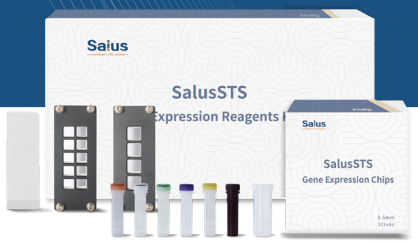
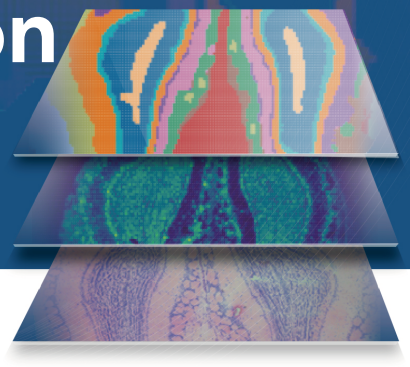
Salus
innovation in life science

# Salus Spatial Transcriptomics Solution

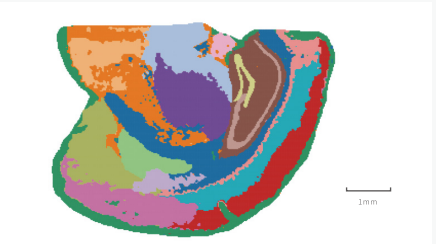
## Molecular insights at subcellular resolution



The Salus Spatial Transcriptomics Solution (SalusSTS) is a powerful genomics research tool that includes ultra-high-density chips, a gene sequencer, and a data analysis toolkit.

SalusSTS enables researchers to accurately and efficiently obtain spatial gene expression data from tissues at subcellular resolution.

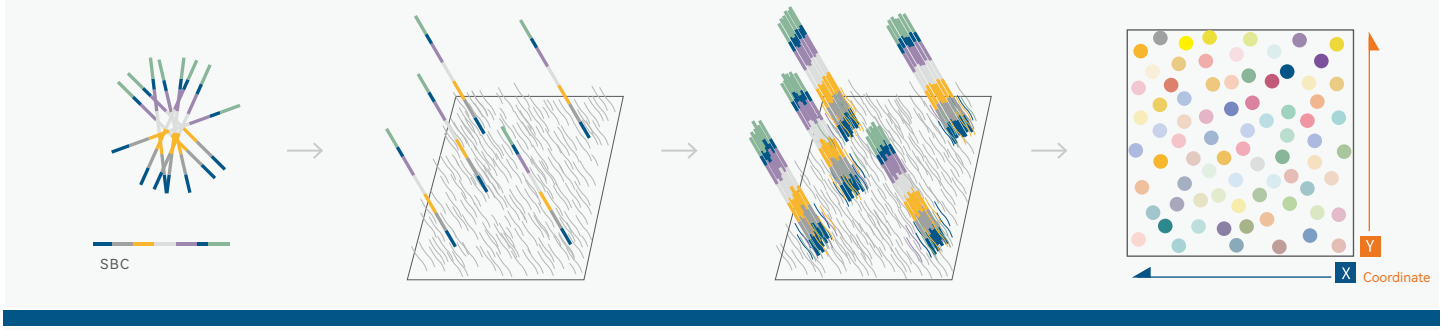


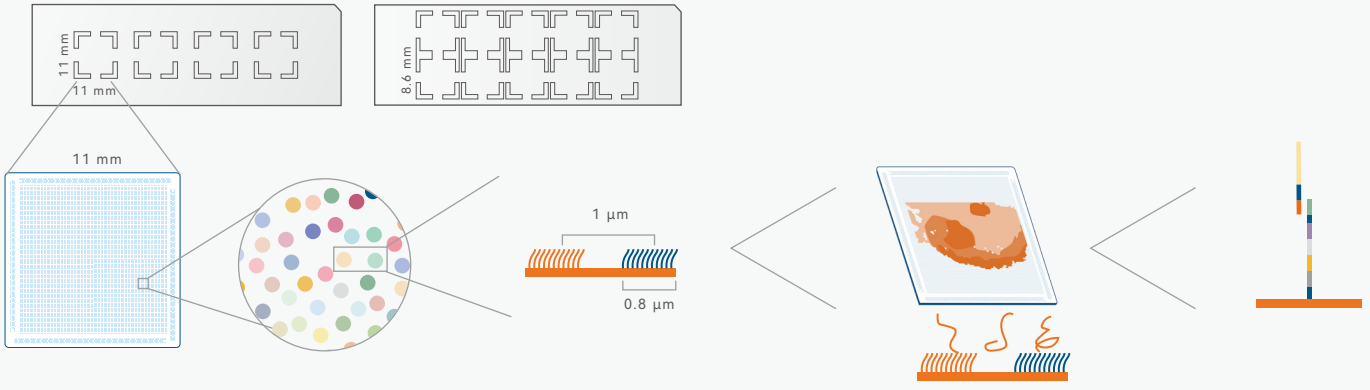

25 μm resolution

## Salus Spatial Transcriptomics

**Spatial Transcriptomics (ST) Chip for mRNA capture and spatial localization at 1 μm resolution**

| Random barcode generation | Hybridization | Amplification | Analyze the mapping relationship between spatial barcodes and coordinates |
|---|---|---|---|




V2.0

# Key Features

### Subcellular Resolution

A resolution of up to 1 μm, supporting precise spatial localization at the subcellular level.

### Flexible Capture Area

Captures 1 - 10 samples either individually or in batches. The tissue and chip are firmly bonded through covalent bonds, ensuring high probe stability and minimal batch-to-batch variation.

### High Capture Efficiency

Ultra-high-density probes (~55000/μm$^2$), offering superior capture efficiency.

### High Throughput

Captures a wide range of transcript data from the tissue section, facilitating the detection of novel and low-abundance transcripts.

### Large Tissue Research

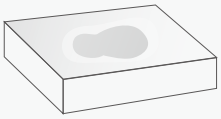
Supports chip sizes of 8.6 x 8.6 mm$^2$ and 11 x 11 mm$^2$, with customizable capture areas for larger tissues.

### Customizable Probes

Supports both targeted and non-targeted capture, and is applicable to various species and tissue types.

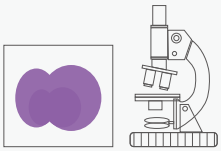
# Salus Spatial Transcriptomics Solution

**1 Sample Preparation and Quality Control**



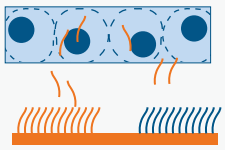
OCT Embedding, Freezing, and RNA Quality Control

**2 Tissue Sectioning and Staining**



Tissue Sectioning, Mounting, H&E Staining, and Imaging

**3 Tissue Permeabilization and cDNA Synthesis**

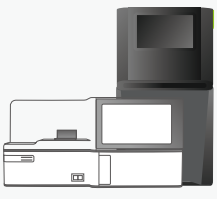


mRNA Capture and cDNA Synthesis

**4 Library Preparation**

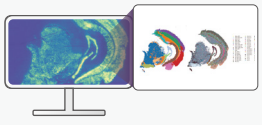
Preparation of Sequencing Libraries from cDNA Samples

**5 Sequencing**



Salus NGS Platforms

**6 Data Analysis and Visualization**

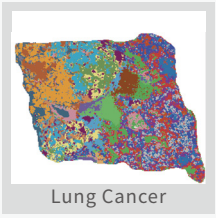


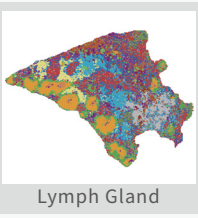
Data Quality Control, Analysis, obtain spatially resolved Gene Expression

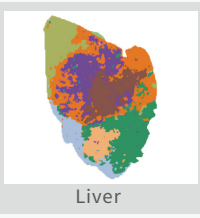
# Salus Spatial Transcriptomics Solution

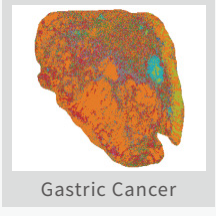

# Data Demonstrations

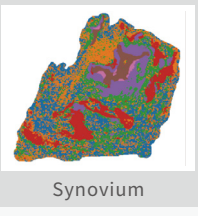
## Human

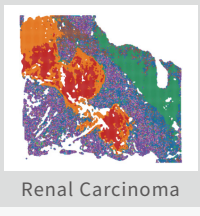

Lung Cancer

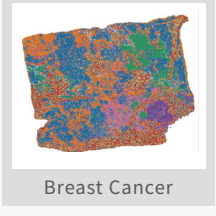

Lymph Gland

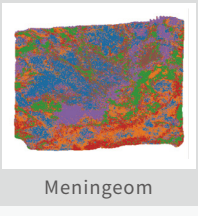

Liver

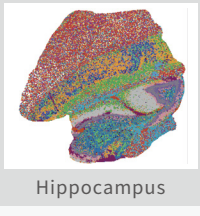

Gastric Cancer


Synovium

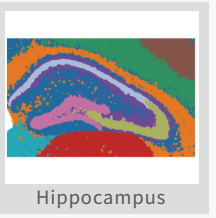

Renal Carcinoma

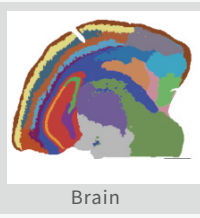

Breast Cancer

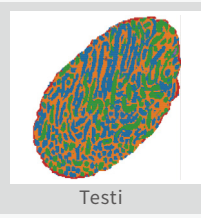

Meningeom

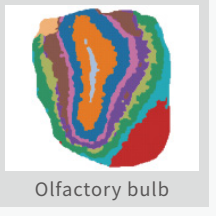

Hippocampus

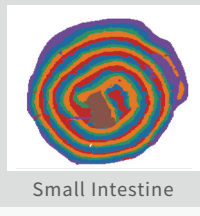
## Mouse

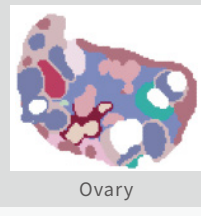

Hippocampus

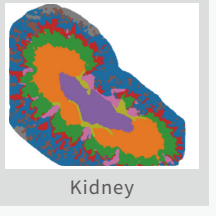

Brain


Testi

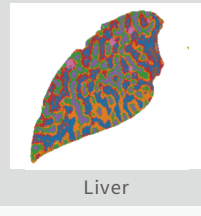

Olfactory bulb


Small Intestine


Ovary

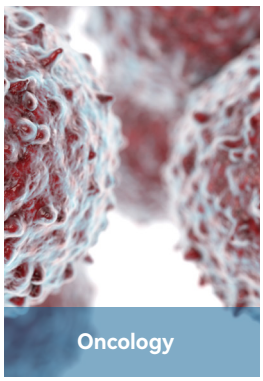

Kidney

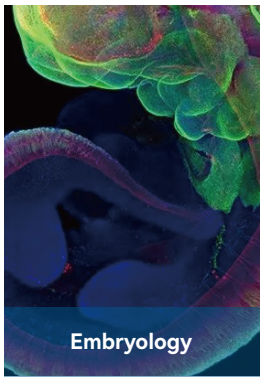

Spleen

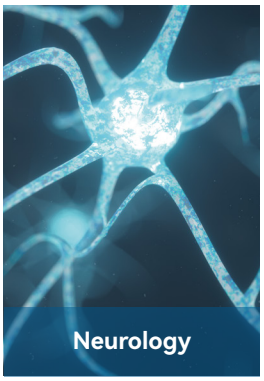

Liver

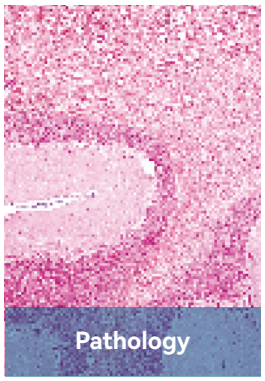
# Research Areas

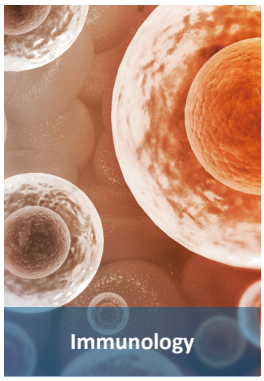
Spatial transcriptomics technology enables researchers to explore into cell-cell interactions at the molecular level, facilitating new biological discoveries. This technology can be applied in tumor research, embryonic tissue development, neurobiology, moleculer pathology , immunology and emerging fields.


Oncology


Embryology


Neurology


Pathology


Immunology

# Specifications

| | |
|---|---|
| Size | 8.6 mm × 8.6 mm × 10； 11 mm × 11 mm × 4 |
| Diameter of the spot | 0.8 μm |
| Center to center (resolution) | ~1 μm |
| Number of spots / 100 X 100 $\mu m^2$ | 5,000 |
| Number of probes / $\mu m^2$ | ~55000 |
| Bin analysis | 5 μm – 100 μm |
| Capture method | Non-targeted and targeted capture |
| Species | Human, animals and plants |
| Sample type | Fresh frozen tissue (FF) |

# After-sale service 400-80-SALUS(72587)

**Salus BioMed or its authorised partners provide after-sale service, including operation training and technical support .**

# Salus BioMed

## Empower and Cooperate

Founded in Shenzhen, Salus BioMed specializes in developing high-throughput genetic sequencing platforms and is a world leader in high resolution spatial omics research platforms, serving both research and clinical applications. The company is dedicated to providing a wide range of cutting-edge instruments and solutions to the sequencing and life sciences industry.


Sequencing Lab


Manufacturing Facilities


Enzyme Development


Reagent Production Line

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