

GeDiPNet Cluster 142 -- 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: 2026-10-08 03:23:04. · Rows: 15 · Generated: 2026-10-08 17:25:13

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	72	CBLB, CCL21, CD28, CTLA4, CTSH, CXCR5, FASLG, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1	543	392	6.32	4.387e-37	3.736e-33
immune system process	GO:0002376	86	CAMK4, CARD9, CD28, CTLA4, ERAP2, GATA3, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, IL18RAP	943	392	4.35	6.640e-32	3.929e-28
positive regulation of T cell proliferation	GO:0042102	20	CCDC88B, CD28, HLA-DMB, HLA-DPA1, IL23R, IL2RA, JAK2, TYK2, CD274, CD40LG, IL4, IL6	67	392	14.23	3.956e-18	4.779e-15
inflammatory response	GO:0006954	45	CAMK4, CCL21, GATA3, IL18RAP, IL23R, IL2RA, IRF5, MACIR, TICAM1, TNFAIP3, TNIP1, STAT3	467	392	4.59	1.127e-17	1.244e-14
adaptive immune response	GO:0002250	45	CAMK4, CARD9, CTLA4, CTSH, ERAP2, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, IL18RAP, JAK2	507	392	4.23	2.572e-16	2.180e-13
peptide antigen assembly with MHC class II protein complex	GO:0002503	11	HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, B2M, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DPB1, HLA-DQB2	16	392	32.77	1.198e-15	8.858e-13
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	GO:0002504	10	HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DPB1, HLA-DQB2	15	392	31.78	4.028e-14	2.324e-11
cell surface receptor signaling pathway	GO:0007166	35	ADGRL2, CBLB, CD28, FLT3, IL2RA, LRRK2, TICAM1, TNFRSF14, TNFSF15, CD274, CD40LG, CXCR3	373	392	4.47	1.264e-13	6.709e-11
positive regulation of T cell activation	GO:0050870	14	CCDC88B, CD28, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, B2M, HLA-DQA1, HLA-DRA, HLA-DRB1, CCR2, HLA-DOB	45	392	14.83	2.346e-13	1.192e-10
antigen processing and presentation of exogenous peptide antigen via MHC class II	GO:0019886	12	HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, B2M, FCGR2B, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DPB1, HLA-DQB2	31	392	18.45	6.052e-13	2.817e-10
positive regulation of immune response	GO:0050778	13	HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, B2M, TGFB2, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DPB1, HLA-DQB2	40	392	15.49	9.007e-13	4.084e-10
antigen processing and presentation	GO:0019882	13	CTSH, HLA-B, HLA-DMB, HLA-DOA, HLA-DPA1, HLA-DQB1, RAB5B, HLA-DQA1, HLA-DRA, HLA-DRB1, HLA-DOB, HLA-DPB1	48	392	12.91	1.241e-11	4.402e-9
positive regulation of tumor necrosis factor production	GO:0032760	18	CARD9, JAK2, LRRK2, TICAM1, STAT3, FCGR2B, IFNG, IL17A, IL6, PF4, IFIH1, TLR3	113	392	7.59	2.294e-11	7.644e-9
cellular response to lipopolysaccharide	GO:0071222	22	IL10, JAK2, TICAM1, TNFAIP3, TNIP1, CD274, AICDA, B2M, IL6, PF4, CD86, CX3CR1	187	392	5.61	6.629e-11	1.961e-8
T cell receptor signaling pathway	GO:0050852	18	CBLB, CD28, CTLA4, GATA3, HLA-DQB1, PTPN22, ZAP70, BTNL2, CD247, FYN, HLA-DRB1, CSK	121	392	7.09	7.450e-11	2.173e-8