

GeDiPNet Cluster 141 -- 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 10:37:16

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Peroxisome	KEGG	17	PEX6, PEX1, PEX26, PEX10, PEX11B, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX3	83	27	91.11	2.609e-31	8.232e-28
Class I peroxisomal membrane protein import	Reactome	10	PEX26, PEX11B, PEX12, PEX13, PEX14, PEX16, PEX19, PEX2, PEX3, ABCD1	20	27	222.41	8.977e-23	1.180e-19
Peroxisomal protein import	Reactome	10	PEX6, PEX1, PEX26, PEX10, PEX12, PEX13, PEX14, PEX2, PEX5, PEX7	63	27	70.61	5.874e-17	2.773e-14
E3 ubiquitin ligases ubiquitinate target proteins	Reactome	7	PEX10, PEX12, PEX13, PEX14, PEX2, PEX5, PAF1	59	27	52.77	3.933e-11	6.215e-9
ABC transporters in lipid homeostasis	Reactome	3	PEX19, PEX3, ABCD1	18	27	74.14	8.085e-6	2.805e-4
Defective ABCD1 causes adrenoleukodystrophy (ALD)	Reactome	1	ABCD1	1	27	444.81	2.248e-3	2.484e-2
Defective MMAA causes methylmalonic aciduria type cblA	Reactome	1	MMUT	2	27	222.41	4.491e-3	4.079e-2
Defective MUT causes methylmalonic aciduria mut type	Reactome	1	MMUT	2	27	222.41	4.491e-3	4.079e-2
Propionyl-CoA catabolism	Reactome	1	MMUT	5	27	88.96	1.119e-2	7.338e-2
Linoleic acid (LA) metabolism	Reactome	1	ABCD1	8	27	55.60	1.785e-2	9.668e-2
Pexophagy	Reactome	1	PEX5	10	27	44.48	2.226e-2	1.093e-1
Beta-oxidation of very long chain fatty acids	Reactome	1	ABCD1	11	27	40.44	2.446e-2	1.151e-1
alpha-linolenic acid (ALA) metabolism	Reactome	1	ABCD1	13	27	34.22	2.885e-2	1.262e-1
Mitochondrial tRNA aminoacylation	Reactome	1	DARS2	14	27	31.77	3.103e-2	1.313e-1
Cobalamin transport and metabolism	KEGG	1	MMUT	18	27	24.71	3.973e-2	1.511e-1