

GeDiPNet Cluster 14 -- 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 09:18:10

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Inflammatory bowel disease	KEGG	58	HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IL12RB2, IL17A, IL18R1, IL18RAP, IL2, IL21	66	3075	3.43	1.883e-26	4.077e-23
Allograft rejection	KEGG	36	CD28, CD40, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL12B, IL2, CD40LG, IFNG	39	3075	3.61	1.674e-18	1.075e-15
Th17 cell differentiation	KEGG	68	AHR, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL17A, IL1R1, IL2, IL21, IL23R, IL27, IL2RA	109	3075	2.44	4.837e-16	1.986e-13
Cytokine-cytokine receptor interaction	KEGG	138	CCL2, CCL20, CCL21, CCR6, CD40, CSF2RB, CXCR1, CXCR2, FAS, IFNGR2, IFNLR1, IL10	298	3075	1.81	4.558e-15	1.554e-12
Type I diabetes mellitus	KEGG	36	CD28, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL12B, IL2, IFNG, HLA-C, LTA, TNF	44	3075	3.20	7.874e-15	2.535e-12
Th1 and Th2 cell differentiation	KEGG	57	HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL12B, IL12RB2, IL2, IL2RA, JAK2, MAPK3, NFATC1, NFKB1	93	3075	2.39	3.412e-13	7.950e-11
Interleukin-4 and Interleukin-13 signaling	Reactome	63	CCL2, IL10, IL12B, IL17A, IL23R, IL6, IL6R, JAK2, NOS2, RORC, STAT3, TNFRSF1B	108	3075	2.28	4.900e-13	1.120e-10
Leishmaniasis	KEGG	50	FCGR2A, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IRAK1, JAK2, MAPK3, NFKB1, NOS2	78	3075	2.50	8.133e-13	1.807e-10
Interleukin-10 signaling	Reactome	35	CCL2, CCL20, IL10, IL12B, IL1R1, IL1R2, IL6, STAT3, TNFRSF1A, TNFRSF1B, TYK2, TIMP1	47	3075	2.91	2.954e-12	5.848e-10
Graft-versus-host disease	KEGG	34	CD28, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL2, IL6, IFNG, HLA-C, TNF, CD80	45	3075	2.95	3.006e-12	5.939e-10
Asthma	KEGG	27	CD40, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, CD40LG, IL4, IL13, TNF, CCL11, FCER1G, HLA-DMB	32	3075	3.30	4.793e-12	9.095e-10
Intestinal immune network for IgA production	KEGG	36	CD28, CD40, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL15RA, IL2, IL6, LTBR, AICDA, CD40LG	50	3075	2.81	7.628e-12	1.404e-9
Viral protein interaction with cytokine and cytokine receptor	KEGG	56	CCL2, CCL20, CCL21, CCR6, CXCR1, CXCR2, IL10, IL18R1, IL18RAP, IL19, IL2, IL2RA	100	3075	2.19	8.938e-11	1.302e-8
Tuberculosis	KEGG	86	CARD9, CORO1A, FCGR2A, HLA-DQA1, HLA-DQB1, HLA-DRB1, IFNGR2, IL10, IL12B, IL6, IRAK1, JAK2	181	3075	1.86	1.330e-10	1.868e-8
Autoimmune thyroid disease	KEGG	35	CD28, CD40, CTLA4, FAS, HLA-B, HLA-DQA1, HLA-DQB1, HLA-DRB1, IL10, IL2, CD40LG, IL4	54	3075	2.53	1.438e-9	1.532e-7