

# Nanostring Spatial Multi-omics Services

Certified CRO services with GeoMx® Digital Spatial Profiling

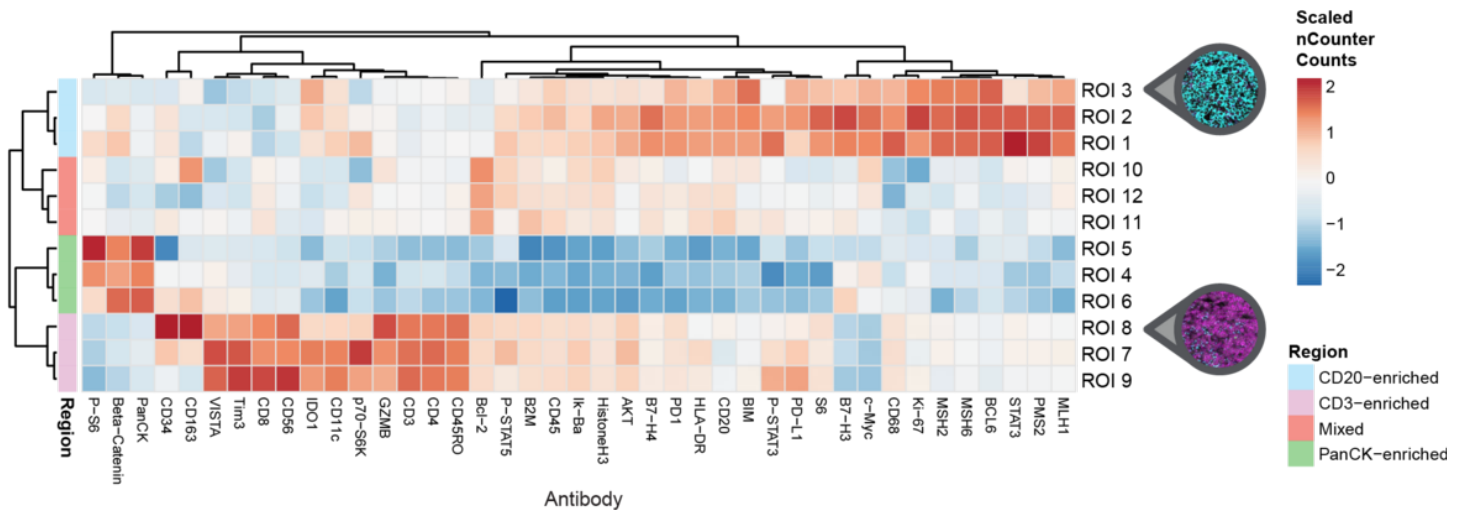
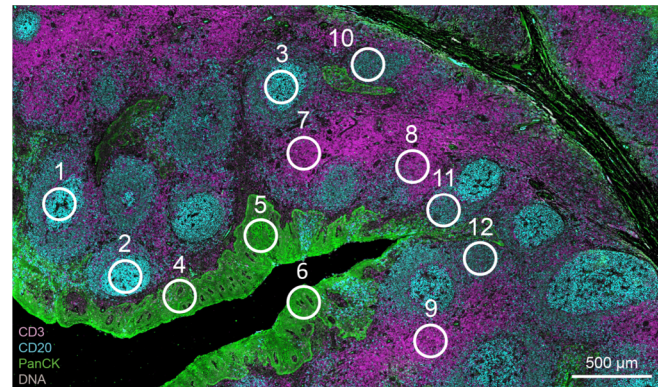
Crown Bioscience offers a comprehensive solution for spatial profiling using the advanced NanoString's GeoMx® platform. Our approach employs morphologically guided gene expression, utilizing NanoString's expertly crafted panels. The process is streamlined for our clients: simply provide your tissue samples, select the desired NanoString panel and readout method, and let our professionals manage everything else. Experience the next level of tissue profiling with ease!

nanoString

Certified Service Provider

## GeoMx® DSP: A Flexible and Scalable Platform for Spatial Biology

Efficiently address tissue diversity and intricate microenvironments using the GeoMx Digital Spatial Profiler (DSP), the premier spatial multiomic platform designed for both FFPE and fresh frozen tissue analysis. Unique in its field, the GeoMx facilitates non-destructive RNA and protein expression profiling from specific tissue sections and cell groups, all through an automated, scalable workflow compatible with conventional histology staining processes.



### Profile the Whole Transcriptome and 570+ Proteins from Intact Tissue

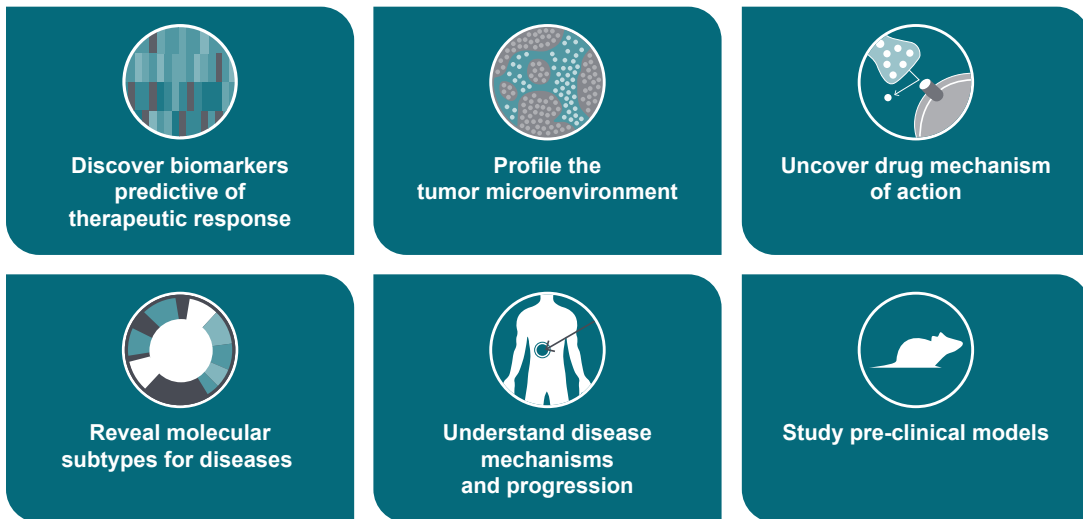
Explore the complete transcriptome and over 570 protein targets individually or in tandem, utilizing a range of sample inputs, including whole tissue sections, tissue microarrays (TMAs), or organoids. Choose GeoMx DSP as your trusted platform in spatial biology for unveiling biomarkers and conducting hypothesis testing.

### Reports and Data Analysis

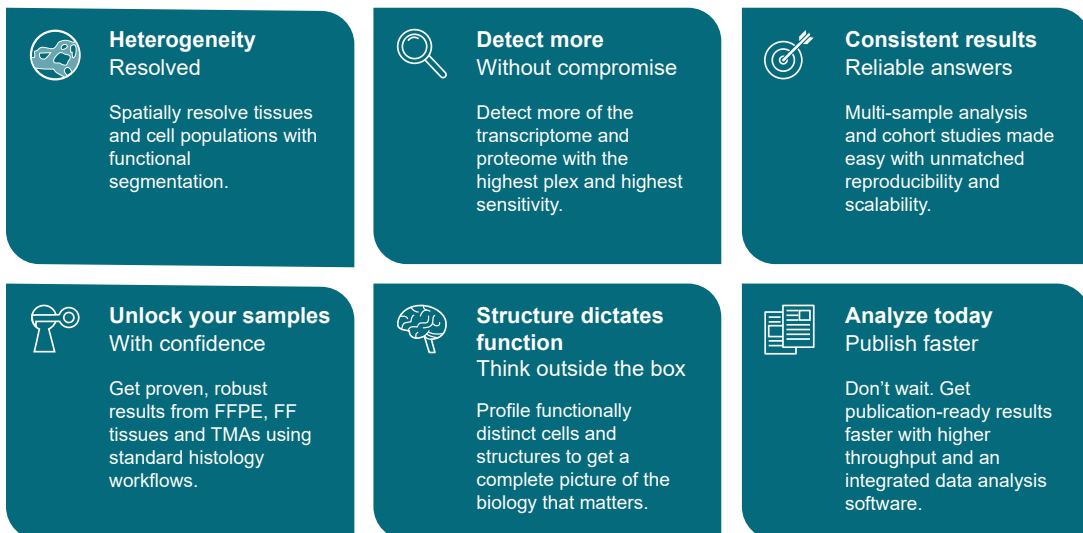
The GeoMx® Data Analysis Suite (DSPDA) offers an integrated platform that seamlessly links quantitative data with its spatial context, ensuring an efficient experimental workflow. Our team of Bioinformatics experts not only reviews the QC data from each project but also furnishes a comprehensive overview via a Standard Report. Should you require a deeper dive into your data, we're available for personalized consultations to cater to your specific analytical needs.



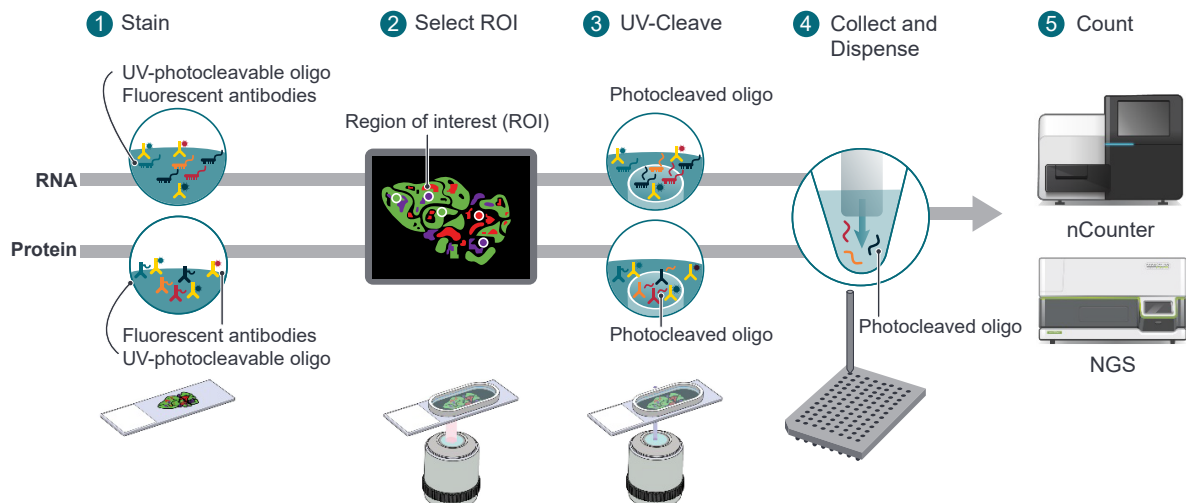
## What Can You Do with GeoMx DSP?



## Imagine the Possibilities with GeoMx DSP



## How it works



## Flexible Region of Interest Selection Strategies

Investigate authentic biological inquiries through adaptable region of interest (ROI) approaches. The foundation of ROI selection lies in tissue morphology, empowering researchers to accurately choose the specific tissue compartments or cell groups to profile. Our dedicated team of in-house spatial multiomics professionals collaborate closely with researchers, offering guidance during the ROI selection phase while striving to resolve any queries or concerns.



### Geometric Profiling

Profile with any geometric shape to characterize distinct tissue regions.



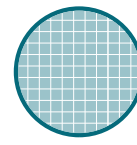
### Segment Profiling

Identify and profile distinct biological compartments within a region of interest (ROI).



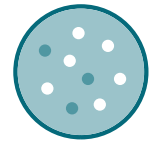
### Contour Profiling

Evaluate how proximity affects biological response and the local microenvironment around a central structure using radiating ROIs.



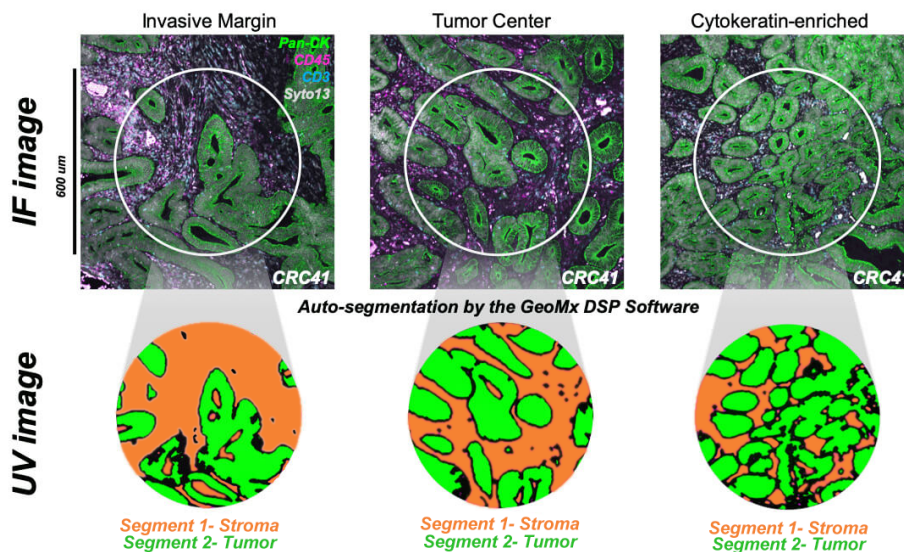
### Gridded Profiling

Perform rigorous spatial mapping using a tunable grid pattern.



### Cell Type Specific Profiling

Reveal the function of cell populations guided by cell type specific morphology markers.



## GeoMx RNA and Protein Assays Overview

### RNA Assays

- **Human/Mouse Whole Transcriptome Atlas:** Facilitates extensive spatial biology profiling, covering all protein-coding genes.
- **TCR Profiling Add-On:** Can be added to the Whole Transcriptome or Cancer Transcriptome Atlases to analyze different T Cell Receptor (TCR) expressions spatially.
- **Cancer Transcriptome Atlas:** Aimed at detailed tumor biology profiling, enabling the analysis of over 1,800 genes from distinct regions in a single tissue section.
- **Immune Pathways Panel:** Focuses on targeted profiling of the tumor and its surroundings, allowing for the analysis of up to 96 RNA targets in a single tissue section using GeoMx DSP.

### Protein Assays (nCounter Readout)

- **Immuno-oncology and Immunology:** Features a core of 18 targets (17 for mouse) for wide-ranging cell profiling, with the flexibility to add up to 60 additional targets plus 10 custom selections for tailored research.
- **Neuroscience:** Comes with a core of 20 targets (19 for mouse) for broad cell profiling, and offers the ability to add up to 60 more targets, plus 10 custom selections for specific research needs.



## GeoMx IO Proteome Atlas

Dive into the next level of immuno-oncology research with the GeoMx IO Proteome Atlas (IPA), backed by Abcam's IHC-validated human antibodies. This leading spatial proteomics panel excels in analyzing both FFPE and fresh frozen tissue sections, opening new avenues for biomarker discovery in translational research.

### The GeoMx IPA stands out by offering:

- Non-destructive profiling of over 570 proteins in various tissue areas.
- Superior data richness compared to traditional IHC or IF assays.
- Compatibility with standard histology workflows.

Take advantage of this technology to gain a deeper understanding of vital tissue microenvironments and cell types, enhancing your insights into immune responses to cancer and potential therapeutic strategies in immunology, oncology, and other research fields.

Please check our [website](#) for more information on the spatial profiling panels.

