

GeDiPNet Cluster 153 -- 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 02:15:22

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inflammatory bowel disease	KEGG	15	IL1B, IL2, TNF, IL10, IL23R, IFNG, IL17A, HLA-DPB1, IL1A, NOD2, HLA-DPA1, STAT3	66	89	30.67	6.440e-19	3.821e-16
Cytokine-cytokine receptor interaction	KEGG	22	IFNA2, IL1B, IL1RN, IL2, TNF, TNFRSF10A, TNFRSF1A, IL10, IL23R, IL3, IFNG, IL17A	298	89	9.96	2.006e-16	7.784e-14
Interleukin-10 signaling	Reactome	11	IL1B, IL1RN, TNF, TNFRSF1A, ICAM1, IL10, PTGS2, IL10RB, IL1A, CCR5, STAT3	47	89	31.58	2.743e-14	7.333e-12
Interleukin-4 and Interleukin-13 signaling	Reactome	14	IL1B, TNF, ICAM1, IL10, IL23R, PTGS2, IL17A, HGF, IL1A, STAT3, BIRC5, GATA3	108	89	17.49	4.155e-14	1.070e-11
Leishmaniasis	KEGG	12	IL1B, TNF, IL10, PTGS2, IFNG, FCGR3A, HLA-DPB1, IL1A, FCGR3B, HLA-DPA1, IL4, PRKCB	78	89	20.76	3.723e-13	8.100e-11
Th17 cell differentiation	KEGG	13	IL1B, IL2, IL23R, IFNG, IL17A, HLA-DPB1, HLA-DPA1, STAT3, FOXP3, GATA3, IL4, IRF4	109	89	16.09	1.080e-12	2.187e-10
Autoimmune thyroid disease	KEGG	10	IFNA2, IL2, CTLA4, IL10, TSHR, HLA-DPB1, HLA-DPA1, CD28, IFNA1, IL4	54	89	24.99	5.451e-12	9.850e-10
Tuberculosis	KEGG	14	IFNA2, IL1B, TNF, TNFRSF1A, IL10, IFNG, FCGR3A, HLA-DPB1, IL10RB, IL1A, NOD2, FCGR3B	181	89	10.44	5.366e-11	7.752e-9
T cell receptor signaling pathway	KEGG	12	IL2, TNF, CTLA4, IL10, IFNG, CARD11, CD28, FYN, ICOS, IL4, PLCG1, VAV1	122	89	13.27	8.560e-11	1.193e-8
Natural killer cell mediated cytotoxicity	KEGG	12	IFNA2, TNF, TNFRSF10A, ICAM1, IFNG, FCGR3A, FCGR3B, FYN, IFNA1, PLCG1, PRKCB, VAV1	133	89	12.18	2.369e-10	2.943e-8
Allograft rejection	KEGG	8	IL2, TNF, IL10, IFNG, HLA-DPB1, HLA-DPA1, CD28, IL4	39	89	27.68	3.367e-10	4.060e-8
Type I diabetes mellitus	KEGG	8	IL1B, IL2, TNF, IFNG, HLA-DPB1, IL1A, HLA-DPA1, CD28	44	89	24.54	9.411e-10	1.014e-7
Graft-versus-host disease	KEGG	8	IL1B, IL2, TNF, IFNG, HLA-DPB1, IL1A, HLA-DPA1, CD28	45	89	23.99	1.138e-9	1.199e-7
Rheumatoid arthritis	KEGG	10	IL1B, TNF, CTLA4, ICAM1, IFNG, IL17A, HLA-DPB1, IL1A, HLA-DPA1, CD28	95	89	14.20	1.799e-9	1.818e-7
NF-kappa B signaling pathway	KEGG	10	IL1B, TNF, TNFRSF1A, ICAM1, PTGS2, CARD11, CSNK2A1, CSNK2B, PLCG1, PRKCB	105	89	12.85	4.835e-9	4.423e-7