

GeDiPNet Cluster 372 -- 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 10:43:16

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
cGMP-PKG signaling pathway	KEGG	23	ADRA1B, ADRA2A, ADRA2C, AKT1, ATP2A2, GATA4, ITPR2, MYH6, NOS3, NPPA, NPPB, NPR1	166	127	13.10	1.205e-19	8.929e-17
Proteoglycans in cancer	KEGG	21	AKT1, CAV1, CAV3, FGF2, HIF1A, IGF1, ITPR2, PRKCA, PRKCB, ROCK2, SRC, STAT3	204	127	9.73	2.573e-15	9.139e-13
AGE-RAGE signaling pathway in diabetic complications	KEGG	16	AGT, AKT1, EDN1, IL1B, NOS3, PRKCA, PRKCB, PRKCZ, STAT3, TNF, IL6, PIK3CA	101	127	14.98	6.993e-15	2.285e-12
Pathways in cancer	KEGG	30	AGT, AKT1, CCND2, EDN1, FGF2, GSK3B, HDAC2, HIF1A, HMOX1, IGF1, PLD1, PLD2	533	127	5.32	2.466e-14	7.020e-12
Diabetic cardiomyopathy	KEGG	20	AGT, AKT1, ATP2A2, CPT1B, GSK3B, NOS3, PPARA, PRKCA, PRKCB, PRKCZ, REN, SLC2A4	205	127	9.23	3.546e-14	9.841e-12
Hormone signaling	KEGG	20	ADRA1B, ADRA2A, ADRA2C, AGT, IGF1, LEP, NPPA, NPPB, NPR1, POMC, SRC, STAT3	219	127	8.64	1.255e-13	3.121e-11
cAMP signaling pathway	KEGG	20	AKT1, ATP2A2, EDN1, NPPA, NPR1, PLD1, PLD2, POMC, PPARA, ROCK2, ADORA1, ADORA2A	226	127	8.37	2.280e-13	5.439e-11
Insulin resistance	KEGG	15	AGT, AKT1, CPT1B, GSK3B, NOS3, PPARA, PRKAA2, PRKCB, PRKCZ, SLC2A4, STAT3, TNF	109	127	13.01	4.377e-13	1.005e-10
Fluid shear stress and atherosclerosis	KEGG	16	AKT1, CAV1, CAV3, EDN1, HMOX1, IL1B, NOS3, PRKAA2, PRKCZ, SRC, TNF, CTNNB1	141	127	10.73	1.482e-12	3.156e-10
Hypertrophic cardiomyopathy	KEGG	14	AGT, ATP2A2, CAV3, DMD, EDN1, IGF1, MYBPC3, MYH6, PRKAA2, TNF, TNNT2, IL6	99	127	13.37	1.877e-12	3.911e-10
Thyroid hormone signaling pathway	KEGG	15	AKT1, ATP2A2, GATA4, GSK3B, HDAC2, HIF1A, MYH6, PRKCA, PRKCB, SRC, ATP1A3, CTNNB1	122	127	11.63	2.366e-12	4.821e-10
Dilated cardiomyopathy	KEGG	14	AGT, ATP2A2, CAV3, DMD, IGF1, MYBPC3, MYH6, TNF, TNNT2, ADRB1, ADCY5, PLN	105	127	12.61	4.297e-12	8.238e-10
HIF-1 signaling pathway	KEGG	14	AKT1, EDN1, HIF1A, HMOX1, IGF1, NOS3, NPPA, PRKCA, PRKCB, STAT3, IL6, INS	110	127	12.04	8.230e-12	1.507e-9
Lipid and atherosclerosis	KEGG	18	AKT1, CYP1A1, GSK3B, IL18, IL1B, NOS3, PRKCA, ROCK2, SOD2, SRC, STAT3, TNF	216	127	7.88	1.104e-11	1.958e-9
Alcoholic liver disease	KEGG	15	AKT1, CPT1B, CYP2E1, GSK3B, IL1B, PPARA, PRKAA2, TNF, ALDH2, CTNNB1, FAS, IL6	144	127	9.85	2.700e-11	4.391e-9