

# Oligo GEArray® Human Common Cytokines Microarray

HybTube Format Cat. No. OHS-021  
HybPlate Format Cat. No. EHS-021

## Description

The Oligo GEArray® Human Common Cytokines Microarray profiles the expression of 114 important cytokine genes. This array includes interferons and interleukins as well as the bone morphogenetic proteins (BMP) and members of the TGF- $\beta$  family. Also represented are colony-stimulating factors and various growth factors (fibroblast, insulin-like, platelet-derived, transforming, and vascular endothelial). Tumor necrosis factors are included as well as other cytokine-related genes. Through a simple side-by-side hybridization experiment you can determine differential gene expression between your samples.

## Functional Gene Groupings

**Interferons:** IFNA1, IFNA13, IFNA14, IFNA2, IFNA4, IFNA5, IFNA8, IFNB1, IFNG, IFNK, IFNW1.

**Interleukins:** IK, IL10, IL11, IL12A, IL12B, IL13, IL14, IL15, IL16, IL17, IL17B, IL17C, IL17E, IL17F, IL18, IL19, IL1A, IL1B, IL1F10, IL1F5, IL1F6, IL1F7, IL1F8, IL1F9, IL2, IL20, IL21, IL22, IL24, IL26, IL3, IL4, IL5, IL6, IL7, IL8, IL9.

**Bone Morphogenetic Proteins (BMPs) and the TGF-beta Family:** BMP1, BMP10, BMP15, BMP2, BMP3, BMP4, BMP5, BMP6, BMP7, BMP8B, GDF10, GDF11, GDF15, GDF2, GDF3, GDF5, GDF8, GDF9, INHA, INHBA, INHBB, LASS1 (GDF1), NODAL, TGFA, TGFB1, TGFB2, TGFB3.

**PDGF/VEGF Family:** FIGF, PDGFA, PDGFB, VEGF, VEGFB.

**TNF Superfamily:** CD40LG (TNFSF5/CD40 ligand), FASLG (TNFSF6), LTA (TNF- $\beta$ ), LTB, TNF (TNF- $\alpha$ ), TNFSF4 (OX40 ligand), TNFSF7 (CD27 ligand), TNFSF8 (CD30 ligand), TNFSF9 (4-1BB ligand), TNFSF10 (TRAIL), TNFSF11 (TRANCE), TNFRSF11B (TR1), TNFSF12 (APO3L), TNFSF13 (April), TNFSF13B, TNFSF14 (HVEM-L), TNFSF15 (VEGI), TNFSF18.

**Other Growth Factors and Cytokines:** AREG, ATP6AP1, CSF1 (M-CSF), CSF2 (GM-CSF), CSF3 (G-CSF), CYFIP2, FAM3B, FAM3C, FGF10, FLT3LG, LEFTY2 (EBAF), MDK, PTN, SLURP1 (ARS), SPP1, THPO.

## 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.**

GEArray microarrays are shipped at ambient temperature enclosed in either a HybTube or ExpressPak Storage Box. They should be stored at  $-20^{\circ}\text{C}$  upon receipt.

## References

1. Callard R, Gearing A (1998). *The Cytokine Facts Book*, Academic Press.
2. Oppenheim JJ, Feldmann M (2000) *Cytokine References*.
3. Richard A, Kaempfer R (2000). *Cytokines Revisited at Hilton Head Cytokine and Growth Factor Reviews 11*: 255-266.
4. Peter J. Delves and Ivan M. Roitt (1998) *Encyclopedia of Immunology*, 2<sup>nd</sup> Edition, Academic Press.
5. Jacqueline Parkin and Byrony Cohen (2001) An overview of the immune system, *The Lancet* **357**: 1777-89.
6. Angus Thomson (1998) *Cytokine Handbook*, 3<sup>rd</sup> edition, Academic Press.
7. Anthony Mire-Sluis and Robin Thorpe (1998) *Cytokines*, Academic Press.

