Gene expression you can **Count On.**

Accelerate your biomarker discovery and development with confidence and peace of mind. With robust performance on even the most difficult sample types and unparalleled flexibility in content and throughput, you can rapidly translate basic science discoveries into actionable clinical insights with the nCounter® Analysis System.

**Robust Performance**
- Gold standard technical reproducibility resulting from direct digital detection (no technical replicates needed)
- Dynamic range of five logs
- Compatibility across a wide variety of sample types, including difficult FFPE, blood, and biofluids
- Innovative technical design eliminates need for enzymatic steps, amplification, cDNA conversion, or complicated sample prep
- Over 7,000 peer-reviewed publications to date prove nCounter is highly trusted and ultra-productive in the lab

**Flexible Assays**
- Generate 800+ plex data covering highly relevant biology for targeted applications
- Extensive menu of ready-to-ship panels designed with input from industry leading experts in the field
- Expert bioinformatics team available to assist with custom panel design, including gene selection
- Option to customize existing panels with up to 55 user-defined targets of interest
- Overlapping content with NanoString’s spatial technologies offers broad biological insights from bulk to single cell spatial analysis

**Efficient Workflow**
- Walk-away automation and minimal hands-on time (<15 minutes on most assays)
- Rapid turnaround time with sample to answer in <24 hours
- Highly scalable systems have option to increase throughput with additional Prep Stations
- Easy data analysis and minimal storage requirements eliminate the need for bioinformatics support or expensive data storage
- Screen up to 96 samples per run with PlexSet™ chemistry
Robust Performance
Gold Standard FFPE Performance

Unique Chemistry
The key to nCounter generating highly robust data lies in the technical design of the chemistry. nCounter technology uses unique optical barcodes that hybridize to each target to enable digital counting of individual oligonucleotides without any enzymatic steps. Each barcode is made up of six fluorophores enabling highly multiplexed, single molecule counting.

Chemistry Highlights
• No RT, enzymatic steps
• No technical replicates needed
• Superior performance on degraded samples

Elegant Chemistry Design

Broad Sample Compatibility
nCounter is compatible with most sample types, even decades old FFPE. It produces high quality data that would otherwise be difficult to produce with technologies that rely on high sample input. Consistent results can even be generated for longitudinal studies with a high degree of confidence on clinical-grade (often degraded) samples.

CRUDE RNA FFPE FRESH FROZEN BLOOD PLASMA SERUM CELL LYSATES
**Superior performance on FFPE tissue sections**

Since nCounter probes only require a 100 base pair region for hybridization, high quality results are produced even from degraded samples.

**Reproducibility over a wide dynamic range**

Direct, digital counting removes potential sources of variability from reverse transcription and amplification, enabling high precision and reproducibility over a wide dynamic range. Save reagents, sample, and money by eliminating technical replicates and confidently detect both high and low expressing genes.

**Compatible with cell lysates**

Zero enzymatic steps mean you can confidently analyze samples directly from cell lysates without any RNA purification, saving time and reagents.

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**NanoString Publication Library**

There are over 7,000 publications linked on the NanoString website written by researchers who have used nCounter in their labs. Filter by application, sample type, analyte, and more at nanostring.com
Over 25 off-the-shelf gene expression panels are available for a wide variety of biological pathways and research areas. All panels are created with input from industry experts and current research topics and are updated regularly.

Panel Pro Selection Tool

Check out the Panel Pro Selection Tool to compare gene content and identify the right panel for your research at nanostring.com/PanelPro
Custom Solutions

Researchers have the flexibility to tailor gene expression assay content to meet individual project needs.

Build your own custom gene expression

nCounter is compatible with most sample types, even including decades old FFPE. It produces high quality data that would otherwise be difficult to produce with technologies that rely on high sample input. Consistent results can even be generated for longitudinal studies with a high degree of confidence on clinical-grade (often degraded) samples.

Gene Expression Panel

- Panel Plus: Customizeable Add-on to a Panel
  - Up to 55 User-defined Targets

- Custom CodeSets
  - Turnkey Solution for Any Project
    - Maximum target number: 800
    - Daily sample throughput 24-96

- Elements™
  - Increased Flexibility for Smaller Projects
    - Maximum target number: 216
    - Daily sample throughput: 24-96
    - Optimized for validation projects

- PlexSet™
  - High-Throughput Chemistry
    - Maximum target number: 96
    - Daily sample throughput: 192-1,152
    - Optimized for screening projects
nCounter’s seamless workflow enables you to regain independence over your research. Time spent on pipetting, monitoring systems, and getting lost in data can be spent doing what matters most – advancing your research. The workflow features a limited number of steps, reducing potential sources of variability, improving the reliability of results, and making training technicians easy.

Four Simple Steps Produce a Huge Amount of Data

1. Combine reagents with samples in solution to begin the hybridization reaction.
2. Leave the lab while samples hybridize on a heat block overnight.
3. Move samples onto nCounter to process in a number of hours.
4. Draw scientific insights and generate publication-ready figures using a suite of intuitive analysis tools.

Sample Throughput

<table>
<thead>
<tr>
<th></th>
<th>1 Run/day</th>
<th>1 Run/day</th>
<th>1 Run/day</th>
<th>2 Run/day</th>
<th>3 Run/day</th>
<th>3 Run/day</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Samples per Lane</strong></td>
<td>SPRINT</td>
<td>Pro: 1 Prep Station</td>
<td>Pro: 2 Prep Stations</td>
<td>SPRINT</td>
<td>Pro: 1 Prep Station</td>
<td>Pro: 2 Prep Stations</td>
</tr>
<tr>
<td>1</td>
<td>12</td>
<td>12</td>
<td>24</td>
<td>24</td>
<td>36</td>
<td>72</td>
</tr>
<tr>
<td>8*</td>
<td>96</td>
<td>96</td>
<td>192</td>
<td>192</td>
<td>288</td>
<td>576</td>
</tr>
</tbody>
</table>

*With PlexSet reagents
NanoString offers a suite of intuitive analysis tools that enable you to gain insights from your data and share publication-quality figures and statistical outputs faster than ever.

**nSolver™ Analysis Software**
An integrated analysis platform for storage, custom QC, and normalization of nCounter data. Generate highly-customized exports, basic statistical outputs, and figures quickly and easily with no incremental cost.

**nCounter Advanced Analysis**
A free, wizard-based add-on to nSolver for deeper data insights based on robust R statistics. Examine experimental trends, identify pathway-specific responses, and profile immune cell populations in shareable HTML reports.

Data analysis services for large projects are available. For more information contact: DAS@nanostring.com

**ROSALIND® Platform**
A cloud-based system that enables scientists to analyze and interpret differential gene expression data without the need for bioinformatics or programming skills. ROSALIND makes analysis of nCounter data easy with guided modules for:

- Normalization
- Quality Control
- Individual Pathway Analysis
- Cell Type Profiling
- PlexSet™ Experiments
- Differential Expression
- Gene Set Analysis

nCounter customers can access ROSALIND at rosalind.bio/nanostring
Go Spatial
Your portal to the Spatial Biology Revolution


NanoString’s integrated platforms and analytics can help tackle challenges and alleviate risks in the drug development process—from discovery to commercialization. Each platform with its uniquely NanoString barcodes and distinct value supports the needs at each step in the process by providing biological insights and characterization on various scales.

Pair with GeoMx for spatial protein and RNA analysis

Enhance your nCounter data by adding spatial context: spatially profile expression of the whole transcriptome or targeted RNA and protein targets in distinct tissue structures and cell populations across FFPE or fresh frozen tissue sections.
# nCounter® Analysis System

## Product Specifications

<table>
<thead>
<tr>
<th>FEATURE</th>
<th>SPECIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>nCounter® Sprint Profiler</strong></td>
<td><strong>nCounter® Pro Analysis System</strong></td>
</tr>
<tr>
<td>Level of multiplexing</td>
<td>800+ targets</td>
</tr>
<tr>
<td>Recommended amount of starting material (dependent on assay and sample type)</td>
<td>RNA: 1-50 ng DNA: 5-30 0ng</td>
</tr>
<tr>
<td>Sample types supported</td>
<td>Total RNA, cell lysates in GTIC, FFPE-derived total RNA and PAXgenelysed whole blood</td>
</tr>
<tr>
<td>Reaction volume</td>
<td>Up to 35 µL</td>
</tr>
<tr>
<td>Limit of detection 0.5 fM spike-in control</td>
<td>15 zeptomole spike in control in 15 µL hybridization</td>
</tr>
<tr>
<td>Fold change sensitivity</td>
<td>&gt; 1.5-fold (if &gt; 5 copies per cell)</td>
</tr>
<tr>
<td>Spike in correlation</td>
<td>R² &gt; 0.95</td>
</tr>
<tr>
<td>Linearity</td>
<td>Linear regression correlation coefficient R² &gt; 0.95</td>
</tr>
<tr>
<td>Linear dynamic range</td>
<td>6 x 10⁵ total counts</td>
</tr>
<tr>
<td>Controls</td>
<td>Assay dependent</td>
</tr>
<tr>
<td>Hands-on Time</td>
<td>10 min</td>
</tr>
<tr>
<td>Processing Time</td>
<td>12 samples per 6 hours</td>
</tr>
<tr>
<td>Throughput</td>
<td>12-192** (1 cartridge x 2 runs/day)</td>
</tr>
<tr>
<td>Expandable throughput</td>
<td>No</td>
</tr>
<tr>
<td>Enterprise package features</td>
<td>No</td>
</tr>
<tr>
<td>Dimensions</td>
<td>107 x 72 x 82 cm</td>
</tr>
<tr>
<td>Weight</td>
<td>81.65 kg</td>
</tr>
</tbody>
</table>

* Option to increase capacity by adding a second Prep Station; accelerate cell line screening and high-throughput applications by running multiple samples per lane with nCounter PlexSet reagents