

GeDiPNet Cluster 350 -- 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 02:17:23

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cortisol synthesis and secretion	KEGG	8	CYP17A1, ADCY8, CYP11A1, CYP11B1, CYP21A2, HSD3B2, STAR, NR0B1	65	23	64.27	2.169e-13	4.982e-11
Ovarian steroidogenesis	KEGG	7	CYP17A1, ADCY8, CYP19A1, FSHB, CYP11A1, HSD3B2, STAR	52	23	70.29	4.359e-12	7.942e-10
Steroid hormone biosynthesis	KEGG	6	CYP17A1, CYP19A1, CYP11A1, CYP11B1, CYP21A2, HSD3B2	63	23	49.73	1.537e-9	1.572e-7
Glucocorticoid biosynthesis	Reactome	4	CYP17A1, CYP11B1, CYP21A2, HSD3B2	10	23	208.87	2.130e-9	2.120e-7
Cushing syndrome	KEGG	7	CYP17A1, ADCY8, CYP11A1, CYP11B1, CYP21A2, HSD3B2, STAR	155	23	23.58	1.073e-8	9.020e-7
Endogenous sterols	Reactome	4	CYP19A1, CYP11A1, CYP11B1, CYP21A2	25	23	83.55	1.259e-7	8.023e-6
Aldosterone synthesis and secretion	KEGG	5	ADCY8, CYP11A1, CYP21A2, HSD3B2, STAR	98	23	26.64	9.776e-7	4.779e-5
Mineralocorticoid biosynthesis	Reactome	2	CYP21A2, HSD3B2	6	23	174.06	5.238e-5	1.345e-3
Androgen biosynthesis	Reactome	2	CYP17A1, HSD3B2	11	23	94.94	1.909e-4	3.812e-3
Pregnenolone biosynthesis	Reactome	2	CYP11A1, STAR	12	23	87.03	2.289e-4	4.391e-3
Hormone signaling	KEGG	4	ADCY8, CALCR, FSHB, PRL	219	23	9.54	7.254e-4	1.088e-2
Metabolic pathways	KEGG	9	CYP17A1, ADCY8, CYP19A1, DERA, PPCDC, CYP11A1, CYP11B1, CYP21A2, HSD3B2	1563	23	3.01	1.538e-3	1.927e-2
ADORA2B mediated anti-inflammatory cytokines production	Reactome	3	ADCY8, CALCR, FSHB	128	23	12.24	1.792e-3	2.150e-2
Defective CYP11B1 causes Adrenal hyperplasia 4 (AH4)	Reactome	1	CYP11B1	1	23	522.17	1.915e-3	2.253e-2
Defective CYP17A1 causes Adrenal hyperplasia 5 (AH5)	Reactome	1	CYP17A1	1	23	522.17	1.915e-3	2.253e-2