

# Single cell and spatial technology to accelerate biological insights

## Product offerings from 10x Genomics

Resolve biology to advance human health with single cell or spatial resolution and scalable options to suit your research needs. Our Chromium Single Cell and Visium Spatial platforms offer end-to-end solutions that include sample preparation support, instruments, reagents and consumables for library preparation, as well as intuitive turnkey software analysis tools.

### Visium Spatial products

#### Spatial Gene Expression

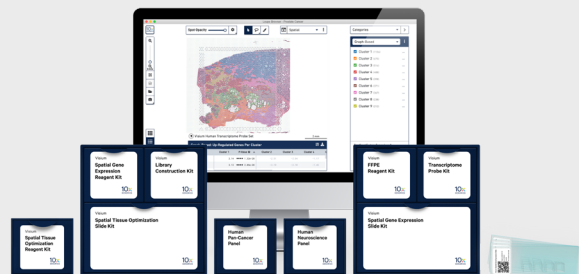
- Discover novel insights into normal development, disease pathology, and clinical translational research with morphological context
- Profile whole transcriptome gene expression across an entire fresh frozen or FFPE tissue section
- Combine immunofluorescence protein detection and whole transcriptome gene expression analysis in the same fresh frozen or FFPE tissue section

#### Targeted Spatial Gene Expression

- Comprehensively target relevant genes and biomarkers in your fresh frozen tissues to gain a complete view of the biology most important to your research
- Profile a defined set of transcripts in an entire fresh frozen tissue section with comprehensive, pre-designed human panels for cancer, immunology, neuroscience, and drug discovery, or define your own custom content

#### Visium Gateway

- Experience the wealth of data provided by Visium with Gateway slides that let you analyze two tissue samples at an introductory cost for fresh frozen tissue samples
- Generate pilot data for your upcoming grants to showcase the value of spatial gene expression in your research project



## Chromium instruments

### Chromium X Series

- Expand your experimental possibilities with the most advanced hardware, widest range of throughput options, and support for all of our single cell assays
- Perform gene expression and multiomic analysis with throughput solutions for pilot studies to your most ambitious projects, enabling efficient capture of hundreds to millions of cells

### Chromium Connect

- Go from cell suspension to consistent, sequencing-ready single cell gene expression or immune profiling libraries with less than one hour's hands-on time
- Integrate single cell partitioning, barcoding, and/or library prep in one optimized solution to automate your single cell sequencing workflows

### Chromium Controller

- Rely on established technology in our compact instrument for your single cell studies
- Run low- or standard-throughput applications for pilot and everyday experiments



## Chromium Single Cell products

### Single Cell Gene Expression

- Capture the full heterogeneity of a sample to characterize complex cell populations, discover novel cell types and states, and identify biomarkers
- Measure whole transcriptome 3' gene expression alone or as part of multiomic profiling with simultaneous cell surface protein expression or CRISPR perturbations in hundreds of thousands of cells
- Scale throughput to fit your needs, from pilot experiments with Single Cell Gene Expression LT to million-cell studies with Single Cell Gene Expression HT and 3' Cell-Plex sample multiplexing

### Single Cell Immune Profiling

- Recover a comprehensive immune repertoire to explore immune cell diversity
- Profile any combination of full-length, paired B-cell or T-cell receptors, surface protein expression, antigen specificity, and gene expression, all from a single cell
- Scale up for more ambitious studies with Single Cell Immune Profiling HT

### Single Cell Multiome ATAC + Gene Expression

- Enhance your characterization of cell types and states and reconstruct cell type-specific gene regulatory networks
- Simultaneously profile gene expression and open chromatin for multiomic characterization of the same cell

### Single Cell ATAC

- Gain a deeper understanding of gene regulatory mechanisms to explore the epigenetic underpinnings of disease, developmental plasticity, and cell identity
- Analyze chromatin accessibility in hundreds to tens of thousands of individual nuclei in parallel

### Targeted Single Cell Gene Expression

- Scale your studies, refine discoveries, and validate biomarkers and drug targets by focusing on the genes most relevant to your research
- Profile a defined set of transcripts with customizable, pre-designed human panels for cancer, immunology, neuroscience, and drug discovery, or design a fully custom human or mouse panel with up to 1,500 gene targets

# Coming Soon

## Chromium Single Cell products



### Early 2022

#### Single Cell Fixed RNA Profiling

- Unlock clinical and translational studies at scale with PFA-fixed single cell analysis, creating new possibilities for streamlined sample transport and preparation while allowing simultaneous detection of gene expression and cell surface proteins at high sensitivity
- Preserve fragile cell types and states, as well as sample integrity and data quality, and lock in important biological information with fixation

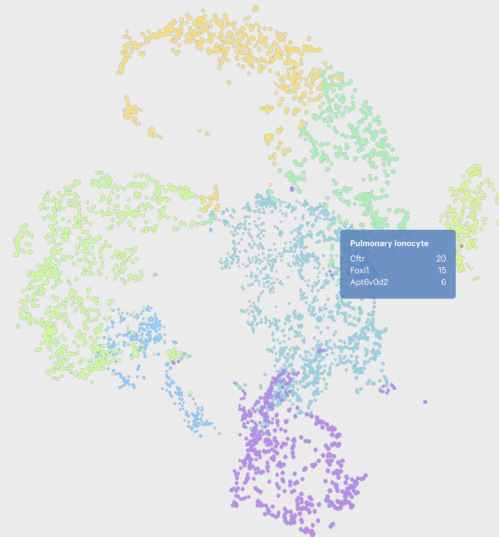
### Mid 2022

#### Single Cell Antigen Mapping

- Enable high-throughput antibody and TCR discovery with Barcode Enabled Antigen Mapping (BEAM), and leverage Feature Barcode technology to interrogate antigen specificity and map them to corresponding full-length, paired receptor sequences

#### Single Cell 5' CRISPR Screening

- Streamline and elevate single cell CRISPR screens using your existing Cas9 guide libraries to obtain comprehensive multiomic readouts, bringing new perspectives to target validation, unraveling complex disease networks, and providing new insights into key biological mechanisms
- Profile perturbation effects for hundreds to thousands of guides on the whole transcriptome, protein expression, and clonotype frequencies in a single experiment for deep insights into complex biology



# Coming Soon

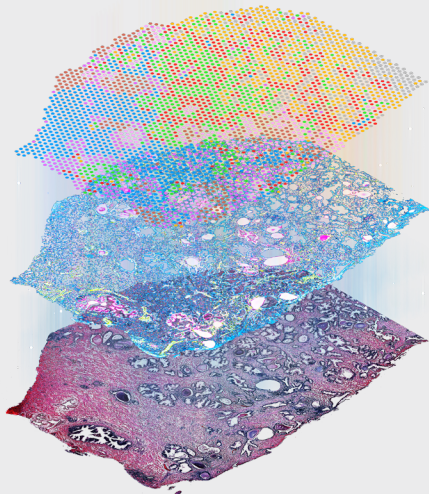
## Visium Spatial products



### Early 2022

#### Spatial Multiomics

- Further your understanding of tissue organization by spatially profiling key protein markers and gene expression simultaneously from a single tissue section
- Map tumor-immune boundaries and unlock the tumor microenvironment with a more accurate picture of protein–gene interactions



### Mid 2022

#### Visium HD

- Spatially profile the whole transcriptome at the level of single cells to visualize any gene, discover new biomarkers with morphological context, resolve tissue heterogeneity, and reveal the spatial organization of cell types and cell states
- Expand your coverage of fresh frozen or FFPE tissue sections to detect rare cell types within the tissue context

#### CytAssist

- Quickly capture gene expression and protein analytes from your tissue sections of interest, including FFPE specimens archived in blocks or on slides, then choose from our range of Visium assays to create your spatially resolved libraries
- Find the tissue section that will best answer your biological questions with the ability to preview tissue section integrity, morphology, and staining patterns before selecting a Visium spatial assay

#### Contact us

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