

GeDiPNet Cluster 34 -- 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 16:06:31

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cobalamin transport and metabolism	KEGG	14	MTRR, ABCD4, HCFC1, LMBRD1, MMACHC, MMADHC, PRDX1, MTR, THAP11, ZNF143, MMAA, MMAB	18	68	137.37	2.507e-29	6.323e-26
Cobalamin (Cbl, vitamin B12) transport and metabolism	Reactome	10	MTRR, ABCD4, LMBRD1, MMACHC, MMADHC, MTR, MMAA, MMAB, MMUT, CD320	21	68	84.10	5.700e-18	2.906e-15
Propionyl-CoA catabolism	Reactome	3	MCEE, MMAA, MMUT	5	68	105.97	1.722e-6	7.796e-5
One carbon pool by folate	KEGG	5	MTHFR, MTR, CBS, GNMT, MTHFD1	38	68	23.24	2.177e-6	9.568e-5
Vitamin digestion and absorption	KEGG	4	ABCD4, LMBRD1, MMACHC, SLC46A1	26	68	27.17	1.279e-5	4.186e-4
Legionellosis	KEGG	5	HBS1L, CASP1, PYCARD, TNF, CYCS	56	68	15.77	1.531e-5	4.863e-4
Folate transport and metabolism	KEGG	4	MTHFR, MTR, SLC46A1, MTHFD1	31	68	22.79	2.636e-5	7.660e-4
Defective MMAA causes methylmalonic aciduria type cblA	Reactome	2	MMAA, MMUT	2	68	176.62	3.159e-5	8.853e-4
Defective MUT causes methylmalonic aciduria mut type	Reactome	2	MMAA, MMUT	2	68	176.62	3.159e-5	8.853e-4
Defective MMADHC causes methylmalonic aciduria and homocystinuria type cblD	Reactome	2	MMACHC, MMADHC	2	68	176.62	3.159e-5	8.853e-4
Defective MTRR causes methylmalonic aciduria and homocystinuria type cblE	Reactome	2	MTRR, MTR	2	68	176.62	3.159e-5	8.853e-4
Defective MTR causes methylmalonic aciduria and homocystinuria type cblG	Reactome	2	MTRR, MTR	2	68	176.62	3.159e-5	8.853e-4
Detoxification of Reactive Oxygen Species	Reactome	4	PRDX1, GSTP1, CYCS, SOD2	34	68	20.78	3.835e-5	1.041e-3
Influenza A	KEGG	7	JAK2, FAS, NUP98, CASP1, PYCARD, TNF, CYCS	173	68	7.15	5.274e-5	1.352e-3
Peroxisome	KEGG	5	ABCD4, PRDX1, MVK, SOD2, PEX16	83	68	10.64	1.034e-4	2.334e-3