

GeDiPNet Cluster 24 -- Enriched GO Terms (Biological Process)

GO term enrichment: Biological Process terms (gene2go, human/tax_id=9606 only), upper-tail hypergeometric test, fold enrichment = (overlap / cluster gene count) / (term gene count / universe size), Benjamini-Hochberg FDR-corrected. Top 15 terms per cluster by q-value. See scripts/build_cluster_go_enrichment.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-07 03:23:06. · Rows: 15 · Generated: 2026-10-07 04:01:17

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
erythrocyte development	GO:0048821	10	HBA1, HBA2, GATA1, HBB, SLC11A2, BPGM, HBD, HBG1, SH2B3, SLC4A1	32	140	41.71	2.255e-14	1.379e-11
multicellular organismal-level iron ion homeostasis	GO:0060586	8	HAMP, HFE, SLC11A2, SLC40A1, SOD2, TF, TMPRSS6, EPAS1	28	140	38.14	2.222e-11	7.472e-9
oxygen transport	GO:0015671	6	HBA1, HBA2, HBB, BPGM, HBD, HBG1	17	140	47.11	1.836e-9	3.834e-7
response to nutrient levels	GO:0031667	9	ATG7, GH1, PRL, PTH, SOD2, TNF, ALAD, GSTP1, DNMT3A	79	140	15.21	7.572e-9	1.344e-6
carbon dioxide transport	GO:0015670	5	HBA1, HBA2, HBB, HBD, HBG1	13	140	51.34	2.694e-8	4.021e-6
cell surface receptor signaling pathway via STAT	GO:0097696	6	CSF2, EPO, GH1, IFNA2, IL2, IL3	28	140	28.60	5.223e-8	7.026e-6
intracellular iron ion homeostasis	GO:0006879	8	HAMP, HFE, SLC11A2, SLC40A1, SLC46A1, TF, TMPRSS6, EGLN1	71	140	15.04	5.802e-8	7.682e-6
glutathione metabolic process	GO:0006749	7	G6PD, GPX1, GSR, SOD2, GSTM1, GSTM3, GSTP1	49	140	19.07	7.526e-8	9.490e-6
positive regulation of phosphatidylinositol 3-kinase/protein kinase B signal transduction	GO:0051897	12	AGT, CSF3, GH1, GPX1, IGF2, JAK2, TCF7L2, TNF, CD28, CX3CR1, EGFR, OSM	217	140	7.38	8.772e-8	1.078e-5
iron ion export across plasma membrane	GO:1903988	3	HAMP, SLC40A1, TF	3	140	133.48	4.116e-7	3.967e-5
response to hydrogen peroxide	GO:0042542	6	HBA1, HBA2, GPX1, HBB, HP, SOD2	39	140	20.54	4.227e-7	4.049e-5
cellular oxidant detoxification	GO:0098869	7	HBA1, HBA2, GPX1, GSR, HBB, HP, GSTP1	66	140	14.16	6.137e-7	5.564e-5
embryonic placenta development	GO:0001892	5	CSF2, GATA2, IGF2, EPAS1, EGFR	26	140	25.67	1.273e-6	1.007e-4
response to isolation stress	GO:0035900	3	KRAS, SOD2, TNF	4	140	100.11	1.637e-6	1.230e-4
response to ethanol	GO:0045471	8	CSF3, G6PD, IL2, PTH, TNF, ALAD, GSTP1, DNMT3A	110	140	9.71	1.749e-6	1.295e-4