

GeDiPNet Cluster 36 -- 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 03:57:07

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Complement and coagulation cascades	KEGG	30	F2, F5, FGG, PROC, F10, SERPINC1, F7, PLAT, PLAUI, PROS1, SERPING1, THBD	88	281	14.57	2.239e-27	5.262e-24
Platelet degranulation	Reactome	31	F5, FGG, ITGA2B, ITGB3, VEGFA, APP, PROS1, SERPING1, F13A1, F8, TGFB1, VWF	123	281	10.77	9.355e-24	1.359e-20
Intrinsic Pathway of Fibrin Clot Formation	Reactome	16	F2, PROC, F10, SERPINC1, PROS1, SERPING1, F8, F9, VWF, F11, GP1BA, GP1BB	23	281	29.73	1.116e-21	1.174e-18
Platelet activation	KEGG	29	ACTB, F2, FGG, GNAQ, ITGA2B, ITGB3, TBXAS1, FCGR2A, VWF, FERMT3, P2RY12, GNAS	126	281	9.84	4.450e-21	4.311e-18
Common Pathway of Fibrin Clot Formation	Reactome	15	F2, F5, FGG, PROC, F10, SERPINC1, PROS1, THBD, F13A1, F8, FGA, FGB	22	281	29.14	3.500e-20	2.761e-17
Pathways in cancer	KEGG	45	F2, GNAQ, HMOX1, BAX, BCL2, BCL2L1, CASP3, CASP8, COL4A1, COL4A2, ITGA2B, ITGAV	533	281	3.61	4.191e-14	1.132e-11
Gamma-carboxylation of protein precursors	Reactome	8	F2, PROC, F10, GGCX, F7, PROS1, F9, PROZ	9	281	37.99	7.178e-13	1.608e-10
Transport of gamma-carboxylated protein precursors from the endoplasmic reticulum to the Golgi apparatus	Reactome	8	F2, PROC, F10, F7, PROS1, F9, PROZ, GAS6	9	281	37.99	7.178e-13	1.608e-10
AGE-RAGE signaling pathway in diabetic complications	KEGG	19	BAX, BCL2, CASP3, COL4A1, COL4A2, MMP2, VEGFA, THBD, TNF, F3, TGFB1, JAK2	101	281	8.04	1.639e-12	3.454e-10
Removal of aminoterminal propeptides from gamma-carboxylated proteins	Reactome	8	F2, PROC, F10, F7, PROS1, F9, PROZ, GAS6	10	281	34.19	3.517e-12	6.874e-10
Integrin cell surface interactions	Reactome	17	FGG, COL4A1, COL4A2, ITGA2B, ITGAV, ITGB3, KDR, SPP1, ITGA9, VWF, COL4A4, COL5A1	81	281	8.97	3.898e-12	7.540e-10
Interleukin-4 and Interleukin-13 signaling	Reactome	19	HMOX1, BCL2, BCL2L1, MMP2, MMP3, MMP9, POMC, VEGFA, TNF, F13A1, IL10, TGFB1	108	281	7.52	5.724e-12	1.075e-9
p130Cas linkage to MAPK signaling for integrins	Reactome	9	FGG, ITGA2B, ITGB3, VWF, FGA, FGB, RAP1B, SRC, TLN1	15	281	25.64	8.190e-12	1.503e-9
GRB2:SOS provides linkage to MAPK signaling for Integrins	Reactome	9	FGG, ITGA2B, ITGB3, VWF, FGA, FGB, RAP1B, SRC, TLN1	15	281	25.64	8.190e-12	1.503e-9
Hematopoietic cell lineage	KEGG	18	ITGA2B, ITGB3, HLA-DRB1, TNF, HLA-DQA1, IL11, THPO, CSF2, CSF3, EPO, GP1BA, GP1BB	100	281	7.69	1.404e-11	2.427e-9