

GeDiPNet Cluster 374 -- 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: 2026-10-09 03:30:08. · Rows: 15 · Generated: 2026-10-09 19:06:58

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inhibition of Signaling by Overexpressed EGFR	Reactome	3	BTC, AREG, EREG	8	35	128.68	1.257e-6	5.725e-5
EGFR interacts with phospholipase C-gamma	Reactome	3	BTC, AREG, EREG	9	35	114.38	1.882e-6	8.017e-5
Signaling by EGFR	Reactome	3	BTC, AREG, EREG	11	35	93.58	3.682e-6	1.428e-4
GRB2 events in EGFR signaling	Reactome	3	BTC, AREG, EREG	13	35	79.19	6.357e-6	2.220e-4
SHC1 events in EGFR signaling	Reactome	3	BTC, AREG, EREG	14	35	73.53	8.074e-6	2.712e-4
GAB1 signalosome	Reactome	3	BTC, AREG, EREG	17	35	60.55	1.499e-5	4.577e-4
Estrogen-dependent nuclear events downstream of ESR-membrane signaling	Reactome	3	BTC, AREG, EREG	23	35	44.76	3.858e-5	1.005e-3
EGFR downregulation	Reactome	3	BTC, AREG, EREG	31	35	33.21	9.637e-5	2.122e-3
ErbB signaling pathway	KEGG	4	BTC, CBLB, AREG, EREG	86	35	15.96	1.083e-4	2.332e-3
PI3K events in ERBB4 signaling	Reactome	2	BTC, EREG	10	35	68.63	3.659e-4	6.174e-3
Signaling by ERBB4	Reactome	2	BTC, EREG	11	35	62.39	4.464e-4	7.211e-3
Extra-nuclear estrogen signaling	Reactome	3	BTC, AREG, EREG	58	35	17.75	6.269e-4	9.411e-3
ERBB2 Activates PTK6 Signaling	Reactome	2	BTC, EREG	13	35	52.79	6.307e-4	9.455e-3
SHC1 events in ERBB4 signaling	Reactome	2	BTC, EREG	14	35	49.02	7.345e-4	1.061e-2
GRB2 events in ERBB2 signaling	Reactome	2	BTC, EREG	14	35	49.02	7.345e-4	1.061e-2