

**S7 Table.** Top ten GO terms of differentially expressed genes with absolute log<sub>2</sub> fold change of FPKM > 4 ordered by statistical significance

ID	GO terms	Q-value	Count	Genes
GO:0001816	Cytokine production	5.93E-03	31	CD83, UBASH3A, S100A8, S100A12, HEG1, SCGB1A1, CCL20, HSPA1A, HTR2B, BIRC3, IFI16, IL23A, CSF2, PRG2, IL1A, CYBA, SERPINB7, IL15, TNFRSF9, IL18, IL17C, PTAFR, BST2, PGLYRP4, CAMK4, NFAM1, PAEP, IRAK3, RORC, LTB, TNFAIP3
GO:0006955	Immune response	5.93E-03	52	IL32, TNIP3, RFTN2, CD83, UBASH3A, S100A8, S100A12, CCL28, PIGR, CCL20, MMP7, HSPA1A, BIRC3, IFI16, IFI27, IL23A, CSF2, PRG2, IL1A, STX11, IFI6, MX1, IL7R, CYBA, IL15, TNFRSF9, IL18, TNFSF10, PSMB9, PTAFR, CCL27, CFB, PTK6, DEFB4A, BST2, PLCL2, C2, IFI44L, DOCK2, PGLYRP4, CAMK4, TRIM31, GPR183, CAV1, LCN2, NFAM1, CXCL3, IRAK3, RORC, LTB, TNFAIP3, TNFRSF1B
GO:0051707	Response to other organism	5.93E-03	38	TNIP3, S100A8, S100A12, SCGB1A1, CCL20, MMP7, ALPL, IFI44, BIRC3, IFI16, IL23A, BPIFA2, CSF2, PRG2, ASB2, MX1, CYBA, CYP1A2, IL15, TNFRSF9, IL18, PSMB9, PTAFR, DEFB4A, BST2, IFI44L, FGFBP1, DOCK2, PGLYRP4, MUC5B, CAV1, LCN2, CXCL3, THBD, IRAK3, TNFAIP3, TNFRSF1B, CDK6
GO:0043207	Response to external biotic stimulus	5.93E-03	38	TNIP3, S100A8, S100A12, SCGB1A1, CCL20, MMP7, ALPL, IFI44, BIRC3, IFI16, IL23A, BPIFA2, CSF2, PRG2, ASB2, MX1, CYBA, CYP1A2, IL15, TNFRSF9, IL18, PSMB9, PTAFR, DEFB4A, BST2, IFI44L, FGFBP1, DOCK2, PGLYRP4, MUC5B, CAV1, LCN2, CXCL3, THBD, IRAK3, TNFAIP3, TNFRSF1B, CDK6
GO:0009607	Response to biotic stimulus	5.93E-03	39	TNIP3, S100A8, S100A12, SCGB1A1, CCL20, MMP7, ALPL, IFI44, BIRC3, IFI16, IL23A, BPIFA2, CSF2, PRG2, SMO, ASB2, MX1, CYBA, CYP1A2, IL15, TNFRSF9, IL18, PSMB9, PTAFR, DEFB4A, BST2, IFI44L, FGFBP1, DOCK2, PGLYRP4, MUC5B, CAV1, LCN2, CXCL3, THBD, IRAK3, TNFAIP3, TNFRSF1B, CDK6
GO:0001817	Regulation of cytokine production	3.46E-02	27	CD83, UBASH3A, HEG1, SCGB1A1, CCL20, HSPA1A, HTR2B, BIRC3, IFI16, IL23A, CSF2, PRG2, IL1A, CYBA, SERPINB7, IL15, TNFRSF9, IL18, IL17C, PTAFR, BST2, PGLYRP4, NFAM1, PAEP, IRAK3, LTB, TNFAIP3
GO:0007267	Cell-cell signaling	5.69E-02	41	LRRK2, FOXA2, CHRM3, CHRN2, RYR2, SCN4B, SCN5A, CCL20, VIPR2, GDF15, BCAN, SNCAIP, WNT10A, SMO, RIMS1, SNCG, STX11, UNC13A, GABRB2, IL15, IL18, SNPH, TNFSF10, IL17C, MYT1, CEACAM6, CCL27, C2CD4C, GFAP, SV2B, BST2, PLCL2, SYP, SYT1, FGFBP1, CAMK4, PCDHB11, EDN2, LHX1, GPR68, LTB

GO:0009617	Response to bacterium	6.39E-02	25	TNIP3, S100A8, S100A12, SCGB1A1, CCL20, MMP7, ALPL ,IL23A, BPIFA2, CSF2, PRG2, CYBA, CYP1A2, TNFRSF9, IL18, PTAFR, DEFB4A, PGLYRP4, MUC5B, CAV1, CXCL3, THBD, IRAK3, TNFAIP3, TNFRSF1B
GO:0001819	Positive regulation of cytokine production	8.03E-02	20	CD83, HEG1, CCL20, HSPA1A, HTR2B, BIRC3, IFI16, IL23A, CSF2, PRG2, IL1A, CYBA, SERPINB7, IL15, IL18, IL17C, PTAFR, NFAM1, PAEP,LTB
GO:0006952	Defense response	9.40E-02	49	SERPINA3, IL32, TNIP3, CD83, S100A8, S100A12, SCGB1A1, CCL20, MMP7, HSPA1A, BIRC3, IFI16, IFI27, IL23A, BPIFA2, PRG2, ASB2, IL1A, STX11, IFI6, MX1, CYBA,IL15, TNFRSF9, IL18, IL17C, PSMB9, PTAFR, CFB, PTK6, DEFB4A, BST2, C2, IFI44L, FGFBP1, DOCK2, PGLYRP4, CAMK4, TRIM31, MUC5B, CAV1, LCN2, NFAM1, CXCL3, GPR68, APOL3, IRAK3, TNFAIP3, TNFRSF1B

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Q values were estimated by Benjamini and Hochberg procedure to control the false discovery rate. GO, gene ontology; FPKM, fragments per kilobase of transcript per million fragments mapped.