

GeDiPNet Cluster 18 -- 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 18:15:43

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Transcriptional misregulation in cancer	KEGG	18	TP53, BAK1, CEBPA, CEBPE, CSF2, ERG, FLT3, NFKB1, ATM, PBX1, TCF3, ETV6	198	162	6.74	1.618e-10	2.114e-8
Cellular senescence	KEGG	16	TP53, CDKN2A, NFKB1, TRAF3IP2, ATM, CCND1, HLA-C, MYC, MTOR, RB1, CDKN2B, ATR	157	162	7.56	3.269e-10	3.955e-8
Chronic myeloid leukemia	KEGG	11	TP53, BAK1, CDKN2A, NFKB1, CCND1, ABL1, BCR, MYC, RB1, BAX, MDM2	77	162	10.59	5.934e-9	5.344e-7
Human cytomegalovirus infection	KEGG	16	TP53, BAK1, CCL2, CDKN2A, NFKB1, CCND1, PDGFRA, HLA-C, MYC, MTOR, RB1, BAX	226	162	5.25	6.394e-8	4.426e-6
Glioma	KEGG	10	TP53, BAK1, CDKN2A, CCND1, PDGFRA, MTOR, RB1, IGF1, BAX, MDM2	76	162	9.75	6.704e-8	4.615e-6
Stabilization of p53	Reactome	5	TP53, CDKN2A, ATM, CHEK2, MDM2	11	162	33.70	1.817e-7	1.105e-5
Pathways in cancer	KEGG	24	TP53, BAK1, CDKN2A, CEBPA, FLT3, IL7, NFKB1, STAT4, STAT6, CCND1, PDGFRA, ABL1	533	162	3.34	1.891e-7	1.143e-5
Human T-cell leukemia virus 1 infection	KEGG	15	TP53, CDKN2A, CSF2, NFKB1, ATM, CCND1, TCF3, HLA-C, MYC, RB1, CDKN2B, ATR	224	162	4.96	3.469e-7	1.946e-5
Melanoma	KEGG	9	TP53, BAK1, CDKN2A, CCND1, PDGFRA, RB1, IGF1, BAX, MDM2	73	162	9.14	5.491e-7	2.897e-5
p53 signaling pathway	KEGG	9	TP53, CDKN2A, ATM, CCND1, ATR, IGF1, BAX, CHEK2, MDM2	75	162	8.90	6.942e-7	3.543e-5
Pancreatic cancer	KEGG	9	TP53, BAK1, CDKN2A, NFKB1, CCND1, MTOR, RB1, BAX, VEGFA	77	162	8.67	8.714e-7	4.308e-5
Bladder cancer	KEGG	7	TP53, CDKN2A, CCND1, MYC, RB1, MDM2, VEGFA	41	162	12.66	1.091e-6	5.245e-5
Kaposi sarcoma-associated herpesvirus infection	KEGG	13	TP53, BAK1, CSF2, NFKB1, CCND1, HLA-C, MYC, MTOR, RB1, MAP1LC3B2, BAX, GNB1	196	162	4.92	2.417e-6	1.048e-4
Acute myeloid leukemia	KEGG	8	CEBPA, CEBPE, CSF2, FLT3, NFKB1, CCND1, MYC, MTOR	68	162	8.72	3.428e-6	1.412e-4
Small cell lung cancer	KEGG	9	TP53, BAK1, NFKB1, CCND1, MYC, RB1, CDKN2B, BAX, FHIT	93	162	7.17	4.323e-6	1.717e-4