

GeDiPNet Cluster 366 -- 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 16:46:40

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
PI3K-Akt signaling pathway	KEGG	15	IFNB1, LAMC3, PPP2R2B, TSC1, TSC2, EPO, GSK3B, IGF2, LAMB2, MET, VEGFA, BDNF	361	111	4.50	1.091e-6	5.273e-5
Cocaine addiction	KEGG	6	CDK5R1, TH, DRD2, FOSB, MAOA, BDNF	49	111	13.25	5.507e-6	2.053e-4
Hormone signaling	KEGG	11	AGT, CRH, DRD2, DRD3, EPO, IGF2, LEPR, OXTR, SMAD4, VIP, INS	219	111	5.43	5.522e-6	2.055e-4
Human papillomavirus infection	KEGG	13	IFNB1, IRF3, LAMC3, PPP2R2B, TBK1, TICAM1, TSC1, TSC2, GSK3B, LAMB2, PSEN1, PTGS2	333	111	4.22	1.178e-5	3.842e-4
Dopaminergic synapse	KEGG	8	PPP2R2B, TH, COMT, DRD2, DRD3, GSK3B, MAOA, CACNA1C	132	111	6.56	2.942e-5	8.201e-4
Herpes simplex virus 1 infection	KEGG	9	IFNB1, IFNG, IRF3, TBK1, TICAM1, TSC1, TSC2, EIF2S1, NECTIN2	182	111	5.35	4.633e-5	1.200e-3
Kaposi sarcoma-associated herpesvirus infection	KEGG	9	IFNB1, IRF3, TBK1, TICAM1, GSK3B, PTGS2, HIF1A, VEGFA, FGF2	196	111	4.97	8.227e-5	1.915e-3
Enzymatic degradation of Dopamine by monoamine oxidase	Reactome	2	COMT, MAOA	2	111	108.20	8.466e-5	1.958e-3
Metabolism of serotonin	Reactome	2	MAOA, ALDH2	2	111	108.20	8.466e-5	1.958e-3
HDL remodeling	Reactome	3	ALB, APOE, APOC3	10	111	32.46	8.795e-5	2.022e-3
Serotonergic synapse	KEGG	7	APP, HTR2A, MAOA, PTGS2, SLC6A4, CACNA1C, CYP2D6	115	111	6.59	9.186e-5	2.093e-3
Malaria	KEGG	5	IFNG, TGFB1, MET, CR1, CSF3	50	111	10.82	9.372e-5	2.128e-3
Hepatitis C	KEGG	8	IFNB1, IFNG, IRF3, PPP2R2B, TBK1, TICAM1, EIF2S1, GSK3B	159	111	5.44	1.102e-4	2.427e-3
Pathways in cancer	KEGG	15	IFNG, LAMC3, TGFB1, AGT, EPO, GSK3B, IGF2, LAMB2, MET, PTGS2, SMAD4, HIF1A	533	111	3.04	1.110e-4	2.441e-3
Regulation of gene expression by Hypoxia-inducible Factor	Reactome	3	EPO, HIF1A, VEGFA	11	111	29.51	1.201e-4	2.597e-3