

GeDiPNet Cluster 281 -- 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 12:56:51

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Endosomal/Vacuolar pathway	Reactome	3	HLA-B, HLA-A, LNPEP	8	20	225.19	2.200e-7	1.298e-5
Antigen Presentation: Folding, assembly and peptide loading of class I MHC	Reactome	3	HLA-B, ERAP2, HLA-A	25	20	72.06	8.874e-6	3.108e-4
ER-Phagosome pathway	Reactome	2	HLA-B, HLA-A	30	20	40.03	1.114e-3	1.507e-2
Allograft rejection	KEGG	2	HLA-B, HLA-A	39	20	30.79	1.881e-3	2.229e-2
Cellular senescence	KEGG	3	HLA-B, HLA-A, SMAD3	157	20	11.47	2.122e-3	2.432e-2
Type I diabetes mellitus	KEGG	2	HLA-B, HLA-A	44	20	27.30	2.390e-3	2.656e-2
Graft-versus-host disease	KEGG	2	HLA-B, HLA-A	45	20	26.69	2.499e-3	2.745e-2
Herpes simplex virus 1 infection	KEGG	3	HLA-B, IFIH1, HLA-A	182	20	9.90	3.227e-3	3.286e-2
Autoimmune thyroid disease	KEGG	2	HLA-B, HLA-A	54	20	22.24	3.580e-3	3.540e-2
SMAD4 MH2 Domain Mutants in Cancer	Reactome	1	SMAD3	3	20	200.17	4.988e-3	4.437e-2
SMAD2/3 MH2 Domain Mutants in Cancer	Reactome	1	SMAD3	3	20	200.17	4.988e-3	4.437e-2
Interferon alpha/beta signaling	Reactome	2	HLA-B, HLA-A	67	20	17.93	5.460e-3	4.739e-2
Human T-cell leukemia virus 1 infection	KEGG	3	HLA-B, HLA-A, SMAD3	224	20	8.04	5.773e-3	4.921e-2
Viral myocarditis	KEGG	2	HLA-B, HLA-A	70	20	17.16	5.945e-3	5.025e-2
Endocytosis	KEGG	3	HLA-B, HLA-A, SMAD3	250	20	7.21	7.818e-3	5.997e-2