

GeDiPNet Cluster 43 -- 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 11:07:12

GO Term	GO ID	Overlap Genes	Overlap Gene Names	Term Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
response to lipopolysaccharide	GO:0032496	17	TLR4, TNF, ADAM17, IL10, IL1B, MPO, NOS2, RELA, SOD2, SNCA, CASP3, LBP	161	125	15.79	6.041e-16	4.949e-13
negative regulation of apoptotic process	GO:0043066	26	AVP, MMP9, TNF, CD27, GHRL, IGF1, IL6, PTGS2, GCG, IL10, IL4, MIF	524	125	7.42	9.024e-16	7.077e-13
positive regulation of chemokine production	GO:0032722	11	TLR4, TNF, IL6, ADAM17, HMOX1, IFNG, IL1B, IL4R, ADORA2B, HMGB1, LBP	49	125	33.56	1.801e-14	1.123e-11
positive regulation of interleukin-6 production	GO:0032755	13	TLR4, TNF, IL6, IFNG, IL17A, IL1B, NOS2, RELA, SYK, TGFB1, ADORA2B, HMGB1	103	125	18.87	1.829e-13	9.649e-11
positive regulation of ERK1 and ERK2 cascade	GO:0070374	16	TLR4, TNF, IGF1, FGF19, GCG, IL1B, MIF, NAMPT, SRC, APOE, FGF2, TGFB1	201	125	11.90	3.925e-13	1.942e-10
positive regulation of smooth muscle cell proliferation	GO:0048661	10	TLR4, TNF, ITGA2, IGF1, IL6, HMOX1, CCL5, FGF2, MMP2, TGFB1	52	125	28.75	1.553e-12	6.806e-10
cellular response to lipopolysaccharide	GO:0071222	15	MMP9, TLR4, TNF, CXCL8, IL6, ZFP36, IL10, IL1B, NOS2, RELA, SERPINE1, CSF3	187	125	11.99	1.992e-12	8.552e-10
inflammatory response	GO:0006954	21	TLR4, TNF, CXCL8, IL6, TNFRSF1A, ALOX5, IL17A, IL1B, MIF, NAMPT, NOS2, RELA	467	125	6.72	4.695e-12	1.847e-9
response to xenobiotic stimulus	GO:0009410	16	AVP, TNF, ITGA2, ADAM17, AHR, IL10, RELA, SOD2, LOX, SNCA, COL1A1, MMP2	248	125	9.64	9.823e-12	3.625e-9
immune response	GO:0006955	22	TLR4, TNF, CXCL8, IL6, HLA-B, IFNG, IL10, IL17A, IL1B, IL4, MADCAM1, IL4R	543	125	6.06	1.066e-11	3.909e-9
positive regulation of interleukin-8 production	GO:0032757	10	TLR4, TNF, IL6, IL1B, NOS2, RELA, SYK, SERPINE1, HMGB1, LBP	65	125	23.00	1.633e-11	5.719e-9
regulation of insulin secretion	GO:0050796	9	TNF, IL6, ALOX5, GCG, IFNG, IL1B, NOS2, CCL5, PPP3CB	46	125	29.25	1.791e-11	6.198e-9
positive regulation of neuroinflammatory response	GO:0150078	6	TNF, IL6, IL1B, CCL5, MAPK1, MAPK3	16	125	56.06	6.018e-10	1.432e-7
positive regulation of cell population proliferation	GO:0008284	19	AVP, IGF1, IL6, PTHLH, ADAM17, FGF19, IFNG, IL1B, IL4, MIF, NAMPT, RELA	532	125	5.34	2.570e-9	5.148e-7
positive regulation of tumor necrosis factor production	GO:0032760	10	TLR4, IL6, ADAM17, IFNG, IL17A, MIF, SYK, TGFB1, HMGB1, LBP	113	125	13.23	4.327e-9	8.186e-7