

GeDiPNet Cluster 291 -- 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 00:48:40

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inflammatory bowel disease	KEGG	49	FOXP3, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IL18, IL1B, IL23A, IL6, STAT1	66	1603	5.56	1.819e-29	4.806e-26
Leishmaniasis	KEGG	50	CYBB, FCGR2A, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IL1B, IRAK1, NCF1, NCF2, PTGS2	78	1603	4.80	2.564e-25	4.184e-22
Type I diabetes mellitus	KEGG	36	CD28, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, TNF, INS, CD80, CD86, GAD2	44	1603	6.13	1.381e-24	2.071e-21
Th17 cell differentiation	KEGG	58	AHR, CD3E, FOXP3, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, IL23A, IL2RA, IL2RB	109	1603	3.99	2.909e-23	3.627e-20
Allograft rejection	KEGG	32	CD28, CD40, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, TNF, CD80, CD86, HLA-DPA1	39	1603	6.15	4.663e-22	4.747e-19
Cytokine-cytokine receptor interaction	KEGG	100	ACKR3, BMP4, BMP6, CCL21, CCL8, CCR6, CD40, CSF2, CXCL2, CXCL6, CXCL8, CXCR4	298	1603	2.51	1.142e-19	7.542e-17
Toxoplasmosis	KEGG	54	ALOX5, CD40, CIITA, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IRAK1, ITGA6, LY96, STAT1	112	1603	3.61	3.646e-19	2.224e-16
Herpes simplex virus 1 infection	KEGG	72	FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, IL6, IRAK1, STAT1, TLR2, TNF, TNFRSF14	182	1603	2.96	5.901e-19	3.558e-16
Th1 and Th2 cell differentiation	KEGG	48	CD3E, GATA3, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL2RA, IL2RB, NFKBIE, PRKCQ, RBPJ, STAT1	93	1603	3.87	9.538e-19	5.512e-16
Autoimmune thyroid disease	KEGG	35	CD28, CD40, CTLA4, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IL10, CD80, CD86, HLA-DPA1, HLA-DQA1	54	1603	4.86	2.447e-18	1.338e-15
Tuberculosis	KEGG	68	CIITA, CTSD, FCGR2A, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL10, IL18, IL1B, IL23A, IL6	181	1603	2.81	1.365e-16	5.429e-14
Rheumatoid arthritis	KEGG	45	CD28, CSF2, CTLA4, CXCL2, CXCL6, CXCL8, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL18, IL1B	95	1603	3.55	7.975e-16	2.845e-13
Interleukin-10 signaling	Reactome	30	CSF2, CXCL2, CXCL8, IL10, IL18, IL1B, IL1RN, IL6, PTGS2, TNF, TYK2, CCR5	47	1603	4.78	1.242e-15	4.254e-13
Intestinal immune network for IgA production	KEGG	31	CD28, CD40, CXCR4, HLA-DPB1, HLA-DQA2, HLA-DRB1, IL10, IL6, CD80, CD86, CXCL12, HLA-DPA1	50	1603	4.65	1.377e-15	4.687e-13
Graft-versus-host disease	KEGG	29	CD28, FASLG, HLA-DPB1, HLA-DQA2, HLA-DRB1, IFNG, IL1B, IL6, TNF, CD80, CD86, HLA-DPA1	45	1603	4.83	2.558e-15	8.300e-13