

GeDiPNet Cluster 1 -- 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 00:30:13

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
immune response	GO:0006955	70	HLA-DPA1, HLA-DPB1, HLA-DQA1, CD40LG, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, FCGR3A, JAK2, TLR4, STAT4	543	701	3.44	9.564e-20	1.494e-16
peptide antigen assembly with MHC class II protein complex	GO:0002503	14	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-DOA, HLA-DMA	16	701	23.33	1.078e-18	1.434e-15
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	GO:0002504	13	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-DOA, HLA-DMA, HLA-DMB	15	701	23.10	2.561e-17	2.782e-14
positive regulation of T cell activation	GO:0050870	20	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-DOA, CCL2	45	701	11.85	3.065e-17	3.259e-14
positive regulation of immune response	GO:0050778	16	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-DOA, IFNL3	40	701	10.66	3.525e-13	1.761e-10
cellular response to lipopolysaccharide	GO:0071222	32	B2M, CD40, JAK2, TLR4, ZFP36, DAB2IP, ABCB1, CD86, CXCL8, NOD2, IL1B, CCL2	187	701	4.56	5.546e-13	2.683e-10
antigen processing and presentation of exogenous peptide antigen via MHC class II	GO:0019886	14	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-DOA, HLA-DMA	31	701	12.04	1.411e-12	6.290e-10
positive regulation of cell population proliferation	GO:0008284	56	PRTN3, TSC22D1, GRK5, TSHR, IL23R, JAK2, NPY, VEGFA, IL2, TNC, BMP4, EDN1	532	701	2.81	3.045e-12	1.257e-9
antigen processing and presentation	GO:0019882	16	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DQB2, HLA-DRB5, HLA-B, HLA-C, HLA-DOA	48	701	8.89	9.552e-12	3.532e-9
phosphatidylinositol 3-kinase/protein kinase B signal transduction	GO:0043491	21	CD40, FCGR3A, NF1, EDN1, MAPKAP1, BTN2A2, BANK1, PTEN, PDPK1, PIK3CA, PIK3CB, PIK3CD	92	701	6.08	1.985e-11	6.794e-9
immune system process	GO:0002376	77	HLA-DPA1, HLA-DPB1, HLA-DQA1, HLA-DQB1, HLA-DRA, HLA-DRB1, B2M, CD40, FCGR3A, HP, IL23R, JAK2	943	701	2.18	9.318e-11	2.683e-8
regulation of cell population proliferation	GO:0042127	30	NF1, STAT4, EMILIN2, DNMT1, TBX19, AGT, PLAU, ARG1, CXCL10, CXCL11, CXCL9, STAT1	201	701	3.98	1.028e-10	2.945e-8
positive regulation of canonical NF-kappaB signal transduction	GO:0043123	32	CD40LG, HLA-DRB1, CD40, PARP1, TLR4, ATP2C1, VEGFA, TLR2, DAB2IP, EDN1, PELI2, UBE2V1	232	701	3.68	1.980e-10	5.295e-8
positive regulation of interleukin-12 production	GO:0032735	14	CD40LG, CD40, IL23R, SYK, TLR4, TLR2, SCIMP, AGER, IFNG, TLR9, TNFSF4, LTB	43	701	8.68	2.746e-10	7.084e-8
cell surface receptor signaling pathway via JAK-STAT	GO:0007259	17	CD40, IL23R, JAK2, STAT4, TSLP, IFNL3, IFNL4, CCL2, IFNG, JAK1, STAT1, CSF2	67	701	6.76	2.778e-10	7.150e-8