

GeDiPNet Cluster 529 -- 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 00:03:18

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Erythropoietin activates RAS	Reactome	2	EPOR, JAK2	10	4	600.50	3.741e-6	1.289e-4
Erythropoietin activates Phosphoinositide-3-kinase (PI3K)	Reactome	2	EPOR, JAK2	12	4	500.42	5.485e-6	1.772e-4
Efferocytosis	KEGG	3	EPOR, JAK2, CALR	157	4	57.37	8.684e-6	2.597e-4
Factors involved in megakaryocyte development and platelet production	Reactome	2	SH2B3, JAK2	99	4	60.66	3.993e-4	5.615e-3
Assembly of Viral Components at the Budding Site	Reactome	1	CALR	2	4	1501.25	6.660e-4	8.310e-3
JAK-STAT signaling pathway	KEGG	2	EPOR, JAK2	168	4	35.74	1.146e-3	1.257e-2
Herpes simplex virus 1 infection	KEGG	2	JAK2, CALR	182	4	32.99	1.343e-3	1.417e-2
Calnexin/calreticulin cycle	Reactome	1	CALR	5	4	600.50	1.664e-3	1.665e-2
Hormone signaling	KEGG	2	EPOR, JAK2	219	4	27.42	1.939e-3	1.862e-2
Scavenging by Class F Receptors	Reactome	1	CALR	6	4	500.42	1.997e-3	1.898e-2
Interleukin-23 signaling	Reactome	1	JAK2	9	4	333.61	2.995e-3	2.538e-2
ATF6 (ATF6-alpha) activates chaperone genes	Reactome	1	CALR	9	4	333.61	2.995e-3	2.538e-2
MAPK1 (ERK2) activation	Reactome	1	JAK2	9	4	333.61	2.995e-3	2.538e-2
MAPK3 (ERK1) activation	Reactome	1	JAK2	10	4	300.25	3.327e-3	2.738e-2
Interleukin-12 signaling	Reactome	1	JAK2	10	4	300.25	3.327e-3	2.738e-2