

Singleron

From Single Cell Multi-Omics to Precision Medicine



Unique Single Cell Multi-omics
Solutions

Sample to Sequencing-ready Library with
Manual and Automated Workflow

Comprehensive Data Analysis and Interpretation Tools

Bringing Groundbreaking Single Cell Analysis to Clinics



We Support Researchers and Clinicians Worldwide

630 000 000 +

Single cells sequenced

1490 +

Different sample types building our experience

4290 +

Entrusted projects by collaborative partners and laboratories

270 +

Scientific publications supported by our technology

Single Cell Multi-Omics - A New Dimension of Knowledge

Cellular Complexity Unveiled

Explore cell heterogeneity, crucial for understanding complex biological processes.

Streamlined Drug Discovery

Accelerate development by identifying biomarkers and therapeutic targets at the single-cell level.

Innovative Scientific Frontiers

Fuel breakthrough in oncology, immunology, and neuroscience with single-cell multi-omics.



Cancer

- Elucidate cancer cell heterogeneity
- Connect gene expression to mechanisms of tumor development
- Profile drug resistant cancer cells



Development

- Trace cell lineages in early development
- Reveal the dynamics of epigenetic rewiring in stem cell differentiation
- Study genetic modality in specific cell fates



Neuroscience

- Classify neuronal cell types in development and disease
- Track neuronal gene expression dynamics
- Study brain cell interaction profiles



Microbiology

- Analyze response to cellular stress
- Conduct phylogeny studies
- Profile cells for genetic engineering studies
- Detect and study rare phenotypes

Applications



Immunology

- Identify immune cell subtypes
- Map regulation of immunological memory
- Profile TCR/BCR in disease settings
- Predict immunotherapy outcomes

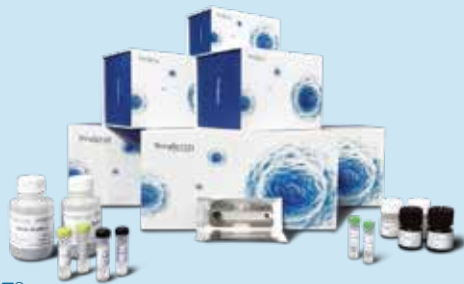


Pharmacology

- Link gene expression profiles to disease states for biomarker discovery
- Describe the mechanism of drug resistance
- Vaccine development by immune profiling

One-Stop-Shop Solution for High-throughput Single Cell Sequencing

Consumables



SCOPE®

- Single cell transcriptome and multi-omics solutions

AccuraCode®

- High-throughput RNA library construction kits

Instruments

Matrix NEO™



Matrix NEO™

- Automated single cell processing platform

PythoN® PythoN Junior™

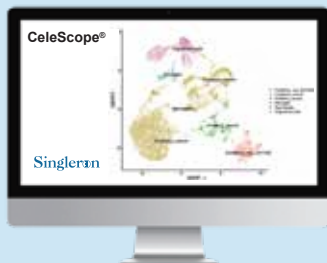


PythoN® and PythoN Junior™

- Automated tissue dissociation

Product Portfolio

Software



CeleScope® software

- Single cell sequencing data processing software
- QC report and feature-barcode matrices
- Expression matrix generation

Clinical Database



SynEcoSys® database

- Accurate cell type annotation
- Data mining for clinically focused interpretation
- Intuitive, easy-to-use interface

What do we cover?



Tissue



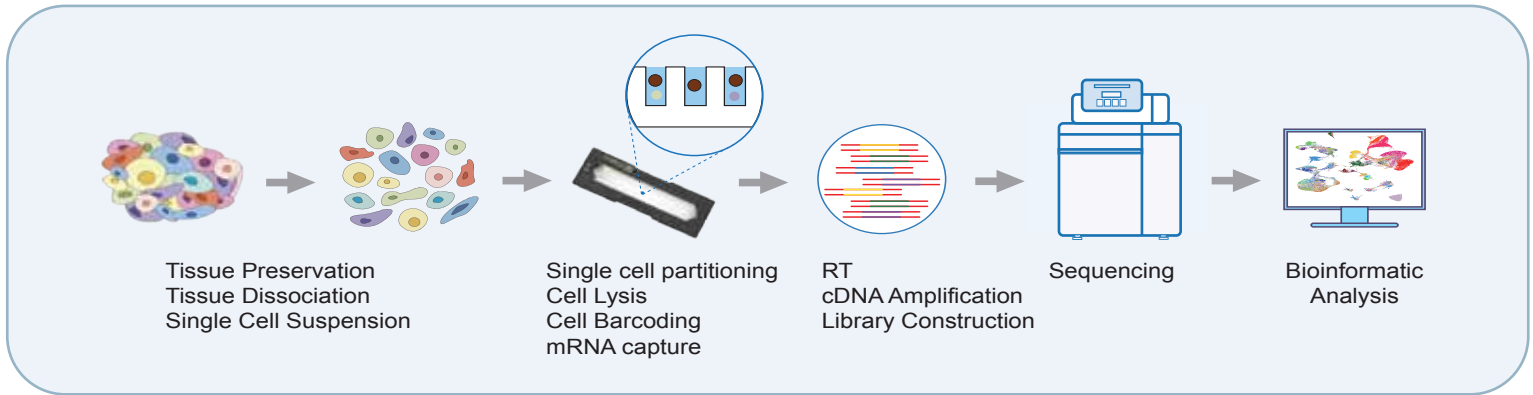
Data Analysis

- Free initial consultation
- Full workflow from tissue to bioinformatic analysis

Get in touch with us to discuss your case

info@singleron.bio

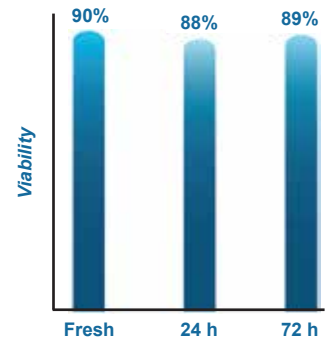
SCOPE Technology – Complete Workflow from Sample to Analysis



sCellLiVE® Tissue Preservation and Dissociation Solutions

Unique advantages to ensure high success rate:

- Preservation of fresh tissues for up to 72 hours
- Effective dissociation of diverse tissue types while keeping cells alive
- Validation with 400+ sample types of different origins and sizes



Singleron Python®/ Python Junior™ - Automated tissue dissociation

Reproducible and time-saving automation

- Cutting, grinding, heating, and enzymatic dissociation of a broad range of tissues
- Processing of up to 8 samples in parallel
- High efficiency with as little as 10 mg of tissue



Python

Python Junior™

Microfluidic SCOPE-chip® with flexible configurations

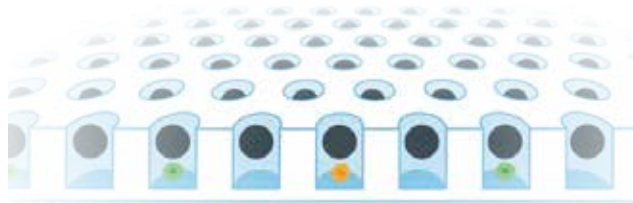
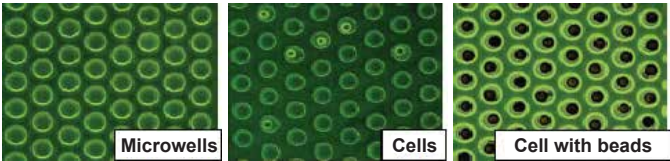


The SCOPE-chip® captures single cells by partitioning them into microwells.

Instrument-free workflow!



Standard (SD) microchip :	150,000	10,000	40um	
High-density (HD) microchip :	250,000	30,000	40um	



Chip can be visualized under the Microscope

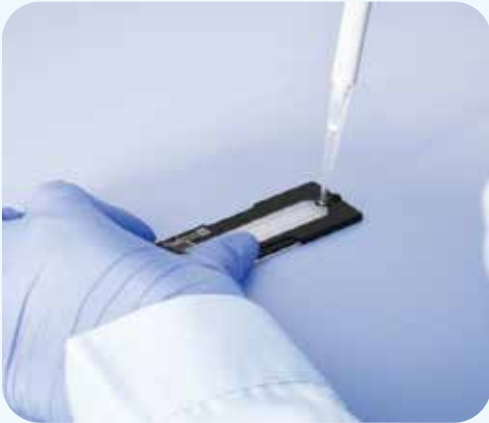
Cells and barcoding beads are partitioned into the microwells



After cell lysis, beads capture the RNA transcripts and label them with a unique cell barcode.

Advantages of using our SCOPE-chip®

- Easy to use
- Can be operated manually with a P200 pipette
- No instrument is required

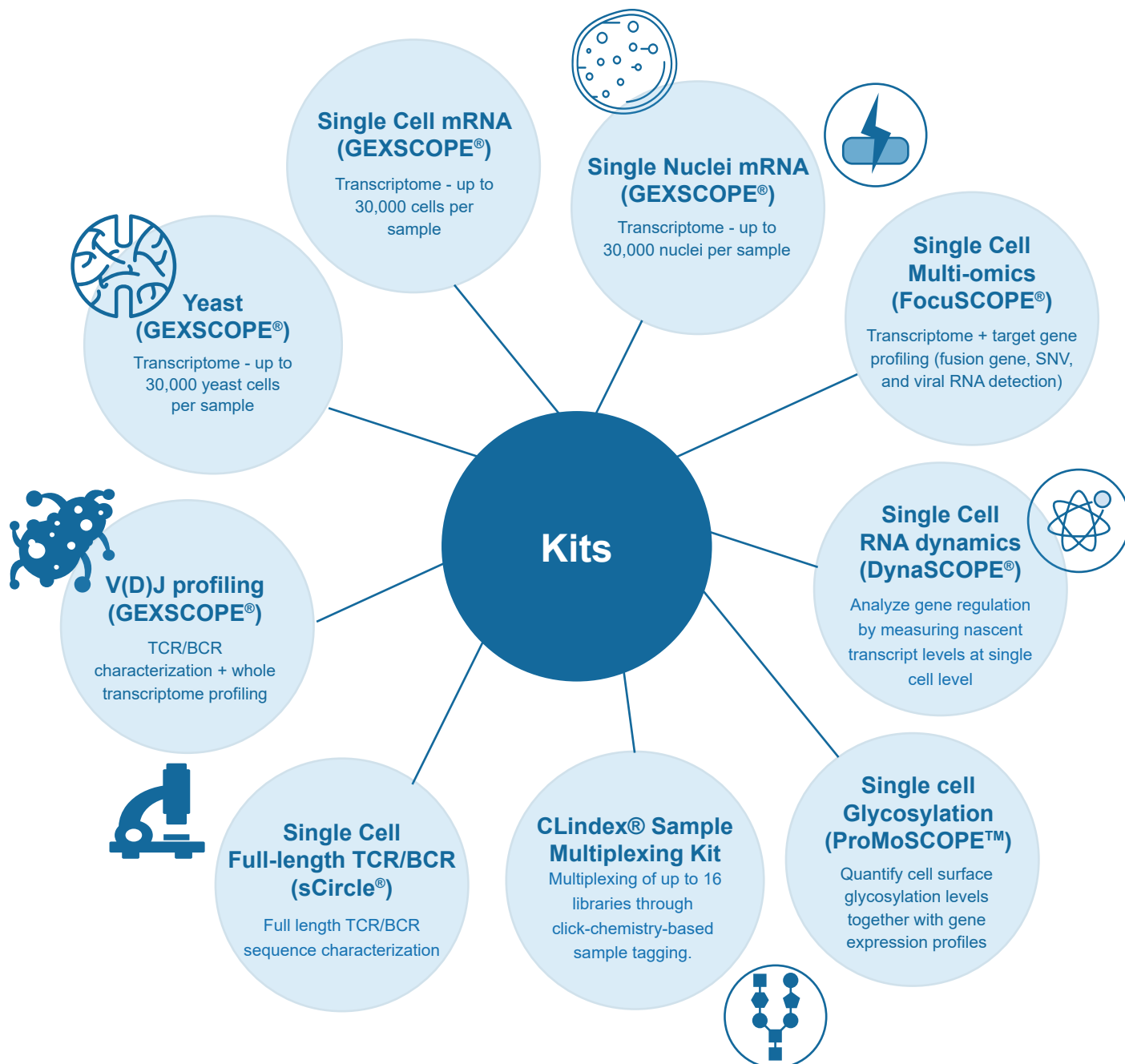


Singleron Matrix NEO™ – Automated single cell processing platform

Automate cell separation, cell lysis, and mRNA capture on the NEO instrument **within 40 minutes**



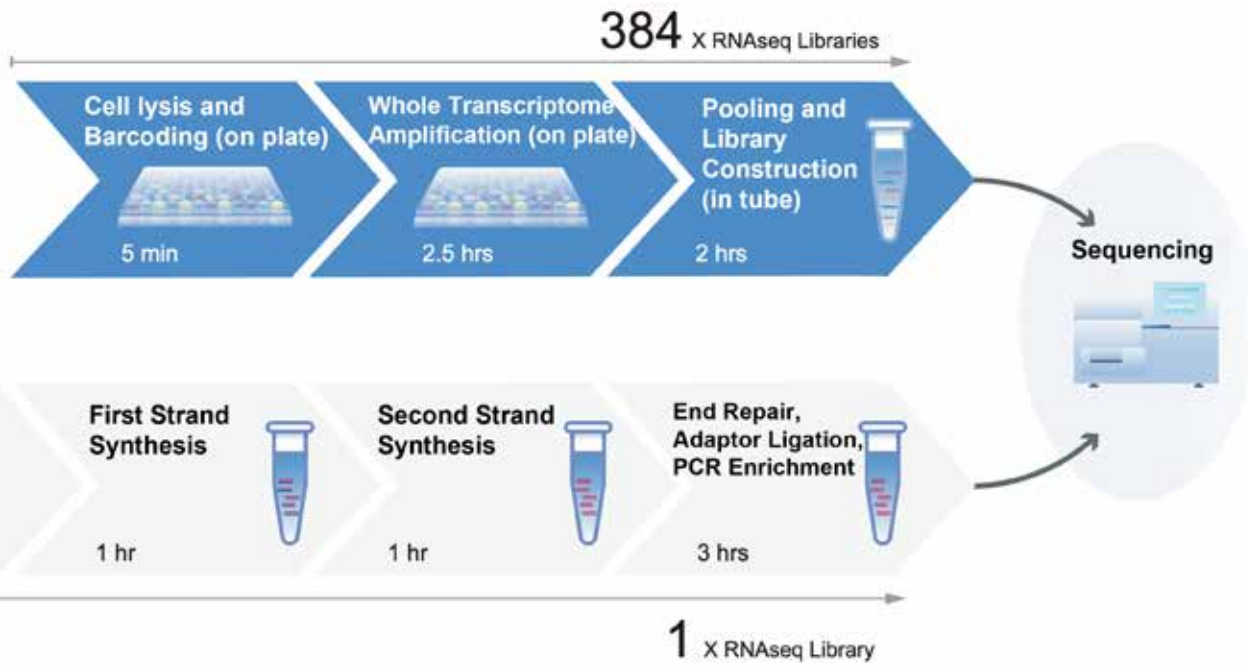
SCOPE kits – “All-In-One” single cell sequencing from Sample to Library Preparation



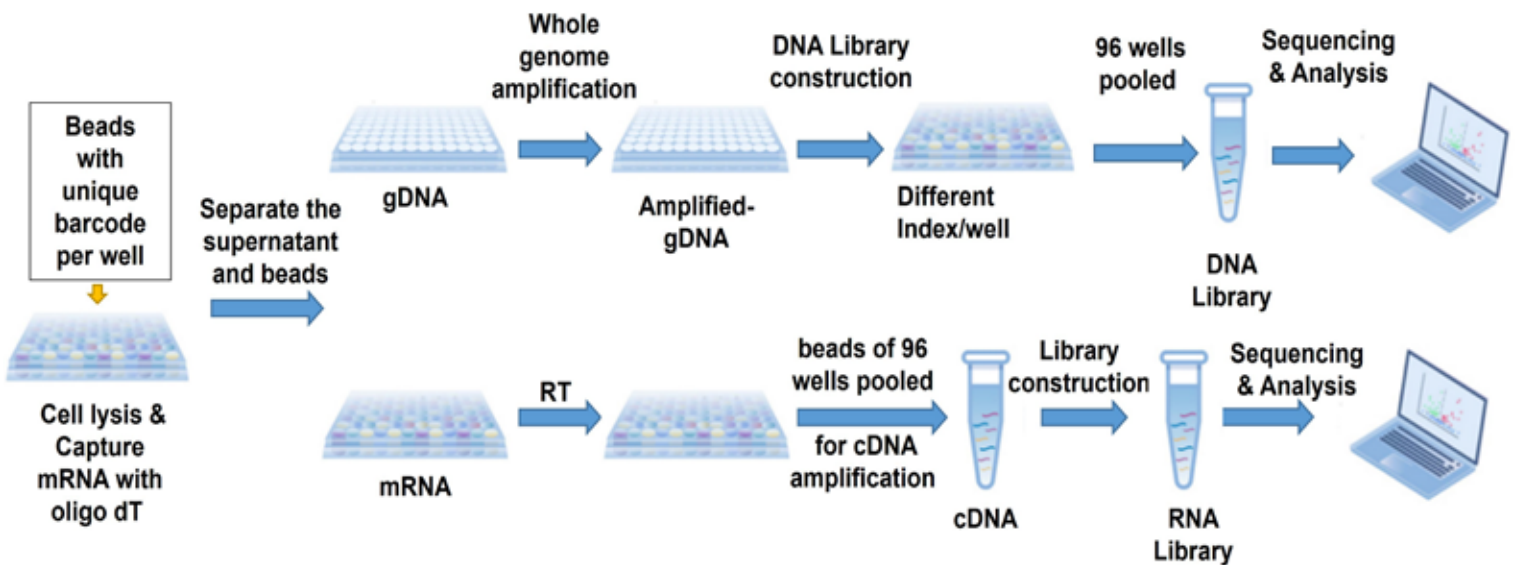
Accura Product Line – Discover Plate-Based Perfection for Your Research Needs



AccuraCode® – OneStep RNAseq Multiplexed Library
 AccuraCode® TCR – Library Construction Kit



AccuraSCOPE® Single Cell Transcriptome and Genome Library Kit

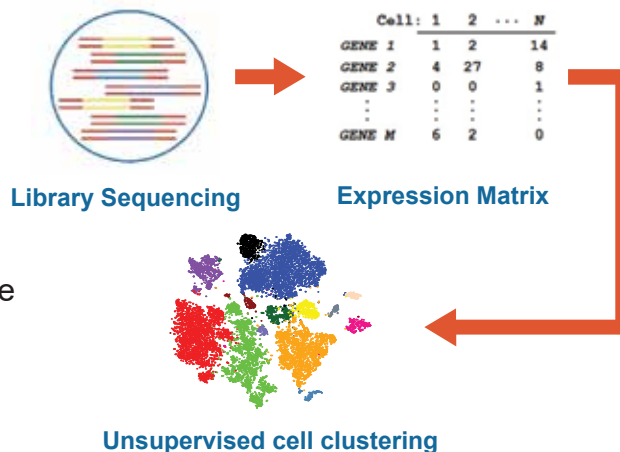


Data Analysis Tools

Bioinformatics Software and Curated Clinical Database

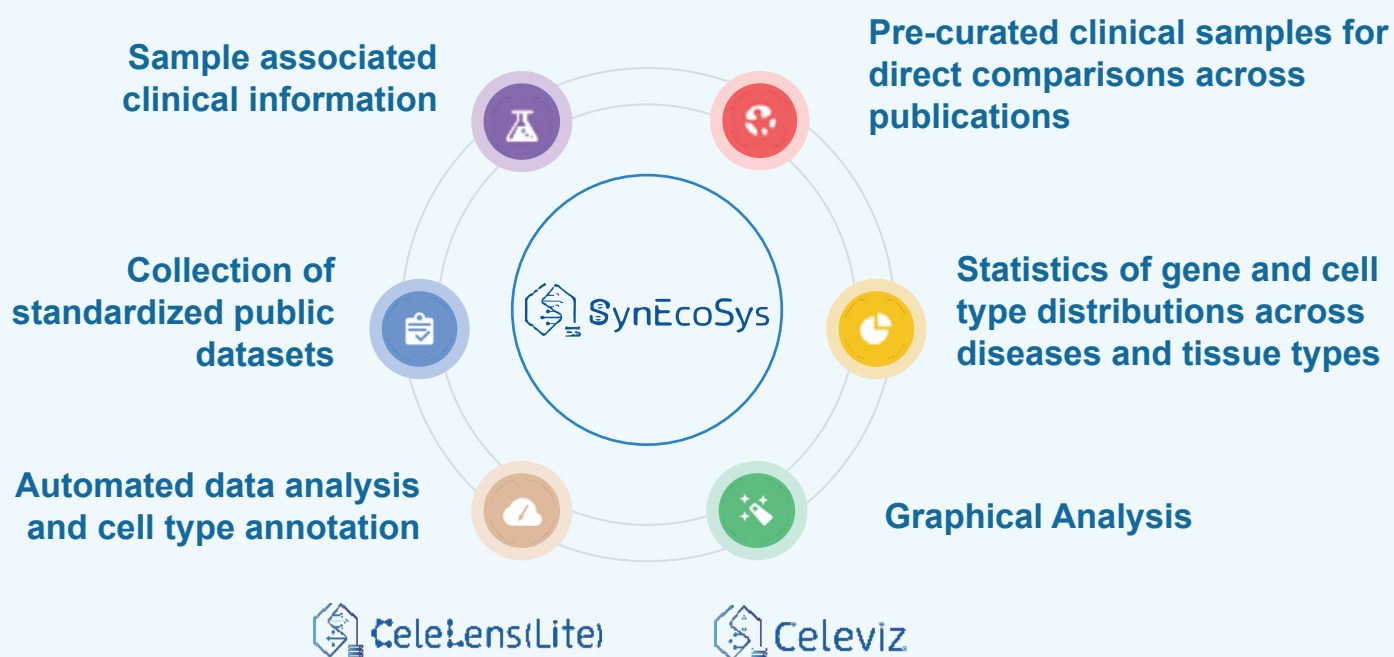
CeleScope® - Bioinformatic software for data analysis

- **Processes data** generated by SCOPE-chip
- **Conducts QC** (Quality Control) and calibrates raw sequencing data using cell barcodes
- **Aligns data** to the reference genome and performs gene quantification
- Generates **expression matrix**
- Conducts **unsupervised** cell clustering



SynEcoSys® - curated clinical annotation database

- Data mining for clinically focused interpretation
- Filter the database by chosen parameters (disease type, drug response etc.)
- Real-time updates in the field of single-cell research
- Publication-ready data visualization



For more information about our products, please contact us directly or visit <https://singleron.bio>

Product	Description	Size*	Procedure	Category
GEXSCOPE® Single Cell RNA Library Kit	Single cell mRNA library construction from fresh samples	2/4/16 RXNs	Automated/Manual	Consumable
GEXSCOPE® Single Nucleus RNA Library Kit	Single nucleus extraction and mRNA library construction from frozen tissue or special sample types (e.g., large cells with irregular morphology)	2/4/16 RXNs	Automated/Manual	Consumable
GEXSCOPE® Single Cell Human V(D)J Library Kits	Simultaneous analysis of TCR/BCR sequences and the whole transcriptome expression profiles in single cells	2/4/16 RXNs	Automated/Manual	Consumable
GEXSCOPE® Microbial Single Cell RNA Library Kit HD (Yeast)	Single cell mRNA library construction, specifically designed for yeast analysis	2/4/16 RXNs	Automated/Manual	Consumable
DynaSCOPE® Single Cell Dynamics RNA Library Kit	In vivo analysis of nascent RNA synthesis at single cell level	2/4/16 RXNs	Automated/Manual	Consumable
FocuSCOPE® Single Cell Targeted Sequencing Library Kit	Simultaneous analysis of mRNA expression and genetic variants (mutation or gene fusion) or intracellular viral sequences in single cells	2/4/16 RXNs	Automated/Manual	Consumable
ProMoSCOPE™ Single Cell Glycosylation Detection Kit	Simultaneous analysis of mRNA expression and quantification of cell surface glycosylation levels in single cells	2/4/16 RXNs	Automated/Manual	Consumable
sCircle® Single Cell Full-Length Immuno-receptor Library Kit	Full-length V(D)J region sequencing at single cell level with short-read sequencing	2/4/16 RXNs	Automated/Manual	Consumable
Clindex® Sample Multiplexing Kit	Click-chemistry for pooling of up to 16 sample in the same single cell sequencing library	16 RXNs	Manual	Consumable
sCellLiVE® Tissue Dissociation Kit	Tissue Preservation and Dissociation Master Mix for obtaining single cell suspensions	16/24 RXNs	Automated/Manual	Consumable
AccuraCode® HTP One Step RNAseq Kit	High-throughput RNA library construction for drug screening or other large scale screening	1/4 RXNs	Manual	Consumable
AccuraCode® TCR Library Construction Kit	High-throughput RNA library construction for targeted TCR libraries at the bulk level	1 RXNs	Manual	Consumable
AccuraSCOPE® Single Cell Transcriptome and Genome Library Kit	Single-cell mRNA and DNA library preparation	1 RXN	Manual	Consumable
Janus Magnetic Rack	Magnetic beads separation optimized for single cell library construction workflow	N/A	Manual	Device
Singleron NEO™	Instrument for automated single cell processing	N/A	Automated	Instrument
Singleron PythoN®	Instrument for automated tissue dissociation	N/A	Automated	Instrument
Singleron PythoN Junior™	Instrument for automated tissue dissociation	N/A	Automated	Instrument
CeleScope®	Processes the data generated by SCOPE-chip®	N/A	N/A	Software
SynEcoSys®	Database for clinically relevant data interpretation	N/A	N/A	Software

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* Kit size availability depends on version

Get in touch with us!

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Singleron

From single cell multi-omics to precision medicine



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