

GeDiPNet Cluster 391 -- 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 10:34:37

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-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1, HLA-DQB2, HLA-DRA	66	1333	6.69	2.842e-33	9.555e-30
Th17 cell differentiation	KEGG	52	CD247, FOXP3, GATA3, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1, HLA-DQB2	109	1333	4.30	7.219e-22	6.813e-19
Allograft rejection	KEGG	28	CD28, CD40, CD80, CD86, FASLG, HLA-B, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1	39	1333	6.47	7.102e-19	4.148e-16
Asthma	KEGG	25	CCL11, CD40, FCER1G, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1, HLA-DQB2	32	1333	7.04	1.717e-18	9.528e-16
Type I diabetes mellitus	KEGG	29	CD28, CD80, CD86, FASLG, HLA-B, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2	44	1333	5.94	6.799e-18	3.368e-15
Interleukin-4 and Interleukin-13 signaling	Reactome	45	ALOX15, ALOX5, BATF, BCL2, CCL11, CCL2, CCL22, F13A1, FASLG, FN1, FOXO1, GATA3	108	1333	3.75	2.806e-16	1.056e-13
Intestinal immune network for IgA production	KEGG	28	CD28, CD40, CD80, CD86, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1	50	1333	5.05	1.109e-14	3.181e-12
Graft-versus-host disease	KEGG	26	CD28, CD80, CD86, FASLG, HLA-B, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2	45	1333	5.21	3.589e-14	9.414e-12
Cytokine-cytokine receptor interaction	KEGG	78	CCL11, CCL2, CCL20, CCL22, CCL24, CCL26, CCL5, CCR2, CCR3, CCR5, CCR7, CD40	298	1333	2.36	1.644e-13	3.865e-11
Th1 and Th2 cell differentiation	KEGG	37	CD247, GATA3, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1, HLA-DQB2, HLA-DRA	93	1333	3.58	7.008e-13	1.487e-10
Autoimmune thyroid disease	KEGG	27	CD28, CD40, CD80, CD86, CTLA4, FASLG, HLA-B, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1	54	1333	4.50	1.286e-12	2.552e-10
Rheumatoid arthritis	KEGG	36	ATP6V0A1, CCL2, CCL20, CCL5, CD28, CD80, CD86, CTLA4, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1	95	1333	3.41	7.860e-12	1.376e-9
Leishmaniasis	KEGG	32	C3, CYBA, FCGR3A, HLA-DMB, HLA-DOA, HLA-DOB, HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQA2, HLA-DQB1, HLA-DQB2	78	1333	3.70	9.468e-12	1.630e-9
Human T-cell leukemia virus 1 infection	KEGG	61	ADCY2, ADCY8, ADCY9, ANAPC1, BAX, CD40, CDK2, CREB5, EGR1, ETS1, FOSL1, HLA-B	224	1333	2.45	1.266e-11	2.113e-9
Interleukin-10 signaling	Reactome	23	CCL2, CCL20, CCL22, CCL5, CCR2, CCR5, CD80, CD86, CSF3, ICAM1, IL10, IL12B	47	1333	4.41	1.057e-10	1.445e-8