

GeDiPNet Cluster 341 -- 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: 2026-10-09 03:30:08. · Rows: 15 · Generated: 2026-10-09 10:54:01

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Pyrimidine biosynthesis	Reactome	3	CAD, DHODH, UMPS	3	15	800.67	1.576e-9	1.584e-7
Interaction between L1 and Ankyrins	Reactome	3	SPTB, SPTA1, ANK1	13	15	184.77	4.475e-7	2.326e-5
Pyrimidine metabolism	KEGG	3	CAD, DHODH, UMPS	58	15	41.41	4.667e-5	1.173e-3
COPI-mediated anterograde transport	Reactome	3	SPTB, SPTA1, ANK1	101	15	23.78	2.441e-4	4.455e-3
NCAM signaling for neurite out-growth	Reactome	2	SPTB, SPTA1	20	15	80.07	2.731e-4	4.865e-3
Biosynthesis of cofactors	KEGG	3	CAD, DHODH, UMPS	154	15	15.60	8.401e-4	1.169e-2
Defective SLC4A1 causes hereditary spherocytosis type 4 (HSP4), distal renal tubular acidosis (dRTA) and dRTA with hemolytic anemia (dRTA-HA)	Reactome	1	SLC4A1	1	15	800.67	1.249e-3	1.593e-2
Neurofascin interactions	Reactome	1	ANK1	4	15	200.17	4.987e-3	4.363e-2
RAF/MAP kinase cascade	Reactome	2	SPTB, SPTA1	124	15	12.91	1.017e-2	7.002e-2
Erythrocytes take up oxygen and release carbon dioxide	Reactome	1	SLC4A1	9	15	88.96	1.119e-2	7.436e-2
Bicarbonate transporters	Reactome	1	SLC4A1	10	15	80.07	1.242e-2	7.935e-2
Erythrocytes take up carbon dioxide and release oxygen	Reactome	1	SLC4A1	13	15	61.59	1.612e-2	9.300e-2
Arginine biosynthesis	KEGG	1	CAD	23	15	34.81	2.836e-2	1.278e-1
Collecting duct acid secretion	KEGG	1	SLC4A1	28	15	28.60	3.443e-2	1.424e-1
Neurexins and neuroligins	Reactome	1	EPB41	32	15	25.02	3.925e-2	1.534e-1