

GeDiPNet Cluster 74 -- 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 13:38:22

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inflammatory bowel disease	KEGG	48	HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IL12RB2, IL17A, IL18R1, IL18RAP, IL2, IL21	66	1919	4.55	1.226e-24	1.863e-21
Allograft rejection	KEGG	35	CD28, CD40, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL12B, IL2, CD40LG, IFNG	39	1919	5.62	4.330e-24	6.240e-21
Th17 cell differentiation	KEGG	58	AHR, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL17A, IL1R1, IL2, IL21, IL23R, IL27, IL2RA	109	1919	3.33	2.526e-19	1.575e-16
Type I diabetes mellitus	KEGG	34	CD28, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL12B, IL2, IFNG, IL1B, TNF, HLA-DOB	44	1919	4.84	3.069e-19	1.902e-16
Leishmaniasis	KEGG	46	FCGR2A, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IRAK1, JAK2, MAPK3, NFKB1, NOS2	78	1919	3.69	5.572e-18	2.862e-15
Graft-versus-host disease	KEGG	33	CD28, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL2, IL6, IFNG, IL1B, TNF, HLA-DOB	45	1919	4.59	1.623e-17	7.535e-15
Th1 and Th2 cell differentiation	KEGG	50	HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL12B, IL12RB2, IL2, IL2RA, JAK2, MAPK3, NFATC1, NFKB1	93	1919	3.36	4.310e-17	1.832e-14
Cytokine-cytokine receptor interaction	KEGG	105	CCL2, CCL20, CCL21, CCR6, CD40, CSF2RB, CXCR1, CXCR2, FAS, IFNGR2, IFNLR1, IL10	298	1919	2.21	1.475e-16	5.782e-14
Tuberculosis	KEGG	75	CARD9, CORO1A, FCGR2A, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IL6, IRAK1, JAK2	181	1919	2.59	1.587e-16	6.202e-14
Intestinal immune network for IgA production	KEGG	34	CD28, CD40, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL15RA, IL2, IL6, LTBR, AICDA, CD40LG	50	1919	4.26	2.252e-16	8.617e-14
Toxoplasmosis	KEGG	53	CD40, HLA-DQA1, HLA-DQB1, HLA-DRB1, HSPA6, IFNGR2, IL10, IL12B, IRAK1, IRGM, JAK2, MAPK3	112	1919	2.96	6.073e-15	1.836e-12
Autoimmune thyroid disease	KEGG	34	CD28, CD40, CTLA4, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL2, CD40LG, IL4	54	1919	3.94	7.578e-15	2.254e-12
Herpes simplex virus 1 infection	KEGG	72	CARD9, CCL2, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFIH1, IFNGR2, IL12B, IL6, IRAK1	182	1919	2.48	1.160e-14	3.301e-12
Interleukin-4 and Interleukin-13 signaling	Reactome	50	CCL2, IL10, IL12B, IL17A, IL23R, IL6, IL6R, JAK2, NOS2, RORC, STAT3, TNFRSF1B	108	1919	2.90	1.047e-13	2.560e-11
Interleukin-10 signaling	Reactome	30	CCL2, CCL20, IL10, IL12B, IL1R1, IL1R2, IL6, STAT3, TNFRSF1A, TNFRSF1B, TYK2, TIMP1	47	1919	3.99	1.736e-13	4.063e-11