

GeDiPNet Cluster 56 -- 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 17:26:54

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Pathways in cancer	KEGG	119	BAD, BCL2L11, BRCA2, CASP8, ESR1, FGFR2, MECOM, MMP9, TERT, TP53, ETS1, AKT1	533	1350	1.99	5.218e-14	1.331e-11
Human T-cell leukemia virus 1 infection	KEGG	63	HLA-B, HLA-DQB1, HLA-DRA, MAP3K1, TERT, TP53, ETS1, AKT1, ATM, BCL2L1, BUB1B, CCNA1	224	1350	2.50	2.159e-12	4.166e-10
Gastric cancer	KEGG	47	FGFR2, TERT, TP53, ABCB1, AKT1, APC, AXIN1, BRAF, CCND1, CCNE1, CDKN1B, CDKN2B	150	1350	2.79	2.360e-11	3.730e-9
Prostate cancer	KEGG	36	BAD, FGFR2, MMP9, TP53, AKT1, AR, BRAF, CCND1, CCNE1, CDKN1B, CTNNB1, E2F1	98	1350	3.27	3.268e-11	5.036e-9
Colorectal cancer	KEGG	33	BAD, BCL2L11, TP53, AKT1, APC, AXIN1, BIRC5, BRAF, CCND1, CTNNB1, EGF, EGFR	87	1350	3.37	7.974e-11	1.119e-8
EGFR tyrosine kinase inhibitor resistance	KEGG	31	BAD, BCL2L11, FGFR2, AKT1, BCL2L1, BRAF, EGF, EGFR, HGF, HRAS, IGF1, IGF1R	80	1350	3.45	1.581e-10	2.074e-8
Cell cycle	KEGG	46	TP53, ATM, AURKB, BUB1, BUB1B, CCNA1, CCNB1, CCNB2, CCND1, CCNE1, CDC20, CDC25C	158	1350	2.59	5.987e-10	6.744e-8
Endocrine resistance	KEGG	34	BAD, ESR1, MMP9, TP53, AKT1, BRAF, CCND1, CDK4, CDKN1B, CDKN2A, CDKN2C, E2F1	99	1350	3.06	9.238e-10	9.962e-8
Melanoma	KEGG	28	BAD, TP53, AKT1, BRAF, CCND1, CDK4, CDKN2A, E2F1, EGF, EGFR, FGF19, FGF3	73	1350	3.41	1.601e-9	1.635e-7
Breast cancer	KEGG	43	BRCA2, ESR1, TP53, AKT1, APC, AXIN1, BRAF, CCND1, CDK4, CTNNB1, E2F1, EGF	148	1350	2.58	2.328e-9	2.304e-7
PIP3 activates AKT signaling	Reactome	31	ESR1, FGFR2, AKT1, EGF, EGFR, EREG, FGF19, FGF3, FGF4, FGFR1, HGF, IL1RAP	93	1350	2.97	1.146e-8	9.554e-7
Constitutive Signaling by Aberrant PI3K in Cancer	Reactome	27	ESR1, FGFR2, EGF, EGFR, EREG, FGF19, FGF3, FGF4, FGFR1, HGF, IRS1, IRS2	75	1350	3.20	1.559e-8	1.252e-6
Bladder cancer	KEGG	19	MMP9, TP53, BRAF, CCND1, CDK4, CDKN2A, CXCL8, E2F1, EGF, EGFR, HRAS, KRAS	41	1350	4.12	1.748e-8	1.390e-6
Hepatocellular carcinoma	KEGG	45	BAD, TERT, TP53, ACTB, AKT1, APC, ARID1A, ARID1B, ARID2, AXIN1, BCL2L1, BRAF	170	1350	2.35	2.391e-8	1.843e-6
Pancreatic cancer	KEGG	27	BAD, BRCA2, TP53, AKT1, BCL2L1, BRAF, CCND1, CDK4, CDKN2A, E2F1, EGF, EGFR	77	1350	3.12	2.977e-8	2.238e-6