

GeDiPNet Cluster 47 -- 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 11:32:45

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inflammatory bowel disease	KEGG	50	FOXP3, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IL18, IL1B, IL23A, IL6, STAT1	66	1725	5.27	3.170e-29	8.335e-26
Cytokine-cytokine receptor interaction	KEGG	112	ACKR3, BMP4, BMP6, CCL21, CCL8, CCR6, CD40, CSF2, CXCL2, CXCL6, CXCL8, CXCR4	298	1725	2.62	7.145e-24	1.127e-20
Leishmaniasis	KEGG	50	CYBB, FCGR2A, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IL1B, IRAK1, NCF1, NCF2, PTGS2	78	1725	4.46	7.685e-24	1.195e-20
Type I diabetes mellitus	KEGG	36	CD28, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, TNF, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1	44	1725	5.70	1.818e-23	2.542e-20
Th17 cell differentiation	KEGG	59	AHR, CD3E, FOXP3, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, IL23A, IL2RA, IL2RB	109	1725	3.77	1.713e-22	2.201e-19
Allograft rejection	KEGG	32	CD28, CD40, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, TNF, HLA-B, HLA-DMB, HLA-DOA	39	1725	5.71	4.604e-21	4.346e-18
Viral protein interaction with cytokine and cytokine receptor	KEGG	53	ACKR3, CCL21, CCL8, CCR6, CXCL2, CXCL6, CXCL8, CXCR4, IL10, IL18, IL2RA, IL2RB	100	1725	3.69	8.809e-20	6.710e-17
Herpes simplex virus 1 infection	KEGG	75	FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, IL6, IRAK1, STAT1, TLR2, TNF, TNFRSF14	182	1725	2.87	4.861e-19	3.398e-16
Intestinal immune network for IgA production	KEGG	35	CD28, CD40, CXCR4, HLA-DPB1, HLA-DQA2, HLA-DRB1, IL10, IL6, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1	50	1725	4.87	5.829e-19	4.049e-16
Toxoplasmosis	KEGG	55	ALOX5, CD40, CIITA, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IRAK1, ITGA6, LY96, STAT1	112	1725	3.42	1.789e-18	1.142e-15
Th1 and Th2 cell differentiation	KEGG	49	CD3E, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL2RA, IL2RB, NFKBIE, PRKCQ, RBPJ, STAT1	93	1725	3.67	3.019e-18	1.832e-15
Autoimmune thyroid disease	KEGG	35	CD28, CD40, CTLA4, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IL10, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1	54	1725	4.51	2.637e-17	1.306e-14
Interleukin-10 signaling	Reactome	32	CSF2, CXCL2, CXCL8, IL10, IL18, IL1B, IL1RN, IL6, PTGS2, TNF, TYK2, JAK1	47	1725	4.74	6.925e-17	3.227e-14
Rheumatoid arthritis	KEGG	47	CD28, CSF2, CTLA4, CXCL2, CXCL6, CXCL8, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL18, IL1B	95	1725	3.44	3.823e-16	1.593e-13
Epstein-Barr virus infection	KEGG	75	CD3E, CD40, CDK6, HDAC1, HLA-DPB1, HLA-DQA2, HLA-DRB1, IL6, IRAK1, NFKBIE, RBPJ, STAT1	204	1725	2.56	9.349e-16	3.636e-13