

GeDiPNet Cluster 164 -- 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 17:03:00

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Autoimmune thyroid disease	KEGG	7	CTLA4, HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, IL2, HLA-E	54	28	55.60	2.733e-11	4.259e-9
Allograft rejection	KEGG	6	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, IL2, HLA-E	39	28	65.99	2.803e-10	3.437e-8
Type I diabetes mellitus	KEGG	6	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, IL2, HLA-E	44	28	58.49	6.018e-10	6.772e-8
Graft-versus-host disease	KEGG	6	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, IL2, HLA-E	45	28	57.19	6.933e-10	7.755e-8
Viral myocarditis	KEGG	5	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, HLA-E	70	28	30.64	5.153e-7	2.739e-5
Human T-cell leukemia virus 1 infection	KEGG	7	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, IL2, CDC27, HLA-E	224	28	13.40	6.064e-7	3.155e-5
Endosomal/Vacuolar pathway	Reactome	3	HLA-A, HLA-B, HLA-E	8	28	160.85	6.306e-7	3.260e-5
Antigen processing and presentation	KEGG	5	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, HLA-E	81	28	26.48	1.072e-6	5.166e-5
Phagosome	KEGG	6	FCGR3A, HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, HLA-E	155	28	16.60	1.250e-6	5.897e-5
Cell adhesion molecules	KEGG	6	CTLA4, HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, HLA-E	160	28	16.08	1.504e-6	6.941e-5
Interferon gamma signaling	Reactome	5	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, HLA-E	87	28	24.65	1.531e-6	7.022e-5
Herpes simplex virus 1 infection	KEGG	6	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, BCL2, HLA-E	182	28	14.14	3.184e-6	1.328e-4
Epstein-Barr virus infection	KEGG	6	HLA-DPB1, HLA-DRB1, HLA-A, HLA-B, BCL2, HLA-E	204	28	12.62	6.154e-6	2.288e-4
Antigen Presentation: Folding, assembly and peptide loading of class I MHC	Reactome	3	HLA-A, HLA-B, HLA-E	25	28	51.47	2.522e-5	7.394e-4
Leishmaniasis	KEGG	4	FCGR3A, HLA-DPB1, HLA-DRB1, NOS2	78	28	22.00	2.994e-5	8.473e-4