

GeDiPNet Cluster 176 -- 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 12:16:04

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Primary immunodeficiency	KEGG	6	RAG1, RAG2, ADA, DCLRE1C, IL2RG, IL7R	38	12	158.03	6.044e-13	1.292e-10
Non-homologous end-joining	KEGG	2	DCLRE1C, LIG4	13	12	153.97	7.095e-5	1.713e-3
MAPK6/MAPK4 signaling	Reactome	3	RAG1, RAG2, PSMB10	89	12	33.74	8.246e-5	1.939e-3
FoxO signaling pathway	KEGG	3	RAG1, RAG2, IL7R	133	12	22.58	2.715e-4	5.025e-3
Interleukin-7 signaling	Reactome	2	IL2RG, IL7R	33	12	60.66	4.750e-4	7.837e-3
Defective SLC17A5 causes Salla disease (SD) and ISSD	Reactome	1	SLC17A5	1	12	1000.83	9.992e-4	1.390e-2
Nonhomologous End-Joining (NHEJ)	Reactome	2	DCLRE1C, LIG4	69	12	29.01	2.069e-3	2.387e-2
UCH proteinases	Reactome	2	INO80, PSMB10	97	12	20.64	4.042e-3	3.856e-2
2-LTR circle formation	Reactome	1	LIG4	7	12	142.98	6.975e-3	5.567e-2
Interleukin-9 signaling	Reactome	1	IL2RG	9	12	111.20	8.960e-3	6.534e-2
Organic anion transporters	Reactome	1	SLC17A5	10	12	100.08	9.951e-3	6.966e-2
Interleukin-21 signaling	Reactome	1	IL2RG	10	12	100.08	9.951e-3	6.966e-2
JAK-STAT signaling pathway	KEGG	2	IL2RG, IL7R	168	12	11.91	1.171e-2	7.704e-2
Interleukin-2 signaling	Reactome	1	IL2RG	12	12	83.40	1.193e-2	7.793e-2
Purine salvage	Reactome	1	ADA	13	12	76.99	1.292e-2	8.184e-2