

GeDiPNet Cluster 457 -- 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: 2026-10-20 03:30:09. · Rows: 15 · Generated: 2026-10-20 00:02:59

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Factors involved in megakaryocyte development and platelet production	Reactome	4	HBB, HBG2, HBD, HBG1	99	7	69.32	1.492e-7	7.937e-6
Malaria	KEGG	2	HBB, TGFB2	50	7	68.63	3.520e-4	5.090e-3
Adrenaline signalling through Alpha-2 adrenergic receptor	Reactome	1	ADRA2B	3	7	571.90	1.748e-3	1.725e-2
Vitamin C (ascorbate) metabolism	Reactome	1	CYB5R3	8	7	214.46	4.655e-3	3.479e-2
Adrenoceptors	Reactome	1	ADRA2B	9	7	190.63	5.235e-3	3.760e-2
Erythrocytes take up oxygen and release carbon dioxide	Reactome	1	HBB	9	7	190.63	5.235e-3	3.760e-2
Scavenging of heme from plasma	Reactome	1	HBB	13	7	131.98	7.554e-3	4.766e-2
Erythrocytes take up carbon dioxide and release oxygen	Reactome	1	HBB	13	7	131.98	7.554e-3	4.766e-2
Biosynthesis of various nucleotide sugars	KEGG	1	CYB5R3	15	7	114.38	8.712e-3	5.219e-2
Phase I - Functionalization of compounds	Reactome	1	CYB5R3	21	7	81.70	1.218e-2	6.411e-2
G alpha (z) signalling events	Reactome	1	ADRA2B	33	7	51.99	1.908e-2	8.331e-2
African trypanosomiasis	KEGG	1	HBB	37	7	46.37	2.137e-2	8.910e-2
Molecules associated with elastic fibres	Reactome	1	TGFB2	38	7	45.15	2.194e-2	9.030e-2
Neutrophil degranulation	Reactome	2	CYB5R3, HBB	480	7	7.15	2.929e-2	1.068e-1
Inflammatory bowel disease	KEGG	1	TGFB2	66	7	26.00	3.785e-2	1.235e-1