

GeDiPNet Cluster 334 -- 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 07:26:21

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Prostate cancer	KEGG	7	PDGFB, GSTP1, MAPK1, NFKBIA, KLK3, SRD5A2, PDGFD	98	28	30.64	1.995e-9	2.048e-7
NF-kappa B signaling pathway	KEGG	5	CD40, CD40LG, CFLAR, ICAM1, NFKBIA	105	28	20.43	3.887e-6	1.548e-4
Growth hormone receptor signaling	Reactome	3	MAPK1, PTPN1, PRL	14	28	91.91	4.061e-6	1.598e-4
Cytokine-cytokine receptor interaction	KEGG	7	TNFRSF8, TNFSF8, CD40, CD40LG, CSF3, IFNA2, PRL	298	28	10.08	4.083e-6	1.607e-4
Malaria	KEGG	4	CD40, CD40LG, CSF3, ICAM1	50	28	34.31	5.056e-6	1.916e-4
Lipid and atherosclerosis	KEGG	6	CD40, CD40LG, ICAM1, IFNA2, MAPK1, NFKBIA	216	28	11.91	8.544e-6	2.944e-4
PI3K-Akt signaling pathway	KEGG	7	FGF7, PDGFB, CSF3, IFNA2, MAPK1, PRL, PDGFD	361	28	8.32	1.435e-5	4.522e-4
Melanoma	KEGG	4	FGF7, PDGFB, MAPK1, PDGFD	73	28	23.50	2.303e-5	6.704e-4
Kaposi sarcoma-associated herpesvirus infection	KEGG	5	PDGFB, ICAM1, IFNA2, MAPK1, NFKBIA	196	28	10.94	7.966e-5	1.862e-3
Toll-like receptor signaling pathway	KEGG	4	CD40, IFNA2, MAPK1, NFKBIA	109	28	15.74	1.111e-4	2.444e-3
Rap1 signaling pathway	KEGG	5	FPR1, FGF7, PDGFB, MAPK1, PDGFD	211	28	10.16	1.128e-4	2.473e-3
Toxoplasmosis	KEGG	4	CD40, CD40LG, MAPK1, NFKBIA	112	28	15.32	1.235e-4	2.657e-3
TNF signaling pathway	KEGG	4	CFLAR, ICAM1, MAPK1, NFKBIA	119	28	14.42	1.561e-4	3.207e-3
Pathways in cancer	KEGG	7	FGF7, PDGFB, GSTP1, IFNA2, MAPK1, NFKBIA, KLK3	533	28	5.63	1.709e-4	3.455e-3
Interleukin-10 signaling	Reactome	3	FPR1, CSF3, ICAM1	47	28	27.38	1.718e-4	3.468e-3