

## Human Innate & Adaptive Immune Responses PCR Array

### Innate Immunity:

Pattern Recognition Receptors: DDX58 (RIG-I), NLRP3, NOD1 (CARD4), NOD2, TLR1, TLR2, TLR3, TLR4, TLR5, TLR6, TLR7, TLR8, TLR9.

Cytokines: CCL2 (MCP-1), CCL5 (RANTES), CSF2 (GM-CSF), CXCL10, IFNA1, IFNB1, IL18, IL1A, IL1B, IL2, IL8, TNF.

Other Genes: APCS, C3, CASP1 (ICE), CD14, CD4, CD40 (TNFRSF5), CD40LG (TNFSF5), CD8A, CRP, HLA-A, HLA-E, IL1R1, IRAK1, IRF3, IRF7, ITGAM, LY96 (MD-2), LYZ, MAPK1 (ERK2), MAPK8 (JNK1), MBL2, MPO, MX1, MYD88, NFKB1, NFKBIA (I $\beta$ Ba/Mad3), STAT1, TICAM1 (TRIF), TRAF6.

### Adaptive Immunity:

Th1 Markers/Immune Response: CCR5, CD80, CXCR3, IFNG, IL18, IL23A, SLC11A1, STAT4, TBX21, TLR4, TLR6.

Th2 Markers/Immune Response: CCR4, CCR8, CD86, GATA3, IFNB1, IL10, IL13, IL18, IL4, IL5, IL6, NOD2, STAT6.

Th17 Markers: CCR6, IL17A, RORC, STAT3.

Treg Markers: CCR4, CCR8, FOXP3, IL10.

T Cell Activation: CD80, CD86, ICAM1, IFNG, IL23A, IL6, SLC11A1.

Cytokines: CCL2 (MCP-1), CCL5 (RANTES), CSF2 (GM-CSF), CXCL10 (INP10), IFNA1, IFNG, IL10, IL13, IL17A, IL18, IL2, IL23A, IL4, IL5, IL6, IL8, TNF.

Other Genes: CD4, CD40 (TNFRSF5), CD40LG (TNFSF5), CD8A, CRP, FASLG (TNFSF6), HLA-A, IFNAR1, IFNGR1, IL1B, IL1R1, IRF3, IRF7, ITGAM, JAK2, MAPK8 (JNK1), MBL2, MX1, NFKB1, RAG1, STAT1.

Humoral Immunity: C3, CCL2 (MCP-1), CCR6, CRP, IFNB1, IFNG, IL6, MBL2, NOD2, TNF.

Inflammatory Response: APCS, C3, CCL5 (RANTES), CRP, FOXP3, IL1A, IL1B, IL4, IL6, MBL2, STAT3, TNF.

Defense Response to Bacteria: IFNB1, IFNG, IL23A, IL6, LYZ, MBL2, MYD88, NOD1 (CARD4), NOD2, SLC11A1, TLR1, TLR3, TLR4, TLR6, TLR9, TNF.

Defense Response to Viruses: CD4, CD40 (TNFRSF5), CD86, CD8A, CXCL10 (INP10), DDX58 (RIG-I), HLA-A, IFNAR1, IFNB1, IL23A, IL6, IRF3, NLRP3, TICAM1 (TRIF), TLR3, TLR7, TLR8, TYK2.