

GeDiPNet Cluster 161 -- 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 03:15:20

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Platelet activation	KEGG	14	GP1BA, GP1BB, ITGA2B, ITGB3, GP6, TBXA2R, RASGRP2, P2RX1, P2RY12, PRKACG, FERMT3, PLA2G4A	126	32	41.70	3.753e-20	2.669e-17
ECM-receptor interaction	KEGG	7	GP1BA, GP1BB, ITGA2B, ITGB3, GP6, CD36, ITGA2	89	32	29.52	2.797e-9	2.717e-7
Platelet degranulation	Reactome	7	ACTN1, ITGA2B, ITGB3, TUBA4A, CD36, FERMT3, STXBP2	123	32	21.36	2.709e-8	2.054e-6
Hematopoietic cell lineage	KEGG	6	GP1BA, GP1BB, ITGA2B, ITGB3, CD36, ITGA2	100	32	22.52	2.178e-7	1.288e-5
Platelet Adhesion to exposed collagen	Reactome	3	GP1BA, GP1BB, GP6	11	32	102.36	2.794e-6	1.187e-4
Phagosome	KEGG	6	ITGB3, TUBA4A, TUBA8, TUBB1, CD36, ITGA2	155	32	14.53	2.880e-6	1.220e-4
Dilated cardiomyopathy	KEGG	5	ITGA2B, ITGB3, TPM4, PRKACG, ITGA2	105	32	17.87	7.746e-6	2.780e-4
COPI-independent Golgi-to-ER retrograde traffic	Reactome	4	TUBA4A, TUBA8, TUBB1, PLA2G4A	51	32	29.44	9.500e-6	3.278e-4
Microtubule-dependent trafficking of connexons from Golgi to the plasma membrane	Reactome	3	TUBA4A, TUBA8, TUBB1	18	32	62.55	1.365e-5	4.416e-4
Cilium Assembly	Reactome	3	TUBA4A, TUBA8, TUBB1	19	32	59.26	1.617e-5	5.084e-4
Integrin signaling	Reactome	3	ITGA2B, ITGB3, RASGRP2	23	32	48.95	2.935e-5	8.337e-4
Carboxyterminal post-translational modifications of tubulin	Reactome	3	TUBA4A, TUBA8, TUBB1	27	32	41.70	4.812e-5	1.253e-3
Sealing of the nuclear envelope (NE) by ESCRT-III	Reactome	3	TUBA4A, TUBA8, TUBB1	31	32	36.32	7.342e-5	1.760e-3
Tight junction	KEGG	5	ACTN1, TUBA4A, TUBA8, PRKACG, RUNX1	170	32	11.04	7.916e-5	1.876e-3
RHO GTPases activate IQGAPs	Reactome	3	TUBA4A, TUBA8, TUBB1	32	32	35.19	8.087e-5	1.908e-3