

<b>Human Antifungal Response PCR Array</b>
<b>Fungal Pattern Recognition Receptors (PRRs):</b>
<u>Beta-Glycan Responsive:</u> CD36, CD5, CLEC7A (Dectin-1), ITGAM, ITGB2, SCARF1, TLR2.
<u>Mannose/Chitin Responsive:</u> CD207, CD209, CHIA, CLEC6A (Dectin-2), MRC1, TLR2, TLR4.
<u>Other:</u> COLEC12, NLRP3, NPTX1, PTX3, TLR9.
<b>Signal Transduction:</b>
<u>Dectin-1 Signaling Pathway:</u> BCL10, CARD9, CLEC7A (Dectin-1), MALT1, PLCG2, RAF1, SYK.
<u>NF-<math>\kappa</math>B Signaling Pathway:</u> BCL10, CARD9, CASP1 (ICE), CASP8 (FLICE), CD40 (TNFRSF5), IKBKB, IL10, IL1B, IRAK1, IRAK4, MALT1, MAP3K7 (TAK1), NFKB1, NFKBIA (I $\kappa$ Ba/MAD3), STAT1, TNF.
<u>Toll-like receptor (TLR) Signaling Pathway:</u> CASP8 (FLICE), CD14, FOS, IRAK1, IRAK4, ITGB2, JUN, MAP2K4 (JNKK1), MAP3K7 (TAK1), MAPK14 (p38 MAPK), MAPK8 (JNK1), MYD88, NFKB1, TIRAP, TLR2, TLR4, TLR9, TRAF6.
<u>Complement Signaling Pathway:</u> C3, C5AR1 (GPR77), ITGAM, ITGB2, LYN, MBL2, SYK.
<u>Nod-like Receptor (NLR) Signaling Pathway:</u> CARD9, CASP1 (ICE), NLRP3, PYCARD (TMS1/ASC).
<b>Inflammation:</b> C3, CCL2 (MCP-1), CCL20 (MIP-3A), CCL5 (RANTES), CCR1, CD14, CD40 (TNFRSF5), CLEC7A (Dectin-1), CXCL1, CXCL10 (INP10), CXCL11 (I-TAC/IP-9), CXCL2, CXCL9 (MIG), F3, FOS, IL10, IL1A, IL1B, IL2, IL23A, IL6, IL8, ITGB2, LYN, MBL2, MYD88, NFKB1, PTGS2 (COX-2), TIRAP, TLR2, TLR4.
<b>Phagocytosis:</b> C3, CD14, CD36, CLEC7A (Dectin-1), COLEC12, FCGR1A, FCN1, MBL2, SFTPD.
<b>Genes Responsive to Specific Pathogenic Fungi:</b>
<u><i>Candida albicans</i>:</u> CCL2 (MCP-1), CCL20 (MIP-3A), CCL5 (RANTES), CCR1, CD14, CD209, CD83, CLEC6A (Dectin-2), CLEC7A (Dectin-1), CSF2 (GM-CSF), CSF3 (GCSF), CXCL1, CXCL10 (INP10), CXCL11 (I-TAC/IP-9), CXCL2, CXCL9 (MIG), FCGR1A, FCGR3A, IFNG, IL12B, IL18, IL1A, IL1B, IL1R1, IL23A, IL6, IL8, MYD88, NFKB1, PTGS2 (COX-2), SOCS3, TLR2, TNF.
<u><i>Aspergillus fumigatus</i>:</u> C3, CASP1 (ICE), CASP8 (FLICE), CCL2 (MCP-1), CCL20 (MIP-3A), CCL5 (RANTES), CCR1, CD14, CD40 (TNFRSF5), CD83, CLEC6A (Dectin-2), CLEC7A (Dectin-1), CSF2 (GM-CSF), CSF3 (GCSF), CXCL1, CXCL10 (INP10), CXCL11 (I-TAC/IP-9), CXCL2, CXCL9 (MIG), F2RL1, F3, FCGR1A, FCGR2A, FCN1, IFNG, IL10, IL12A, IL12B, IL18, IL1A, IL1B, IL1R1, IL6, IL8, JUN, MALT1, MAPK14 (p38 MAPK), MBL2, MYD88, NFKBIA (I $\kappa$ Ba/MAD3), PTGS2 (COX-2), PTPN6, PTX3, SFTPD, SOCS3, ST3GAL5.

*Cryptococcus neoformans*: C3, CD5, CCL2 (MCP-1), CD40 (TNFRSF5), SOCS3.