

## OHS-025

Oligo GEArray® Human NF $\kappa$ B Signaling Pathway Microarray

## Description

The Oligo GEArray® Human NF $\kappa$ B Signaling Pathway Microarray contains 113 genes related to NF $\kappa$ B-mediated signal transduction. The array includes genes that encode members of the Rel, NF $\kappa$ B, and I $\kappa$ B families, NF $\kappa$ B-responsive genes, extracellular ligands and receptors that activate the pathway, and kinases and transcription factors that propagate the signal. NF $\kappa$ B-mediated signal transduction has been implicated in the regulation of viral replication, autoimmune diseases, the inflammatory response, tumorigenesis and apoptosis. With the OHS-025 Oligo GEArray® Human NF $\kappa$ B Signaling Pathway Microarray you can compare samples from different disease states or experimental treatments with expression data from a focused number of genes involved in the NF-kappaB regulatory pathway.

## Functional Gene Groupings (more detailed information is provided in the gene table)

## Activation of NF-kappaB pathway

Ligands and receptors: CARD10, IL1B, IL8, MYD88, TLR1, TLR2, TLR3, TLR4, TLR6, TLR8, TNF, TNFRSF10A, TNFRSF10B.

Membrane molecules: CARD11, CARD14, IRAK1, IRAK2.

Kinases: CHUK, IKBKB, IKBKG, IRAK1, IRAK2, MAP2K3, MAP2K4, MAP2K6, MAP3K14, MAP3K7, MAPK14.

I-kappaB kinase/NF-kappaB cascade: EDARADD, IKBKB, IRAK2, STAT1, TLR8.

Cytoplasmic sequestering/releasing of NF-kappaB: BCL3, IL10, NALP12, NFKBIA, TNFRSF7, TNFSF14.

Transcription factors: IKBKB, IKBKG, IRAK1, NFKB1, NFKBIA, RELA, STAT1, TNF.

Inflammatory response: IL1B, IL8, IRAK2, MYD88, NFKB1, TLR1, TLR2, TLR3, TLR4, TLR6, TLR8, TNF.

## Positive regulation of I-kappaB kinase/NF-kappaB cascade

Ligands and receptors: F2R, GPR89, HTR2B, LTBR, SLC20A1, TICAM2, TNFRSF1A, TNFRSF5, TNFSF10, TNFSF6, TRIF.

Membrane molecules: EDG2, GJA1, HMOX1, RHOA, VAPA.

Kinases: IKBKE, MAP3K3, MAP3K7IP2, PLK2, RIPK1, RIPK2, TBK1.

Other: APOL3, BCL10, BIRC2, CARD4, CASP1, CASP8, CFLAR, CTL2, CXXC5, ECM1, FADD, HNLF, LITAF, MALT1, PPM1A, PPP5C, REL, RFP2, RHOC, TRADD, TRAF5, TRAF6.

## Other factors involved in NF-kappaB pathway

Extracellular molecules: BF, CSF2, CSF3, IFNA1, IFNB1, IFNG, IL1A, IL6.

Ligands and receptors: AGT, C3, CCL2, ICAM1, IL1R1, LTA, MAP3K7IP1, RAF1, TLR10, TLR7, TLR9.

Kinases: AKT1, CCL2, MAP3K1, MAPK3, MAPK8, RAF1.

Transcription factors: ATF1, ATF2, EGR1, ELK1, FOS, JUN, NFKB2, RELB, TNFAIP3.

Inflammatory response: C3, CCL2, FOS, IL1A, IL1R1, TLR10, TLR7, TLR9.

## Storage Conditions

**Please check the kit components immediately after you receive this package. SuperArray is only responsible for missing items reported within two (2) business days of receipt.**

Oligo GEArrays are shipped at ambient temperature. They should be stored in the enclosed disposable hybridization tube at  $-20^{\circ}\text{C}$  upon receipt.

## References

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