

GeDiPNet Cluster 401 -- 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 08:32:42

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Tuberculosis	KEGG	5	NOD2, IFNG, TLR9, MAPK14, NOS2	181	18	18.43	5.376e-6	2.009e-4
Chagas disease	KEGG	4	IFNG, TLR9, MAPK14, NOS2	103	18	25.91	1.423e-5	4.494e-4
Toxoplasmosis	KEGG	4	IFNG, MAPK14, NOS2, PPIF	112	18	23.83	1.983e-5	5.942e-4
Fluid shear stress and atherosclerosis	KEGG	4	EDN1, IFNG, MAPK14, BMPR1A	141	18	18.93	4.902e-5	1.257e-3
Leishmaniasis	KEGG	3	IFNG, MAPK14, NOS2	78	18	25.66	2.005e-4	3.913e-3
PD-L1 expression and PD-1 checkpoint pathway in cancer	KEGG	3	IFNG, TLR9, MAPK14	90	18	22.24	3.061e-4	5.451e-3
HIF-1 signaling pathway	KEGG	3	EDN1, IFNG, NOS2	110	18	18.20	5.519e-4	8.596e-3
activated TAK1 mediates p38 MAPK activation	Reactome	2	NOD2, MAPK14	24	18	55.60	5.742e-4	8.875e-3
TNF signaling pathway	KEGG	3	NOD2, EDN1, MAPK14	119	18	16.82	6.943e-4	1.030e-2
Relaxin signaling pathway	KEGG	3	EDN1, MAPK14, NOS2	130	18	15.40	8.978e-4	1.251e-2
NOD1/2 Signaling Pathway	Reactome	2	NOD2, MAPK14	36	18	37.07	1.297e-3	1.648e-2
African trypanosomiasis	KEGG	2	IFNG, TLR9	37	18	36.07	1.370e-3	1.719e-2
Malaria	KEGG	2	IFNG, TLR9	50	18	26.69	2.491e-3	2.686e-2
SDK interactions	Reactome	1	SDK2	2	18	333.61	2.995e-3	3.068e-2
Peroxisomal protein import	Reactome	2	ACOT8, NOS2	63	18	21.18	3.925e-3	3.726e-2