

GeDiPNet Cluster 377 -- 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 01:37:13

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	66	ANKRD1, ACTC1, ACTN2, ANK2, CSRP3, DMD, DSC2, DSG2, DSP, DTNA, EMD, FHL2	232	539	6.34	2.249e-35	8.319e-32
Hypertrophic cardiomyopathy	KEGG	35	ACTC1, AGT, CACNA1C, CAV3, DMD, DTNA, EDN1, EMD, IL6, ITGB1, LMNA, MYBPC3	99	539	7.88	1.103e-22	1.275e-19
Dilated cardiomyopathy	KEGG	34	ACTC1, ADCY5, AGT, CACNA1C, CAV3, DMD, DTNA, EMD, ITGB1, LMNA, MYBPC3, MYH6	105	539	7.22	1.177e-20	8.821e-18
Striated Muscle Contraction	Reactome	20	ACTC1, ACTN2, DMD, MYBPC3, MYH6, MYL2, MYL3, MYL4, TCAP, TNNC1, TNNI3, TNNT1	36	539	12.38	2.912e-18	1.568e-15
Arrhythmogenic right ventricular cardiomyopathy	KEGG	26	ACTN2, CACNA1C, CAV3, DMD, DSC2, DSG2, DSP, DTNA, EMD, ITGB1, JUP, LMNA	86	539	6.74	2.883e-15	9.300e-13
Adrenergic signaling in cardiomyocytes	KEGG	33	ACTC1, ADCY5, ADRB2, AGT, AKT1, CACNA1C, KCNE1, MAPK1, MAPK11, MAPK14, MAPK3, MYH6	154	539	4.77	3.466e-14	9.135e-12
Proteoglycans in cancer	KEGG	34	AKT1, ANK2, CAV3, FAS, FASLG, HGF, ITGB1, MAPK1, MAPK11, MAPK14, MAPK3, STAT3	204	539	3.71	2.636e-11	4.115e-9
Endometrial cancer	KEGG	18	AKT1, MAPK1, MAPK3, TP53, CDKN1A, DDB2, AXIN2, BRAF, CTNNA3, CTNNB1, EGFR, GSK3B	59	539	6.80	4.801e-11	7.004e-9
cGMP-PKG signaling pathway	KEGG	30	ADCY5, ADRB2, AKT1, BDKRB2, CACNA1C, MAPK1, MAPK3, MYH6, MYH7, MYLK2, NOS3, NPPB	166	539	4.03	5.040e-11	7.320e-9
Oxytocin signaling pathway	KEGG	28	ADCY5, CACNA1C, MAPK1, MAPK3, MYLK2, NOS3, OXTR, PRKAA2, PRKAG2, PTGS2, RYR2, CDKN1A	154	539	4.05	1.939e-10	2.470e-8
Lipid and atherosclerosis	KEGG	33	AKT1, CYP2C9, FAS, FASLG, HSPD1, IL1B, IL6, MAP3K5, MAPK1, MAPK11, MAPK14, MAPK3	216	539	3.40	5.524e-10	6.280e-8
Cardiac muscle contraction	KEGG	20	ACTC1, CACNA1C, CASQ2, COX1, MYH6, MYH7, MYL2, MYL3, MYL4, RYR2, TNNC1, TNNI3	87	539	5.12	1.108e-9	1.176e-7
Diabetic cardiomyopathy	KEGG	31	AGT, AKT1, COX1, MAPK11, MAPK14, NDUFS2, NDUFV2, NOS3, PARP1, PDK2, PLN, RYR2	205	539	3.37	2.404e-9	2.364e-7
AGE-RAGE signaling pathway in diabetic complications	KEGG	21	AGT, AKT1, EDN1, IL1A, IL1B, IL6, MAPK1, MAPK11, MAPK14, MAPK3, NOS3, PRKCE	101	539	4.63	3.008e-9	2.902e-7
VEGF signaling pathway	KEGG	16	AKT1, MAPK1, MAPK11, MAPK14, MAPK3, NOS3, PTGS2, PPP3R1, PRKCA, PRKCB, RAC1, RAF1	60	539	5.94	5.188e-9	4.711e-7