis	KEGG	3	VCP, MATR3, SQSTM1	368	15	6.53	9.870e-3	6.949e-2
Pexophagy	Reactome	1	SQSTM1	10	15	80.07	1.242e-2	7.999e-2
Fluid shear stress and atherosclerosis	KEGG	2	SQSTM1, CAV3	141	15	11.36	1.300e-2	8.214e-2
HSF1 activation	Reactome	1	VCP	12	15	66.72	1.489e-2	8.912e-2
Cell-extracellular matrix interactions	Reactome	1	FLNC	12	15	66.72	1.489e-2	8.912e-2
Josephin domain DUBs	Reactome	1	VCP	12	15	66.72	1.489e-2	8.912e-2
p75NTR recruits signalling complexes	Reactome	1	SQSTM1	13	15	61.59	1.612e-2	9.396e-2
NF-κB is activated and signals survival	Reactome	1	SQSTM1	13	15	61.59	1.612e-2	9.396e-2