

GeDiPNet Cluster 10 -- 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: 2026-10-07 03:30:09. · Rows: 15 · Generated: 2026-10-07 10:44:58

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Th17 cell differentiation	KEGG	27	IL6ST, IL6R, IRF4, IL2RG, ZAP70, CD3G, IKBKB, IL21R, LCK, RELA, CD3E, CD3D	109	178	16.71	5.408e-26	1.127e-22
Measles	KEGG	29	IL2RG, CD3G, IKBKB, MSN, RELA, OAS1, IFNAR1, CD28, TRAF3, PIK3CD, CD3E, CD3D	139	178	14.08	1.505e-25	2.917e-22
Primary immunodeficiency	KEGG	19	CD40LG, IL2RG, ZAP70, LCK, ORAI1, RAG1, IL7R, PTPRC, RAG2, CD8A, CD3E, CD3D	38	178	33.74	1.837e-25	3.438e-22
T cell receptor signaling pathway	KEGG	26	CARD11, CD40LG, ZAP70, CD3G, IKBKB, ITK, LCK, MALT1, RELA, PTPRC, MAP3K14, CD8A	122	178	14.38	3.158e-23	4.360e-20
Th1 and Th2 cell differentiation	KEGG	23	IL2RG, ZAP70, CD3G, IKBKB, LCK, RELA, CD3E, CD3D, CD247, IFNGR1, IFNGR2, IL12B	93	178	16.69	3.067e-22	3.723e-19
Herpes simplex virus 1 infection	KEGG	29	IKBKB, RELA, OAS1, CARD9, IFNAR1, TNF, TRAF3, PIK3CD, IFNGR1, IFNGR2, IL12B, STAT1	182	178	10.75	4.853e-22	5.642e-19
Epstein-Barr virus infection	KEGG	30	CD3G, IKBKB, RELA, RELB, OAS1, IFNAR1, MAP3K14, TNF, TRAF3, PIK3CD, CD3E, CD3D	204	178	9.92	9.850e-22	1.046e-18
PD-L1 expression and PD-1 checkpoint pathway in cancer	KEGG	20	ZAP70, CD3G, IKBKB, LCK, RELA, CD28, PIK3CD, CD3E, CD3D, CD247, IFNGR1, IFNGR2	90	178	14.99	1.844e-18	1.170e-15
Influenza A	KEGG	25	IKBKB, RELA, OAS1, IFNAR1, TNF, TRAF3, PIK3CD, IFNGR1, IFNGR2, IL12B, STAT1, IKBKG	173	178	9.75	4.857e-18	2.823e-15
Toll-like receptor signaling pathway	KEGG	21	IKBKB, RELA, IFNAR1, TNF, TRAF3, PIK3CD, IL12B, STAT1, IKBKG, TYK2, PIK3R1, IRF7	109	178	13.00	5.805e-18	3.288e-15
Osteoclast differentiation	KEGG	23	IKBKB, LCK, RELA, RELB, IFNAR1, MAP3K14, TNF, ITPR3, PIK3CD, FCGR3A, IFNGR1, IFNGR2	142	178	10.93	8.309e-18	4.588e-15
NF-kappa B signaling pathway	KEGG	19	CARD11, CD40LG, ZAP70, IKBKB, LCK, MALT1, RELA, RELB, MAP3K14, TNF, TRAF3, IKBKG	105	178	12.21	8.139e-16	3.187e-13
NOD-like receptor signaling pathway	KEGG	23	ERBIN, IKBKB, RELA, OAS1, CARD9, IFNAR1, RNF31, TNF, TRAF3, ITPR3, STAT1, IKBKG	187	178	8.30	4.258e-15	1.465e-12
JAK-STAT signaling pathway	KEGG	22	IL6ST, IL6R, IL2RG, IL21R, IL7R, IFNAR1, IL7, PIK3CD, IFNGR1, IFNGR2, IL12B, IL12RB1	168	178	8.84	4.615e-15	1.568e-12
Chagas disease	KEGG	18	CD3G, IKBKB, RELA, TNF, PIK3CD, CD3E, CD3D, CD247, IFNGR1, IFNGR2, IL12B, IKBKG	103	178	11.79	9.212e-15	2.907e-12