

## Cystic Fibrosis PCR Array

**Modifier Genes:** ADIPOR2, ADRB2, EDNRA, GCLC, GSTM1 (MGST1), IFRD1, IL8, MBL2, MSRA, NOS3 (eNOS), SCNN1B, SCNN1G, SERPINA1, TCF7L2, TGFB1, TNF, TNFRSF1A.

**Genes Interacting with CFTR:** AHSA1, CANX, CFTR, DNAJA1, DNAJC5, EZR, GOPC, HSP90AA1, HSPA4 (HSP70), HSPA8, NME1 (NM23A), PDZK1, PPP2R4, PRKAA1, PRKAA2, SLC26A3, SLC9A3R1, SLC9A3R2, SNAP23, STX1A, STX8, TGFB1, TJP1, VCP.

**Neutrophil Chemotaxis:** CCL2 (MCP1), CXCR2 (IL8RB), EDN1, EDNRA, IL1B, IL8, ITGB2.

**Inflammatory Response:** ACE, ADRB2, ALOX12B, CCL2 (MCP1), CXCL1, CXCL2, DEFB1, EDNRA, IL10, IL1B, IL6, IL8, ITGB2, MBL2, NFKB1, PLA2G5, PTGS2 (COX2), S100A8, SERPINA1, TGFB1, TLR2, TLR4, TLR5, TNF, TNFRSF11A (RANK), TNFRSF1A.

**Immune Response:**

Innate: CCL2 (MCP1), CLU, DEFB1, ICAM1, LCN2 (NGAL), MAPK1 (ERK2), MBL2, NFKB1, NFKBIA (?Ba), PRKCE, TGFB1, TLR2, TLR4, TLR5, TNFSF10 (TRAIL).

Adaptive: CLU, FAS (TNFRSF6), ICAM1, IL10, IL1B, IL7R, MBL2, TGFB1, TLR4, TNF, TNFRSF11A (RANK).

**Unfolded Protein Response:** CALR, DNAJA1, HSP90AA1, HSPA1A, HSPA4 (HSP70), HSPA8, HSPH1 (HSP105), VCP.

**Ion Binding & Transport:** ADK, KCNE1, NR4A2 (NUR77), SCNN1B, SCNN1G, SLC9A3R1.

**Oxidative Stress:** CLU, DUSP1 (PTPN16), GCLC, IL6, LCN2 (NGAL), MBL2, MSRA, NOS3 (eNOS), PTGS2 (COX2), SFTPB.

**Other Genes:** EPSTI1, IGFBP5, ITGA2, KIT (CD117), MET, PRTN3, SLPI.