

GeDiPNet Cluster 57 -- 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 17:44:54

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Cholesterol metabolism	KEGG	24	ABCG5, ABCG8, APOB, APOE, LCAT, LDLR, LPL, PLTP, LDLRAP1, PCSK9, ANGPTL4, APOC1	51	246	22.97	1.350e-27	3.241e-24
Chylomicron remodeling	Reactome	9	APOB, APOE, LPL, APOA5, APOA1, APOA2, APOC3, APOC2, GPIHBP1	9	246	48.82	5.489e-16	2.237e-13
Lipid and atherosclerosis	KEGG	26	APOB, HSPD1, ICAM1, IL1B, LDLR, MMP1, MMP3, MMP9, NFKB1A, NOS3, TLR4, TNFSF10	216	246	5.88	2.776e-13	6.550e-11
Chylomicron assembly	Reactome	7	APOB, APOE, APOA1, APOA2, APOC3, MTTP, APOC2	9	246	37.97	4.832e-11	7.478e-9
HDL remodeling	Reactome	7	APOE, LCAT, PLTP, CETP, APOA1, APOC3, APOC2	10	246	34.17	1.583e-10	2.190e-8
Interleukin-4 and Interleukin-13 signaling	Reactome	16	ALOX5, F13A1, ICAM1, IL10, IL1B, MMP1, MMP2, MMP3, MMP9, PTGS2, VCAM1, VEGFA	108	246	7.23	5.608e-10	6.711e-8
Chylomicron clearance	Reactome	5	APOB, APOE, LDLR, LDLRAP1, LIPC	5	246	48.82	3.464e-9	3.404e-7
Fat digestion and absorption	KEGG	10	ABCG5, ABCG8, APOB, PLA2G12B, ABCA1, APOA1, APOA4, MTTP, NPC1L1, SCARB1	43	246	11.35	1.147e-8	9.815e-7
PPAR signaling pathway	KEGG	12	MMP1, LPL, PLTP, PPARA, PPARG, APOA5, ANGPTL4, CYP7A1, FADS2, APOA1, APOA2, APOC3	76	246	7.71	4.056e-8	2.960e-6
Rheumatoid arthritis	KEGG	13	ICAM1, IL1B, MMP1, MMP3, TLR4, TCIRG1, TNFRSF11A, HLA-DQA1, HLA-DRA, HLA-DRB1, VEGFA, CCL2	95	246	6.68	6.399e-8	4.439e-6
AGE-RAGE signaling pathway in diabetic complications	KEGG	13	ICAM1, IL1B, MMP2, NOS3, VCAM1, VEGFA, COL3A1, EDN1, NOX1, SELE, CCL2, JAK2	101	246	6.28	1.342e-7	8.436e-6
Fluid shear stress and atherosclerosis	KEGG	15	GSTA4, ICAM1, IL1B, MMP2, MMP9, NOS3, VCAM1, VEGFA, EDN1, NCF1, NOX1, SELE	141	246	5.19	1.885e-7	1.136e-5
Type I diabetes mellitus	KEGG	9	HSPD1, IL1B, HLA-C, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DQB1, FASLG, INS	44	246	9.99	2.080e-7	1.236e-5
Bile secretion	KEGG	12	ABCG5, ABCG8, LDLR, CYP7A1, HMGCR, BAAT, EPHX1, SLC10A1, ABCB1, SCARB1, UGT2B15, UGT2B17	90	246	6.51	2.779e-7	1.598e-5
Toxoplasmosis	KEGG	13	ALOX5, IL10, LDLR, NFKB1A, TLR4, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DQB1, HSPA1B, JAK2, AKT1	112	246	5.67	4.576e-7	2.477e-5