

GeDiPNet Cluster 187 -- 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 06:32:09

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Chemical carcinogenesis - reactive oxygen species	KEGG	5	AHR, CAT, GSTM1, KEAP1, NFE2L2	227	12	22.04	1.641e-6	7.452e-5
Formation of the cornified envelope	Reactome	4	KRT1, KRT10, KRT16, KRT9	130	12	30.79	6.066e-6	2.209e-4
Fluid shear stress and atherosclerosis	KEGG	4	GSTM1, KEAP1, NFE2L2, TP53	141	12	28.39	8.377e-6	2.892e-4
Keratinization	Reactome	4	KRT1, KRT10, KRT16, KRT9	152	12	26.34	1.128e-5	3.709e-4
Hepatocellular carcinoma	KEGG	4	GSTM1, KEAP1, NFE2L2, TP53	170	12	23.55	1.756e-5	5.373e-4
Staphylococcus aureus infection	KEGG	3	KRT10, KRT16, KRT9	99	12	30.33	1.133e-4	2.480e-3
Estrogen signaling pathway	KEGG	3	KRT10, KRT16, KRT9	139	12	21.60	3.092e-4	5.495e-3
Pathways in cancer	KEGG	4	GSTM1, KEAP1, NFE2L2, TP53	533	12	7.51	1.428e-3	1.775e-2
Events associated with phagocytolytic activity of PMN cells	Reactome	1	MPO	2	12	500.42	1.997e-3	2.278e-2
Regulation of TP53 Expression	Reactome	1	TP53	2	12	500.42	1.997e-3	2.278e-2
Parkinson disease	KEGG	3	KEAP1, NFE2L2, TP53	268	12	11.20	2.082e-3	2.349e-2
Platinum drug resistance	KEGG	2	GSTM1, TP53	75	12	26.69	2.439e-3	2.643e-2
Drug metabolism - other enzymes	KEGG	2	GSTM1, MPO	81	12	24.71	2.838e-3	2.955e-2
Longevity regulating pathway	KEGG	2	CAT, TP53	90	12	22.24	3.491e-3	3.425e-2
Transcriptional activation of cell cycle inhibitor p21	Reactome	1	TP53	4	12	250.21	3.991e-3	3.767e-2