Product Data Sheet

nCounter® GX Mouse Inflammation Kit

Product Highlights

• Simple
  No more days spent cross referencing databases

• Highly curated
  Our expert bioinformaticists use a very rigorous process to select the most meaningful set of genes

• Efficient
  Multiplexed assay profiles 179 inflammation-related genes in one reaction

• Cost-effective
  Gold-standard data at a fraction of the cost

• Quick Turnaround Time
  Complete kit with all consumables is ready to ship next-day

A Gene Set You Can Count On

The nCounter GX Mouse Inflammation Kit is a comprehensive set of 179 inflammation-related mouse genes and six internal reference genes. These represent a broad range of relevant pathways related to inflammation, including:

• apoptosis
• EGF
• interleukin signaling
• Ras
• T-cell receptor
• Toll-like receptor signalling

The gene list was compiled by querying several public databases for inflammation-related genes. This list was refined using multiple criteria, including scoring each gene for relevance in inflammation-related pathways using IPA (by Ingenuity® Systems, Inc). Each gene was also verified to be differentially expressed under conditions leading to inflammation. The verification was done using MSigDB, a repository of gene expression data developed by
Researchers at the Massachusetts Institute of Technology and the Broad Institute Inc (Subramanian, Tamayo, et al., 2005, PNAS 102, 15545-15550.). Other public databases were used to obtain functional gene expression information for each gene.

The final nCounter GX Mouse Inflammation Kit consists of 184 inflammation-related genes and six internal reference genes. For the gene list and additional information about this gene set, visit the nCounter Pre-built Panels product page at: www.nanostring.com.

Nanostring acknowledges Ingenuity® Systems, Inc. (www.ingenuity.com) pathway tools used in the development of the gene list and supporting biological and chemical content.

nCounter® Analysis System Overview

The nCounter® Analysis System from NanoString offers a cost-effective way to easily profile hundreds of gene transcripts simultaneously with high sensitivity and precision. The digital detection of target molecules and high levels of multiplexing eliminate the compromise between data quality and data quantity, bringing better sensitivity, reproducibility, and linearity to your results. It is ideal for studying defined gene sets across a large sample set, e.g., microarray validation, pathway analysis, biomarker validation, and splice variation analysis.

The system utilizes a novel digital technology that is based on direct multiplexed measurement of gene expression and offers high levels of precision and sensitivity (<1 copy per cell). The technology uses molecular “barcodes” and single molecule imaging to detect and count hundreds of unique transcripts in a single reaction.