

GeDiPNet Cluster 239 -- 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 14:37:06

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Bile secretion	KEGG	22	ABCG8, GNAS, HMGCR, UGT1A1, AQP1, CFTR, SCT, SLC4A2, ABCB1, ABCB4, ABCG5, CYP7A1	90	174	16.87	2.062e-21	2.107e-18
Ascorbate and aldarate metabolism	KEGG	10	UGT1A1, UGDH, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	30	174	23.01	7.353e-12	1.356e-9
Glucuronidation	Reactome	9	UGT1A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	22	174	28.24	9.671e-12	1.742e-9
Pentose and glucuronate interconversions	KEGG	10	UGT1A1, UGDH, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	36	174	19.17	5.772e-11	8.732e-9
Steroid hormone biosynthesis	KEGG	11	UGT1A1, CYP7A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9, SULT2B1	63	174	12.05	1.379e-9	1.474e-7
Porphyrin metabolism	KEGG	9	UGT1A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	46	174	13.50	1.589e-8	1.306e-6
Chemical carcinogenesis - DNA adducts	KEGG	10	UGT1A1, SULT2A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	70	174	9.86	5.892e-8	4.132e-6
Metabolism of xenobiotics by cytochrome P450	KEGG	10	UGT1A1, SULT2A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	79	174	8.74	1.913e-7	1.151e-5
Biosynthesis of cofactors	KEGG	13	ADSL, UGT1A1, DLD, LIAS, UGDH, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8	154	174	5.83	3.511e-7	1.970e-5
Retinol metabolism	KEGG	9	UGT1A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	68	174	9.14	5.410e-7	2.870e-5
Drug metabolism - cytochrome P450	KEGG	9	UGT1A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	73	174	8.51	1.002e-6	4.880e-5
Drug metabolism - other enzymes	KEGG	9	UGT1A1, UGT1A10, UGT1A3, UGT1A4, UGT1A5, UGT1A6, UGT1A7, UGT1A8, UGT1A9	81	174	7.67	2.437e-6	1.045e-4
PPARA activates gene expression	Reactome	9	HMGCR, ABCB4, CYP7A1, FADS1, SULT2A1, UGT1A9, ABCA1, NCOA6, SREBF1	115	174	5.40	4.313e-5	1.133e-3
ABC transporters	KEGG	6	ABCG8, CFTR, ABCB1, ABCB4, ABCG5, ABCA1	45	174	9.20	4.325e-5	1.135e-3
NR1H3 & NR1H2 regulate gene expression linked to cholesterol transport and efflux	Reactome	5	ABCG8, ABCG5, APOE, TNRC6B, ABCA1	37	174	9.33	1.804e-4	3.613e-3