

GeDiPNet Cluster 410 -- 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 00:52:47

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
The canonical retinoid cycle in rods (twilight vision)	Reactome	4	RDH5, LRAT, RLBP1, RPE65	20	128	18.77	5.225e-5	1.343e-3
Graft-versus-host disease	KEGG	5	HLA-C, HLA-DQA1, HLA-DQB1, IL6, HLA-B	45	128	10.43	1.104e-4	2.458e-3
Defective ACTH causes Obesity and Pro-opiomelanocortinin deficiency (POMCD)	Reactome	2	MC2R, POMC	2	128	93.83	1.127e-4	2.496e-3
Herpes simplex virus 1 infection	KEGG	9	HLA-C, HLA-DQA1, HLA-DQB1, IL6, JAK2, CCL2, HLA-B, SRSF6, STAT2	182	128	4.64	1.402e-4	2.974e-3
MET activates PTK2 signaling	Reactome	4	COL24A1, COL5A1, LAMA2, LAMB1	30	128	12.51	2.722e-4	5.036e-3
Retinoid cycle disease events	Reactome	3	RDH5, LRAT, RLBP1	13	128	21.65	3.128e-4	5.622e-3
Synthesis, secretion, and inactivation of Glucagon-like Peptide-1 (GLP-1)	Reactome	3	GNB3, TCF7L2, GRP	14	128	20.11	3.950e-4	6.777e-3
Allograft rejection	KEGG	4	HLA-C, HLA-DQA1, HLA-DQB1, HLA-B	39	128	9.62	7.585e-4	1.124e-2
Viral myocarditis	KEGG	5	HLA-C, HLA-DQA1, HLA-DQB1, LAMA2, HLA-B	70	128	6.70	8.844e-4	1.265e-2
Kaposi sarcoma-associated herpesvirus infection	KEGG	8	GNB3, HLA-C, IL6, JAK2, MICA, TCF7L2, HLA-B, STAT2	196	128	3.83	1.174e-3	1.568e-2
Type I diabetes mellitus	KEGG	4	HLA-C, HLA-DQA1, HLA-DQB1, HLA-B	44	128	8.53	1.202e-3	1.596e-2
Interferon gamma signaling	Reactome	5	HLA-C, HLA-DQA1, HLA-DQB1, JAK2, HLA-B	87	128	5.39	2.339e-3	2.614e-2
Autoimmune thyroid disease	KEGG	4	HLA-C, HLA-DQA1, HLA-DQB1, HLA-B	54	128	6.95	2.579e-3	2.815e-2
Endosomal/Vacuolar pathway	Reactome	2	HLA-C, HLA-B	8	128	23.46	3.026e-3	3.135e-2
Ca2+ activated K+ channels	Reactome	2	KCNMA1, KCNN3	9	128	20.85	3.863e-3	3.736e-2