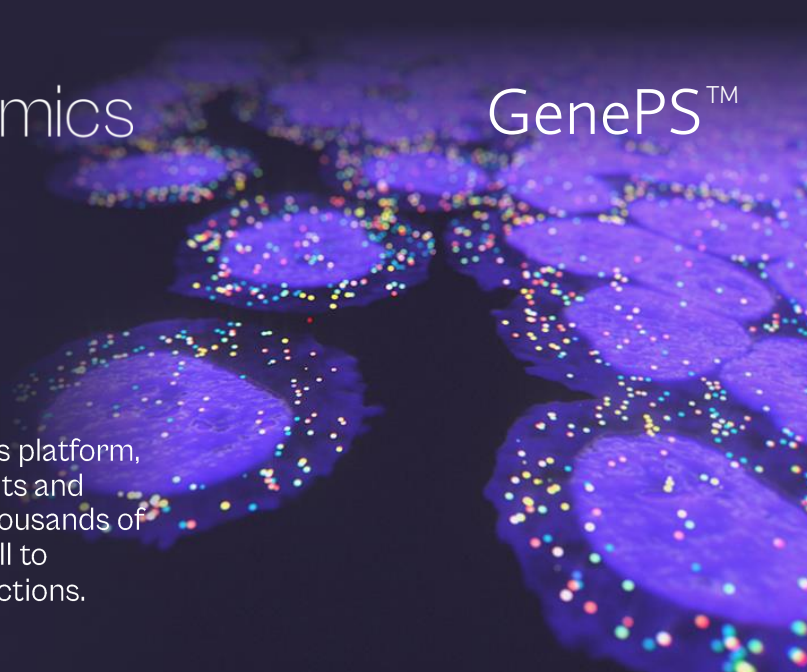# Spatial Genomics

GenePS™

GenePS is an advanced spatial genomics platform, capable of highly multiplexed experiments and simultaneous analysis of hundreds to thousands of genes and many proteins from single-cell to subcellular resolution in intact tissue sections.

Single-molecule sensitivity

Direct single-molecule quantitation of nucleic acid target sequences

Reproducibility

Across corresponding sections from different samples and in dissociated or cultured cells

Specificity

Highly curated and designed probes to limit off-target effects

Single-cell resolution

Single-cell analysis within intact tissues or cultures, without cell loss due to dissociation

Multi-omics

Assay RNAs as well as proteins

Flexibility

Standard and custom panels

The GenePS platform employs the proprietary seqFISH technology, offering the highest quality data at an affordable price.

Transcripts are uniquely identified by a fluorescent barcode built up over multiple images, using a resilient error-correcting barcode strategy that efficiently detects up to thousands of genes.

The GenePS provides high-resolution insights into cell types, neighborhoods, states, and relationships within native tissue and organ environments.

Spatial Genomics
BIOLOGY IS SPATIAL

Category	Feature	Specification
Instrument	Imaging modes	Fluorescence, brightfield
	Imaging area	Up to 1 cm²
	Magnification	40x, 60x
	Lateral pixel resolution	~100 nm
	Imaging lasers	Violet, Blue, Green, Red
	Data storage capacity	24 TB
	Sample type	Fixed cells or tissue section - prepared per protocol
	Sample capacity	One slide per run
	Regions of interest	User selects one or more per experiment
	Instrument dimensions	41" x 25" x 33" / 105 cm x 63 cm x 83 cm (width x depth x height; includes monitor)
	Instrument weight	320 lbs / 145 kg
	Power	100-240 VAC, 50/60 Hz
Reagents	Multiplexity	Low to high gene multiplexity possible (10s to 1000s of genes)
	Standard kits	Pre-designed gene expression kits available
	Custom kits	Custom kit design possible
	Supported biomolecules	RNA, protein
	Supported organisms	Human and mouse (typical); other organisms (custom)
Software	Custom control software	Available on instrument
	Preliminary data processing	Performed on instrument
	Data analysis tools	Off-instrument suite available for data analysis and visualization

What will you discover?

Contact us at info@spatialgenomics.com to get started.

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