

GeDiPNet Cluster 182 -- 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 14:40:30

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
AGE-RAGE signaling pathway in diabetic complications	KEGG	27	BCL2, CCND1, CYBB, FN1, IL6, PLCG1, RAC1, TGFB1, AGT, CCL2, COL4A1, NOS3	101	612	5.25	5.272e-13	1.203e-10
HIF-1 signaling pathway	KEGG	22	BCL2, CYBB, HK1, IL6, INS, INSR, PLCG1, TFRC, TLR4, CDKN1A, NOS3, RELA	110	612	3.92	2.768e-8	2.142e-6
PI3K-Akt signaling pathway	KEGG	42	BCL2, CCND1, CCND2, CSF1R, FGFR3, FN1, IL6, INS, INSR, IRS1, ITGA2, PDGFC	361	612	2.28	4.452e-7	2.420e-5
Malaria	KEGG	13	IL6, TGFB1, THBS2, TLR4, CCL2, HBB, HGF, IFNG, GYPA, ICAM1, IL10, THBS1	50	612	5.10	8.525e-7	4.255e-5
Type I diabetes mellitus	KEGG	12	HLA-C, HLA-DQA1, HLA-DQA2, HLA-DQB1, INS, HLA-DRB1, IFNG, GAD2, HLA-B, LTA, PTPRN2, TNF	44	612	5.35	1.293e-6	6.106e-5
Interleukin-4 and Interleukin-13 signaling	Reactome	19	BCL2, CCND1, FN1, IL6, POMC, PTGS2, TGFB1, FGF2, CCL2, CDKN1A, VEGFA, JAK1	108	612	3.45	1.928e-6	8.526e-5
Type II diabetes mellitus	KEGG	12	ABCC8, ADIPOQ, GCK, HK1, INS, INSR, IRS1, KCNJ11, PRKCE, PIK3R1, TNF, HKDC1	47	612	5.01	2.782e-6	1.167e-4
Maturity onset diabetes of the young	KEGG	9	GCK, HHEX, HNF1A, HNF1B, HNF4A, INS, PAX4, PAX6, RFX6	26	612	6.79	3.125e-6	1.287e-4
Human T-cell leukemia virus 1 infection	KEGG	29	ADCY5, CALR, CCND1, CCND2, CDKN2C, CRTC1, ETS1, HLA-C, HLA-DQA1, HLA-DQA2, HLA-DQB1, IL6	224	612	2.54	3.420e-6	1.384e-4
Leishmaniasis	KEGG	15	CYBB, HLA-DQA1, HLA-DQA2, HLA-DQB1, NCF1, PTGS2, TGFB1, TLR4, RELA, HLA-DRB1, JAK1, IFNG	78	612	3.77	7.506e-6	2.636e-4
Synthesis, secretion, and deacylation of Ghrelin	Reactome	7	CRHR2, INS, LEP, GHRL, GH1, IGF1, PCSK1	19	612	7.23	2.538e-5	7.247e-4
Proteoglycans in cancer	KEGG	25	ANK1, CCND1, FN1, ITGA2, PLCG1, RAC1, TGFB1, TLR4, FGF2, CDKN1A, KDR, VEGFA	204	612	2.40	4.112e-5	1.090e-3
EGFR tyrosine kinase inhibitor resistance	KEGG	14	BCL2, FGFR3, IL6, PDGFC, PLCG1, FGF2, AXL, GAS6, KDR, VEGFA, JAK1, HGF	80	612	3.43	4.568e-5	1.186e-3
Efferocytosis	KEGG	21	ANO4, BCAR1, CALR, CEBPB, CPT1A, PLA2G6, PPARG, PTGS2, RAB7B, RAC1, SIRT1, TGFB1	157	612	2.62	4.659e-5	1.204e-3
Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)	Reactome	18	APOB, APOE, CP, FN1, IL6, MEN1, PCSK9, WFS1, ALB, GAS6, KLK1, AMTN	125	612	2.83	6.057e-5	1.493e-3