

# Accelerate your Research with NanoString® Panels

NanoString provides scientists with innovative and customizable tools from basic and translational research to diagnostic development. Pre-made panels are available for Gene Expression, Gene Fusions, miRNA, CNV, SNV and Protein detection as well as custom project options for any species.

## Customizable Options

Customize your experiment using Panel-Plus to add up to 30 unique targets to any panel, or have our bioinformatics group design a custom project for any species for any gene expression target, splice variation, lncRNA, Fusion Gene, or Copy Number Variant.

nCounter® Gene Expression Panels		
PanCancer IO 360™ Gene Expression Panels	Human & Mouse	750 cancer-related genes involved in the complex interplay between the tumor, microenvironment and immune response including 20 internal reference controls.
Breast Cancer 360™ Gene Expression Panel	Human	770 genes across 23 key breast cancer pathways and processes with 32 validated and novel signatures including expanded evaluation of breast cancer subtypes with PAM50 Signature, Triple Negative Breast Cancer Signature, and Claudin-Low Signature.
CAR-T Characterization Panel	Human	760 CAR-T related genes plus 10 internal reference controls.
PanCancer Pathways Panels	Human & Mouse	770 genes for essential cancer pathways including 40 internal reference controls for the human panel & 20 for the mouse panel.
PanCancer Immune Profiling Panels	Human & Mouse	770 immune profiling genes for the identification of different immune cell types, key checkpoint inhibitors, cancer antigens, genes for measuring the immune response & up to 40 internal reference controls.
PanCancer Progression Panel	Human	770 genes involved in cancer progression including angiogenesis, extracellular matrix remodeling (ECM), epithelial to mesenchymal transition (EMT), metastasis including 30 internal reference controls.
Immunology Panels	Human & Mouse	594 human genes or 561 mouse genes for broad-based screening of innate & adaptive immune response for allergy, auto-immune response diseases & infectious disease immune response. Includes up to 15 internal reference controls.
Inflammation Panels	Human & Mouse	255 human genes or 254 mouse genes for focused screening of the inflammation response in general immunology research including allergy, auto-immune diseases & infectious disease immune response. Includes 6 internal reference controls.
Myeloid Innate Immunity Panels	Human & Mouse	696 human genes or 675 mouse genes with emphasis on the myeloid component of innate immunity, which is relevant to cancer, autoimmunity, & infectious disease. Includes up to 40 internal reference controls.
Autoimmune Profiling Panels	Human & Mouse	770 genes for comprehensive profiling of immune system dysfunction, inflammatory signaling, tissue stress & damage, and disease association as they relate to autoimmune and chronic inflammatory disease.
Autoimmune Discovery Panels	Human	770 genes included for study of the gene expression profile of GWAS significant mutations in the top nine autoimmune diseases together with 230 immune response genes and 15 internal controls.
NHP Immunology Panel	Non-Human Primate	770 genes for vaccine testing, toxicity testing & organ transplant studies in non-human primates, including 16 internal reference controls.
Stem Cell Panel	Human	199 genes for the measurement of pluripotency & differentiation, including 6 internal reference controls.
Kinase Panel	Human	535 protein kinase genes known to be differentially expressed in the human kinome with 8 reference controls.
Neuropathology Panels	Human & Mouse	770 neuropathology-related genes covering six fundamental themes of neurodegeneration: neurotransmission, neuron-glia interaction, neuroplasticity, cell structure integrity, neuroinflammation and metabolism. Includes 10 internal reference controls.
Neuroinflammation Panels	Human & Mouse	770 neuroinflammation-related genes involved in comprehensive assessment of 23 pathways and process representing immunity and inflammation, neurobiology and neuropathology, and metabolism and stress. Includes 13 internal reference controls.
Mouse AD Panel	Mouse	760 Alzheimer's related genes plus 10 internal reference controls.

## miRNA Expression Panels - from miRBase v22

nCounter Human v3 miRNA	Human	>800 human miRNAs with 20 internal reference controls & 5 mRNA probes.
nCounter Mouse v1.5 miRNA	Mouse	>600 mouse and mouse-associated viral miRNAs with 20 internal controls & 4 mRNA probes.
nCounter Rat v1.5 miRNA	Rat	>400 rat miRNAs derived from miRBase with 20 internal reference controls & 4 mRNA probes.

## CNV- Copy Number Variation

nCounter Human Cancer CN Panel	Human	87 most commonly amplified or deleted copy numbers in cancer.
nCounter Human Karyotyping Panel	Human	24 human chromosomes, 388 Individual loci for gross chromosomes abnormalities.

## nCounter® Vantage 3D™ Portfolio

Explore 3D Biology™ Technology, NanoString's award winning technology for the simultaneous detection of DNA, RNA, and protein. Designed for flexibility, select the right Vantage 3D targeted panels for each analyte type then detect and analyze them all at once.

### nCounter Vantage 3D RNA Panels

Adaptive Immunity Panel	Human	192 genes to study T & B cell activation and signaling molecules, including 12 internal reference controls.
Innate Immunity Panel	Human	192 genes involved in host response, bacterial sensing, inflammation such as Toll-like receptor signaling, and related cytokines, including 12 internal reference controls.
Cancer Metabolism Panel	Human	192 unique genes related to cancer metabolism, including 12 internal reference controls.
Intracellular Signaling Panel	Human	192 unique genes related to signaling pathways in cancer immunology, including 12 internal reference controls.
Cellular Profiling Panel	Human	192 unique genes whose relative expression level is indicative of specific immune and related cell types, including 12 internal reference controls.
Wnt Pathways Panel	Human	192 unique genes related to the Wnt signaling pathways ( $\beta$ -catenin, PCP & Calcium-Ion dependent pathways), including 12 internal reference controls.
DNA Damage and Repair Panel	Human	192 unique genes related to DNA damage & repair pathways, such as base excision repair, nucleotide excision repair, mismatch repair, and translation synthesis, including 12 internal reference controls.
MAPK-PI3K Pathways Panel	Human	180 genes that measure activation of the MAPK and/or PI3K pathways, plus 12 internal reference controls.
RNA Heme Panel	Human	180 hematologic oncology related human genes, such as MAPK, MYC signaling, NF- $\kappa$ B, PI3K-AKT, and B cell & T cell receptor signaling, including 12 internal reference controls.

### nCounter Vantage 3D Protein Panels

Immune Cell Profiling for cell suspensions	Human	30 immune cell surface proteins including CD4, CD8, PDL-1, plus 3 internal reference controls.
Immune Cell Signaling for cell suspensions	Human	30 intracellular immune cell signaling proteins including IL-2, IL-6, FOXP3, plus 3 internal reference controls.
Solid Tumor for cell lysates	Human	28 solid tumor signaling pathway total and phospho-protein targets including AKT, MAPK, PRAS40, plus 3 internal reference controls.
Solid Tumor for FFPE	Human	26 key solid tumor signaling protein targets listed above, plus 3 internal reference controls.
Heme for Lysate	Human	36 key hematology-oncology signaling pathway proteins, including PI3K, BCR, and TCR signaling, plus 5 internal reference controls.
Heme for FFPE	Human	35 key hematology-oncology signaling pathway proteins listed above, plus 5 internal reference controls.

### nCounter Vantage 3D DNA SNV Panels

Solid Tumor	Human	97 actionable and high-frequency SNV and InDels in 24 key solid tumor genes, plus reference probes.
Heme	Human	141 actionable SNV and InDels in 45 key heme-onc genes, plus reference probes.

### nCounter Vantage 3D RNA Fusion Panels

Lung RNA Fusion Panel	Human	63 probes: 35 for specific fusion detection, 24 for positional gene expression imbalance detection, and 4 internal reference controls.
Leukemia RNA Fusion Panel	Human	42 probes: 27 for specific fusion detection, 12 leukemia biomarkers, and 3 internal reference controls.

For more information, please visit [nanosttring.com](https://nanosttring.com)

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