

GeDiPNet Cluster 378 -- 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 16:43:49

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Interleukin-4 and Interleukin-13 signaling	Reactome	15	CCL2, IL18, IL1B, ITGB1, ITGB2, JAK2, LCN2, MMP2, MMP9, POMC, TGFB1, TIMP1	108	66	25.27	1.369e-17	6.437e-15
AGE-RAGE signaling pathway in diabetic complications	KEGG	9	CASP3, CCL2, COL1A1, IL1B, JAK2, MMP2, TGFB1, TNF, COL1A2	101	66	16.22	3.647e-9	3.459e-7
Leishmaniasis	KEGG	8	FCGR1A, IL1B, ITGB1, ITGB2, JAK2, PTPN6, TGFB1, TNF	78	66	18.66	9.300e-9	7.925e-7
Proteoglycans in cancer	KEGG	11	CASP3, COL1A1, ITGB1, MMP2, MMP9, PTPN6, TGFB1, TNF, TP53, COL1A2, FGFR1	204	66	9.81	1.231e-8	1.016e-6
Pathways in cancer	KEGG	16	BMP2, CASP3, EPO, FGF23, ITGB1, JAK2, MMP2, MMP9, NOTCH1, PDGFB, PDGFRB, TGFB1	533	66	5.46	1.973e-8	1.548e-6
FGFR1c and Klotho ligand binding and activation	Reactome	3	FGF23, KL, FGFR1	3	66	181.97	1.585e-7	9.811e-6
Malaria	KEGG	6	CCL2, IL18, IL1B, ITGB2, TGFB1, TNF	50	66	21.84	2.872e-7	1.645e-5
PI3K-Akt signaling pathway	KEGG	12	COL1A1, EPO, FGF23, ITGB1, JAK2, PDGFB, PDGFRB, SPP1, TP53, CDK6, COL1A2, FGFR1	361	66	6.05	5.168e-7	2.744e-5
Legionellosis	KEGG	6	CASP3, IL18, IL1B, ITGB2, PYCARD, TNF	56	66	19.50	5.718e-7	2.996e-5
Tuberculosis	KEGG	9	CASP3, FCGR1A, IL18, IL1B, ITGB2, JAK2, LSP1, TGFB1, TNF	181	66	9.05	5.812e-7	3.041e-5
Activation of Matrix Metalloproteinases	Reactome	5	COL18A1, MMP2, MMP9, TIMP1, TIMP2	33	66	27.57	9.053e-7	4.459e-5
Amoebiasis	KEGG	7	CASP3, COL1A1, IL1B, ITGB2, TGFB1, TNF, COL1A2	103	66	12.37	1.429e-6	6.657e-5
Lipid and atherosclerosis	KEGG	9	CASP3, CCL2, IL18, IL1B, JAK2, MMP9, PYCARD, TNF, TP53	216	66	7.58	2.536e-6	1.092e-4
Melanoma	KEGG	6	FGF23, PDGFB, PDGFRB, TP53, CDK6, FGFR1	73	66	14.96	2.787e-6	1.184e-4
Pertussis	KEGG	6	CASP3, IL1B, ITGB1, ITGB2, PYCARD, TNF	78	66	14.00	4.116e-6	1.651e-4