

GeDiPNet Cluster 424 -- 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 14:40:01

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Complex I biogenesis	Reactome	4	ND1, NDUFAF6, NDUFB3, NDUFS4	55	22	39.70	2.708e-6	1.143e-4
Retrograde endocannabinoid signaling	KEGG	4	GNB1, ND1, NDUFB3, NDUFS4	149	22	14.66	1.399e-4	2.940e-3
Respiratory electron transport	Reactome	3	ND1, NDUFB3, NDUFS4	83	22	19.73	4.458e-4	7.287e-3
Thermogenesis	KEGG	4	ND1, NDUFAF6, NDUFB3, NDUFS4	234	22	9.33	7.795e-4	1.128e-2
Loss of MECP2 binding ability to 5hmC-DNA	Reactome	1	MECP2	1	22	545.91	1.832e-3	2.135e-2
Inhibition of PKR	Reactome	1	EIF2AK2	1	22	545.91	1.832e-3	2.135e-2
MPS IIIA - Sanfilippo syndrome A	Reactome	1	SGSH	1	22	545.91	1.832e-3	2.135e-2
Oxidative phosphorylation	KEGG	3	ND1, NDUFB3, NDUFS4	137	22	11.95	1.908e-3	2.197e-2
Phase 0 - rapid depolarisation	Reactome	2	SCN8A, SCN1A	44	22	24.81	2.892e-3	3.001e-2
Alzheimer disease	KEGG	4	EIF2AK2, ND1, NDUFB3, NDUFS4	388	22	5.63	4.944e-3	4.360e-2
Loss of MECP2 binding ability to 5mC-DNA	Reactome	1	MECP2	3	22	181.97	5.486e-3	4.649e-2
Breakdown of the nuclear lamina	Reactome	1	LMNA	3	22	181.97	5.486e-3	4.649e-2
Diabetic cardiomyopathy	KEGG	3	ND1, NDUFB3, NDUFS4	205	22	7.99	5.941e-3	4.911e-2
MECP2 regulates neuronal receptors and channels	Reactome	1	MECP2	4	22	136.48	7.308e-3	5.623e-2
Chemical carcinogenesis - reactive oxygen species	KEGG	3	ND1, NDUFB3, NDUFS4	227	22	7.21	7.870e-3	5.914e-2