

GeDiPNet Cluster 125 -- 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 21:01:16

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Complement and coagulation cascades	KEGG	4	MBL2, PLAT, PLAUI, F7	88	33	16.54	9.362e-5	2.152e-3
Interleukin-4 and Interleukin-13 signaling	Reactome	4	IL6, MMP9, NOS2, TNF	108	33	13.48	2.070e-4	4.041e-3
TNF signaling pathway	KEGG	4	DAB2IP, IL6, MMP9, TNF	119	33	12.23	3.003e-4	5.444e-3
Eicosanoids	Reactome	2	CYP4F3, CYP4F8	12	33	60.66	4.750e-4	7.837e-3
Dissolution of Fibrin Clot	Reactome	2	PLAT, PLAUI	13	33	55.99	5.604e-4	8.879e-3
Fluid shear stress and atherosclerosis	KEGG	4	PLAT, GSTT1, MMP9, TNF	141	33	10.32	5.718e-4	9.023e-3
Fatty acids	Reactome	2	CYP4F3, CYP4F8	15	33	48.53	7.518e-4	1.118e-2
Pertussis	KEGG	3	IL6, NOS2, TNF	78	33	14.00	1.250e-3	1.646e-2
Synthesis of Leukotrienes (LT) and Eoxins (EX)	Reactome	2	CYP4F3, CYP4F8	20	33	36.39	1.349e-3	1.744e-2
RHO GTPases activate PAKs	Reactome	2	MYL9, MYLK	23	33	31.65	1.787e-3	2.146e-2
Transcriptional misregulation in cancer	KEGG	4	IL6, PLAT, PLAUI, MMP9	198	33	7.35	2.017e-3	2.338e-2
IL-17 signaling pathway	KEGG	3	IL6, MMP9, TNF	94	33	11.62	2.137e-3	2.444e-2
Prostate cancer	KEGG	3	PLAT, PLAUI, MMP9	98	33	11.14	2.407e-3	2.669e-2
Hypertrophic cardiomyopathy	KEGG	3	IL6, TNF, TNNT2	99	33	11.03	2.478e-3	2.732e-2
Lipid and atherosclerosis	KEGG	4	CYP1A1, IL6, MMP9, TNF	216	33	6.74	2.766e-3	2.960e-2