

GeDiPNet Cluster 515 -- 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 00:02:44

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Th1 and Th2 cell differentiation	KEGG	4	DLL4, NOTCH1, RBPJ, JAK1	93	8	64.57	2.303e-7	1.165e-5
Constitutive Signaling by NOTCH1 PEST Domain Mutants	Reactome	3	DLL4, NOTCH1, RBPJ	58	8	77.65	5.884e-6	1.881e-4
Constitutive Signaling by NOTCH1 HD+PEST Domain Mutants	Reactome	3	DLL4, NOTCH1, RBPJ	58	8	77.65	5.884e-6	1.881e-4
Notch signaling pathway	KEGG	3	DLL4, NOTCH1, RBPJ	62	8	72.64	7.203e-6	2.226e-4
Constitutive Signaling by NOTCH1 t(7;9)(NOTCH1:M1580_K2555) Translocation Mutant	Reactome	2	DLL4, NOTCH1	7	8	428.93	8.140e-6	2.457e-4
NOTCH1 Intracellular Domain Regulates Transcription	Reactome	2	NOTCH1, RBPJ	13	8	230.96	3.017e-5	7.283e-4
RUNX3 regulates NOTCH signaling	Reactome	2	NOTCH1, RBPJ	14	8	214.46	3.519e-5	8.259e-4
Constitutive Signaling by NOTCH1 HD Domain Mutants	Reactome	2	DLL4, NOTCH1	15	8	200.17	4.059e-5	9.253e-4
NOTCH4 Intracellular Domain Regulates Transcription	Reactome	2	NOTCH1, RBPJ	17	8	176.62	5.254e-5	1.132e-3
NOTCH3 Intracellular Domain Regulates Transcription	Reactome	2	NOTCH1, RBPJ	18	8	166.81	5.909e-5	1.245e-3
Notch-HLH transcription pathway	Reactome	2	NOTCH1, RBPJ	28	8	107.23	1.455e-4	2.555e-3
Pre-NOTCH Transcription and Translation	Reactome	2	NOTCH1, RBPJ	31	8	96.85	1.788e-4	3.007e-3
Human papillomavirus infection	KEGG	3	NOTCH1, RBPJ, JAK1	333	8	13.52	1.067e-3	1.191e-2
Signaling by Insulin receptor	Reactome	1	INS	2	8	750.63	1.332e-3	1.409e-2
Endocrine resistance	KEGG	2	DLL4, NOTCH1	99	8	30.33	1.824e-3	1.780e-2