

GeDiPNet Cluster 116 -- 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: 2026-10-10 03:30:08. · Rows: 15 · Generated: 2026-10-10 02:15:21

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
NOTCH3 Activation and Transmission of Signal to the Nucleus	Reactome	4	NCSTN, PSENEN, PSEN1, ADAM10	19	10	252.84	9.338e-10	1.097e-7
Amyloid fiber formation	Reactome	5	APP, NCSTN, PSENEN, TTR, ADAM10	109	10	55.09	1.365e-8	1.200e-6
Noncanonical activation of NOTCH3	Reactome	3	NCSTN, PSENEN, PSEN1	8	10	450.38	2.323e-8	1.932e-6
Regulated proteolysis of p75NTR	Reactome	3	NCSTN, PSENEN, PSEN1	11	10	327.55	6.836e-8	5.003e-6
Constitutive Signaling by NOTCH1 PEST Domain Mutants	Reactome	4	NCSTN, PSENEN, PSEN1, ADAM10	58	10	82.83	1.006e-7	7.045e-6
Constitutive Signaling by NOTCH1 HD+PEST Domain Mutants	Reactome	4	NCSTN, PSENEN, PSEN1, ADAM10	58	10	82.83	1.006e-7	7.045e-6
NRIF signals cell death from the nucleus	Reactome	3	NCSTN, PSENEN, PSEN1	15	10	240.20	1.882e-7	1.212e-5
Nuclear signaling by ERBB4	Reactome	3	NCSTN, PSENEN, PSEN1	24	10	150.13	8.337e-7	4.446e-5
Alzheimer disease	KEGG	5	APP, NCSTN, PSENEN, PSEN1, ADAM10	388	10	15.48	7.560e-6	2.827e-4
EPH-ephrin mediated repulsion of cells	Reactome	3	NCSTN, PSENEN, PSEN1	50	10	72.06	7.982e-6	2.964e-4
Notch signaling pathway	KEGG	3	NCSTN, PSENEN, PSEN1	62	10	58.11	1.532e-5	5.049e-4
Neutrophil degranulation	Reactome	4	NCSTN, PSEN1, TTR, ADAM10	480	10	10.01	4.366e-4	7.455e-3
Other types of O-glycan biosynthesis	KEGG	2	POFUT1, POGLUT1	47	10	51.11	6.612e-4	1.027e-2
Post-translational protein phosphorylation	Reactome	2	APP, ADAM10	108	10	22.24	3.440e-3	3.479e-2
Regulation of Insulin-like Growth Factor (IGF) transport and uptake by Insulin-like Growth Factor Binding Proteins (IGFBPs)	Reactome	2	APP, ADAM10	125	10	19.22	4.579e-3	4.264e-2