

GeDiPNet Cluster 104 -- 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 17:49:13

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Hypertrophic cardiomyopathy	KEGG	6	MYBPC3, MYH7, TTN, EDN1, SGCZ, RYR2	99	29	25.10	1.097e-7	7.098e-6
Dilated cardiomyopathy	KEGG	5	MYBPC3, MYH7, TTN, SGCZ, RYR2	105	29	19.72	4.664e-6	1.796e-4
Cytoskeleton in muscle cells	KEGG	6	FHL1, FLNC, MYBPC3, MYH7, TTN, SGCZ	232	29	10.71	1.594e-5	4.956e-4
Role of phospholipids in phagocytosis	Reactome	2	PLD1, PRKCE	21	29	39.44	1.149e-3	1.507e-2
Cardiac muscle contraction	KEGG	3	MYH7, CASQ2, RYR2	87	29	14.28	1.171e-3	1.526e-2
cAMP signaling pathway	KEGG	4	EDN1, NPPA, PLD1, RYR2	226	29	7.33	2.004e-3	2.284e-2
Defective CYP2R1 causes Rickets vitamin D-dependent 1B (VDDR1B)	Reactome	1	CYP2R1	1	29	414.14	2.415e-3	2.621e-2
Striated Muscle Contraction	Reactome	2	MYBPC3, TTN	36	29	23.01	3.371e-3	3.347e-2
Vascular smooth muscle contraction	KEGG	3	EDN1, NPPA, PRKCE	134	29	9.27	4.014e-3	3.776e-2
DAG and IP3 signaling	Reactome	1	PRKCE	2	29	207.07	4.824e-3	4.284e-2
Adrenergic signaling in cardiomyocytes	KEGG	3	MYH7, KCNQ1, RYR2	154	29	8.07	5.917e-3	4.894e-2
cGMP-PKG signaling pathway	KEGG	3	MYH7, NPPA, PRKCE	166	29	7.48	7.279e-3	5.613e-2
Ion homeostasis	Reactome	2	CASQ2, RYR2	54	29	15.34	7.454e-3	5.688e-2
Histamine receptors	Reactome	1	HRH2	4	29	103.53	9.625e-3	6.709e-2
NGF processing	Reactome	1	PCSK6	4	29	103.53	9.625e-3	6.709e-2