

GeDiPNet Cluster 19 -- 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: 2026-10-09 03:23:08. · Rows: 15 · Generated: 2026-10-09 05:38:25

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	53	FCGR3B, HLA-DRB5, STAT4, HLA-DPA1, HLA-DPB1, TLR10, C9, HLA-B, HLA-DRA, IL1A, IL1B, TNF	543	369	4.94	3.541e-22	7.755e-19
positive regulation of type II interferon production	GO:0032729	20	HLA-DPA1, HLA-DPB1, IL1B, TNF, CCR2, IL18, LTA, IL12RB2, PDE4D, PTPN22, TNFSF4, TYK2	77	369	13.15	2.568e-17	2.648e-14
inflammatory response	GO:0006954	40	FCGR2B, IRF5, TLR10, TNFAIP3, TRIM31, IL1A, IL1B, TNF, IL13, TLR2, HK1, XCL2	467	369	4.34	5.638e-15	3.845e-12
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	GO:0002504	9	HLA-DRB5, HLA-DPA1, HLA-DPB1, HLA-DRA, HLA-DRB1, HLA-DQA1, HLA-DOB, HLA-DQB1, HLA-DQB2	15	369	30.39	1.868e-12	7.983e-10
peptide antigen assembly with MHC class II protein complex	GO:0002503	9	HLA-DRB5, HLA-DPA1, HLA-DPB1, HLA-DRA, HLA-DRB1, HLA-DQA1, HLA-DOB, HLA-DQB1, HLA-DQB2	16	369	28.49	4.195e-12	1.681e-9
immune system process	GO:0002376	53	HLA-DRB5, IRF5, HLA-DPA1, HLA-DPB1, TLR10, TNFAIP3, C2, TRIM31, C9, HLA-B, HLA-DRA, MBL2	943	369	2.85	5.454e-12	2.116e-9
antigen processing and presentation of exogenous peptide antigen via MHC class II	GO:0019886	11	FCGR2B, HLA-DRB5, HLA-DPA1, HLA-DPB1, HLA-DRA, HLA-DRB1, HLA-DQA1, HLA-DOB, HLA-DQB1, HLA-DQB2, TRAF6	31	369	17.97	9.123e-12	3.381e-9
cellular response to lipopolysaccharide	GO:0071222	22	TNFAIP3, IL1A, IL1B, TNF, IRAK1, IL6, CCR5, CD40, IL18, NFKBIL1, TNFSF4, TNIP1	187	369	5.96	2.056e-11	7.072e-9
positive regulation of T cell proliferation	GO:0042102	14	HLA-DPA1, HLA-DPB1, IL1B, SELENOK, IL6, BTNL2, CD40LG, PTPRC, TNFSF4, TRAF6, TYK2, IL2	67	369	10.58	4.068e-11	1.302e-8
response to lipopolysaccharide	GO:0032496	20	C2, IL1B, TNF, IL13, IRAK1, DUSP10, GCH1, CYP27B1, CASP3, LTA, PELI1, IL12RB2	161	369	6.29	6.333e-11	1.945e-8
cytokine-mediated signaling pathway	GO:0019221	19	IRF5, STAT4, IL1A, IL1B, CAV1, IRAK1, IL6, CCR2, IL18, PTPRJ, IL12RB2, PTPN11	145	369	6.64	7.506e-11	2.262e-8
positive regulation of tumor necrosis factor production	GO:0032760	17	FCGR2B, IL1A, FCGR2A, TLR2, SELENOK, IL6, TGFB1, IL17A, TLR1, CCR2, PTPRC, PTPRJ	113	369	7.62	8.247e-11	2.468e-8
positive regulation of immune response	GO:0050778	11	HLA-DRB5, HLA-DPA1, HLA-DPB1, C9, HLA-DRA, HLA-DRB1, HLA-DQA1, HLA-DOB, HLA-DQB1, HLA-DQB2, PTPRJ	40	369	13.93	2.124e-10	5.775e-8
antigen processing and presentation	GO:0019882	11	HLA-DRB5, HLA-DPA1, HLA-DPB1, HLA-B, HLA-DRA, HLA-DRB1, HLA-DQA1, HLA-DOB, HLA-DQB1, HLA-DQB2, HLA-A	48	369	11.61	1.802e-9	3.752e-7
positive regulation of interleukin-12 production	GO:0032735	10	IRF5, TLR2, IL17A, CD40, CD40LG, TNFSF4, TRAF6, IFNG, IL23R, IRF1	43	369	11.78	8.570e-9	1.475e-6