

GeDiPNet Cluster 298 -- 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 20:36:00

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Hepatocellular carcinoma	KEGG	7	BRAF, PTEN, SMARCE1, SMARCB1, AKT1, PIK3CA, TERT	170	25	19.78	3.902e-8	2.837e-6
Melanoma	KEGG	5	BRAF, PDGFB, PTEN, AKT1, PIK3CA	73	25	32.90	3.490e-7	1.957e-5
Glioma	KEGG	5	BRAF, PDGFB, PTEN, AKT1, PIK3CA	76	25	31.61	4.274e-7	2.329e-5
Breast cancer	KEGG	6	BRAF, PTEN, AKT1, HES1, PGR, PIK3CA	148	25	19.48	4.619e-7	2.498e-5
EGFR tyrosine kinase inhibitor resistance	KEGG	5	BRAF, PDGFB, PTEN, AKT1, PIK3CA	80	25	30.03	5.531e-7	2.914e-5
Pathways in cancer	KEGG	9	BRAF, SMO, PDGFB, PTEN, SUFU, AKT1, HES1, PIK3CA, TERT	533	25	8.11	6.744e-7	3.453e-5
Prostate cancer	KEGG	5	BRAF, PDGFB, PTEN, AKT1, PIK3CA	98	25	24.51	1.524e-6	6.998e-5
Endometrial cancer	KEGG	4	BRAF, PTEN, AKT1, PIK3CA	59	25	32.57	6.152e-6	2.288e-4
Renal cell carcinoma	KEGG	4	BRAF, PDGFB, AKT1, PIK3CA	70	25	27.45	1.220e-5	4.028e-4
Focal adhesion	KEGG	5	BRAF, PDGFB, PTEN, AKT1, PIK3CA	203	25	11.83	5.298e-5	1.357e-3
Proteoglycans in cancer	KEGG	5	BRAF, SMO, AKT1, CTSL, PIK3CA	204	25	11.77	5.423e-5	1.382e-3
Progesterone-mediated oocyte maturation	KEGG	4	BRAF, AKT1, PGR, PIK3CA	110	25	17.47	7.266e-5	1.746e-3
Negative regulation of the PI3K/AKT network	Reactome	2	PTEN, AKT1	8	25	120.10	1.156e-4	2.545e-3
FoxO signaling pathway	KEGG	4	BRAF, PTEN, AKT1, PIK3CA	133	25	14.45	1.518e-4	3.164e-3
Estrogen signaling pathway	KEGG	4	AKT1, GREB1, PGR, PIK3CA	139	25	13.82	1.799e-4	3.634e-3