

GeDiPNet Cluster 412 -- 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 07:56:15

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cholesterol metabolism	KEGG	5	ABCG5, ANGPTL4, APOB, APOE, CETP	51	122	9.65	1.611e-4	3.320e-3
LDL remodeling	Reactome	2	APOB, CETP	3	122	65.63	3.050e-4	5.517e-3
DARPP-32 events	Reactome	3	PDE4D, PPP1R1B, PPP2R1B	19	122	15.54	8.799e-4	1.260e-2
Chylomicron clearance	Reactome	2	APOB, APOE	5	122	39.38	1.003e-3	1.394e-2
Dopaminergic synapse	KEGG	6	DRD4, GNAQ, PPP1R1B, PPP2R1B, PPP2R3A, SLC6A3	132	122	4.47	2.246e-3	2.539e-2
Chylomicron remodeling	Reactome	2	APOB, APOE	9	122	21.88	3.517e-3	3.490e-2
Chylomicron assembly	Reactome	2	APOB, APOE	9	122	21.88	3.517e-3	3.490e-2
HDL remodeling	Reactome	2	APOE, CETP	10	122	19.69	4.367e-3	4.063e-2
Scavenging by Class A Receptors	Reactome	2	APOB, APOE	11	122	17.90	5.302e-3	4.639e-2
Cell adhesion molecules	KEGG	6	CNTNAP2, CD276, ITGAV, L1CAM, NRXN1, SLITRK2	160	122	3.69	5.784e-3	4.929e-2
NR1H3 & NR1H2 regulate gene expression linked to cholesterol transport and efflux	Reactome	3	ABCG5, APOE, CETP	37	122	7.98	6.178e-3	5.145e-2
Late Phase of HIV Life Cycle	Reactome	1	NMT1	1	122	98.44	1.016e-2	7.069e-2
Dopamine clearance from the synaptic cleft	Reactome	1	SLC6A3	1	122	98.44	1.016e-2	7.069e-2
Defective SLC6A3 causes Parkinsonism-dystonia infantile (PKDYS)	Reactome	1	SLC6A3	1	122	98.44	1.016e-2	7.069e-2
Polymerase switching on the C-strand of the telomere	Reactome	2	CHTF8, RFC5	17	122	11.58	1.260e-2	8.073e-2