

GeDiPNet Cluster 143 -- 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 02:48:12

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Melanoma	KEGG	4	BRAF, EGFR, KRAS, MITF	73	28	23.50	2.303e-5	6.704e-4
EGFR tyrosine kinase inhibitor resistance	KEGG	4	BRAF, EGFR, KRAS, IL6	80	28	21.45	3.309e-5	9.069e-4
Endocrine resistance	KEGG	4	BRAF, EGFR, KRAS, NOTCH4	99	28	17.33	7.641e-5	1.800e-3
MAP2K and MAPK activation	Reactome	3	BRAF, IL17RD, KRAS	40	28	32.17	1.058e-4	2.356e-3
Bladder cancer	KEGG	3	BRAF, EGFR, KRAS	41	28	31.39	1.140e-4	2.489e-3
Pathways in cancer	KEGG	7	BRAF, EGFR, GLI2, KRAS, NOTCH4, IL6, MITF	533	28	5.63	1.709e-4	3.455e-3
EGFR Transactivation by Gastrin	Reactome	2	EGFR, KRAS	9	28	95.32	1.868e-4	3.718e-3
FoxO signaling pathway	KEGG	4	BRAF, EGFR, KRAS, IL6	133	28	12.90	2.395e-4	4.503e-3
Endometrial cancer	KEGG	3	BRAF, EGFR, KRAS	59	28	21.81	3.381e-4	5.888e-3
Breast cancer	KEGG	4	BRAF, EGFR, KRAS, NOTCH4	148	28	11.59	3.601e-4	6.183e-3
GRB2 events in EGFR signaling	Reactome	2	EGFR, KRAS	13	28	65.99	4.024e-4	6.742e-3
SHC1 events in EGFR signaling	Reactome	2	EGFR, KRAS	14	28	61.28	4.688e-4	7.579e-3
Constitutive Signaling by EGFRvIII	Reactome	2	EGFR, KRAS	15	28	57.19	5.401e-4	8.452e-3
MAPK signaling pathway	KEGG	5	BRAF, CACNA1H, EGFR, KRAS, MAP4K4	299	28	7.17	5.677e-4	8.792e-3
Signaling by ERBB2 ECD mutants	Reactome	2	EGFR, KRAS	16	28	53.62	6.164e-4	9.389e-3