

GeDiPNet Cluster 444 -- 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: 2026-10-20 03:23:14. · Rows: 15 · Generated: 2026-10-19 23:18:51

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	43	CCR6, CD4, CD40LG, CTLA4, FCRL3, HLA-B, HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, ICAM1	543	259	5.71	1.214e-20	2.148e-17
antigen processing and presentation	GO:0019882	12	HLA-B, HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, RAB5B, HLA-C, HLA-DPB1, HLA-DRA, HLA-DRB5, PSMB8	48	259	18.04	1.743e-12	7.956e-10
positive regulation of T cell proliferation	GO:0042102	13	BTNL2, CD4, CD40LG, HLA-DPA1, IL1B, IL2, IL23R, IL2RA, IL4, IL6, HLA-DPB1, PTPRC	67	259	14.00	6.723e-12	2.654e-9
antigen processing and presentation of peptide or polysaccharide antigen via MHC class II	GO:0002504	8	HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, HLA-DPB1, HLA-DRA, HLA-DRB5	15	259	38.48	7.234e-12	2.832e-9
peptide antigen assembly with MHC class II protein complex	GO:0002503	8	HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, HLA-DPB1, HLA-DRA, HLA-DRB5	16	259	36.08	1.429e-11	5.292e-9
positive regulation of T cell activation	GO:0050870	11	CD4, HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, HLA-DPB1, HLA-DRA, HLA-DRB5, CCL2, TNFSF11	45	259	17.64	1.963e-11	6.956e-9
immune system process	GO:0002376	41	C4A, C4B, CD4, CD40, CTLA4, HLA-B, HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, IFIH1	943	259	3.14	6.862e-11	2.180e-8
positive regulation of canonical NF-kappaB signal transduction	GO:0043123	20	CD4, CD40, CD40LG, HLA-DRB1, IL1B, LTA, TGFB1, TNF, VEGFA, INSR, NEK6, CASP7	232	259	6.22	8.674e-11	2.691e-8
response to lipopolysaccharide	GO:0032496	17	CYP1A1, IL10, IL13, IL1B, IL23R, LTA, PTPN22, TNF, GPX1, SOD2, DIO2, FASLG	161	259	7.62	9.865e-11	3.028e-8
positive regulation of transcription by RNA polymerase II	GO:0045944	46	AAMDC, ADRB2, CD40, ESR2, IFNG, IL10, IL13, IL17A, IL1B, IL2, IL4, IL6	1208	259	2.75	3.329e-10	8.961e-8
positive regulation of MAPK cascade	GO:0043410	19	ADRB2, CD4, CD40, FCRL3, HLA-DRB1, IL1B, IL6, IL6R, TGFB1, TNF, VEGFA, CARTPT	224	259	6.12	3.437e-10	9.218e-8
positive regulation of B cell proliferation	GO:0030890	10	CD40, FCRL3, IL13, IL2, IL4, VAV3, PRLR, PTPRC, TICAM1, TLR4	47	259	15.35	7.256e-10	1.763e-7
positive regulation of smooth muscle cell proliferation	GO:0048661	10	IL13, IL6, IL6R, TGFB1, TNF, ID2, CDH13, FOXP1, PIK3R1, TLR4	52	259	13.88	2.086e-9	4.403e-7
positive regulation of osteoclast differentiation	GO:0045672	8	IFNG, IL17A, IL23R, TNF, PPARGC1B, PPP3CA, TNFRSF11A, TNFSF11	28	259	20.61	2.989e-9	6.074e-7
antigen processing and presentation of exogenous peptide antigen via MHC class II	GO:0019886	8	HLA-DPA1, HLA-DQA1, HLA-DQB1, HLA-DRB1, HLA-DRB3, HLA-DPB1, HLA-DRA, HLA-DRB5	31	259	18.62	7.319e-9	1.343e-6