

GeDiPNet Cluster 135 -- 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 08:36:56

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
AGE-RAGE signaling pathway in diabetic complications	KEGG	22	AGT, CXCL8, EGR1, ICAM1, IL6, MAPK13, MAPK14, RELA, SERPINE1, TNF, VCAM1, COL1A1	101	151	17.32	1.299e-21	1.354e-18
Lipid and atherosclerosis	KEGG	25	CXCL2, CXCL8, CYP2B6, ICAM1, IL6, LY96, MAPK13, MAPK14, NFE2L2, RELA, TLR2, TNF	216	151	9.21	1.898e-17	9.750e-15
Chagas disease	KEGG	19	CXCL8, IL6, MAPK13, MAPK14, NOS2, RELA, SERPINE1, TLR2, TNF, FOS, IL1B, JUN	103	151	14.67	2.444e-17	1.227e-14
Pertussis	KEGG	17	CXCL8, IL6, LY96, MAPK13, MAPK14, NOS2, RELA, TNF, FOS, IL1B, JUN, MAPK1	78	151	17.33	6.384e-17	2.988e-14
Toll-like receptor signaling pathway	KEGG	18	CXCL8, IL6, LY96, MAPK13, MAPK14, RELA, TLR2, TNF, FOS, IL1B, JUN, MAP3K7	109	151	13.13	1.384e-15	5.216e-13
IL-17 signaling pathway	KEGG	17	CCL7, CXCL2, CXCL8, IL6, MAPK13, MAPK14, RELA, TNF, FOS, IL1B, JUN, MAP3K7	94	151	14.38	1.808e-15	6.699e-13
Relaxin signaling pathway	KEGG	18	ADCY9, MAPK13, MAPK14, NOS2, RELA, ACTA2, COL1A1, COL3A1, FOS, JUN, MAPK1, MAPK3	130	151	11.01	3.396e-14	9.471e-12
Leishmaniasis	KEGG	15	MAPK13, MAPK14, NOS2, RELA, TLR2, TNF, FOS, IL1B, JUN, MAP3K7, MAPK1, MAPK3	78	151	15.30	3.394e-14	9.471e-12
TNF signaling pathway	KEGG	17	CXCL2, ICAM1, IL6, MAPK13, MAPK14, RELA, TNF, VCAM1, FOS, IL1B, JUN, MAP3K7	119	151	11.36	1.072e-13	2.716e-11
Fluid shear stress and atherosclerosis	KEGG	18	ICAM1, MAPK13, MAPK14, NFE2L2, NQO1, RELA, TNF, VCAM1, FOS, IL1B, JUN, KEAP1	141	151	10.15	1.442e-13	3.554e-11
Hepatitis B	KEGG	19	CXCL8, IL6, MAPK13, MAPK14, RELA, SLC10A1, TLR2, TNF, FOS, JUN, MAP3K7, MAPK1	163	151	9.27	1.566e-13	3.827e-11
Activation of the AP-1 family of transcription factors	Reactome	7	MAPK14, FOS, JUN, MAPK1, MAPK3, MAPK8, MAPK9	10	151	55.68	5.023e-12	9.515e-10
Bile secretion	KEGG	14	ABCB11, ABCB4, ABCC2, ABCC3, ADCY9, CYP7A1, NR1H4, SLC10A1, SLC51A, SLC51B, SLC01A2, ABCB1	90	151	12.37	5.339e-12	1.010e-9
Toxoplasmosis	KEGG	15	LY96, MAPK13, MAPK14, NOS2, RELA, TLR2, TNF, MAP3K7, MAPK1, MAPK3, MAPK8, MAPK9	112	151	10.65	8.473e-12	1.537e-9
Yersinia infection	KEGG	16	CXCL8, IL6, MAPK13, MAPK14, RELA, TNF, FOS, IL1B, JUN, MAP3K7, MAPK1, MAPK3	138	151	9.22	1.573e-11	2.690e-9