

GeDiPNet Cluster 615 -- 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: 2026-10-20 03:30:09. · Rows: 15 · Generated: 2026-10-20 00:02:23

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
MAPK1 (ERK2) activation	Reactome	2	IL6R, IL6ST	9	7	381.27	1.046e-5	3.021e-4
MAPK3 (ERK1) activation	Reactome	2	IL6R, IL6ST	10	7	343.14	1.308e-5	3.637e-4
Interleukin-6 signaling	Reactome	2	IL6R, IL6ST	11	7	311.95	1.598e-5	4.315e-4
Hematopoietic cell lineage	KEGG	3	IL6R, MS4A1, CR2	100	7	51.47	1.914e-5	5.020e-4
Coronavirus disease - COVID-19	KEGG	3	IL6R, ADAM17, IL6ST	238	7	21.63	2.536e-4	3.954e-3
Viral protein interaction with cytokine and cytokine receptor	KEGG	2	IL6R, IL6ST	100	7	34.31	1.403e-3	1.464e-2
Th17 cell differentiation	KEGG	2	IL6R, IL6ST	109	7	31.48	1.664e-3	1.665e-2
JAK-STAT signaling pathway	KEGG	2	IL6R, IL6ST	168	7	20.43	3.901e-3	3.076e-2
Constitutive Signaling by NOTCH1 t(7;9)(NOTCH1:M1580_K2555) Translocation Mutant	Reactome	1	ADAM17	7	7	245.10	4.074e-3	3.169e-2
TNF signaling	Reactome	1	ADAM17	7	7	245.10	4.074e-3	3.169e-2
CD163 mediating an anti-inflammatory response	Reactome	1	ADAM17	9	7	190.63	5.235e-3	3.760e-2
Epstein-Barr virus infection	KEGG	2	RELB, CR2	204	7	16.82	5.700e-3	3.983e-2
Interleukin-27 signaling	Reactome	1	IL6ST	11	7	155.97	6.395e-3	4.283e-2
Regulated proteolysis of p75NTR	Reactome	1	ADAM17	11	7	155.97	6.395e-3	4.283e-2
Interleukin-35 Signalling	Reactome	1	IL6ST	12	7	142.98	6.975e-3	4.528e-2