

# For all you seq...

# Single-Cell

### RNA Low-Level Detection

**scRNA-seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**SUP-seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**MATQ-seq**: Multiple amplifying and sequencing. Process: Multiple cells, lysis, reverse transcription, PCR amplification, sequencing.

**RamDA-seq**: Randomly amplified DNA. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**SINC-seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**visCRNA-seq**: Visualizing single cell RNA. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**UMI Method**: Unique Molecular Identifier. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Digital RNA**: Digital RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**MARS-seq**: Molecular Analysis of RNA Sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Quartz-seq**: Quartz sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Quartz-seq2**: Quartz sequencing 2. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**DP-seq**: Digital PCR. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Smart-Seq**: Smart sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Smart-Seq2**: Smart sequencing 2. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Smart-Seq3**: Smart sequencing 3. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**snRNA-seq**: Single nucleus RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**FRISCR**: Fluorescence-activated RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**SPLIT-seq**: Splitting single cell transcriptomes. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sci-RNA-seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**CEL-seq**: Cell expression by linear amplification. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**STRT**: Single cell transcriptome reconstruction. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**TCR Chaining**: TCR sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**TCR-LA-MC-PCR**: TCR sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**CirSeq**: Circular RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**TIVA**: Tissue-wide RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**PAIR**: Paired-end RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**CLAP**: Circular RNA amplification. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**CytoSeq**: Cytoplasmic RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Drop-Seq**: Droplet-based RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

### DNA Low-Level Detection

**snMIP**: Single nucleus multiple indexing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**MIPSTR**: Multiple indexing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**MDA/MS-MDA**: Multiple displacement amplification. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**SCMDA**: Single cell multiple displacement amplification. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**MALBAC**: Multiple amplifying and sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**Nuc-Seq**: Nuclear RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**SNES**: Single nucleus RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**LJANTI**: Linear amplification. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**sci-DNA-Seq**: Single cell DNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

### Single-Cell Methods

**snDrop-Seq**: Single nucleus droplet-based RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**DroNc-Seq**: Droplet-based nuclear RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**CITE-Seq**: Cellular Indexing of Transcriptomes and Epitomes. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**ECITE-Seq**: Epitome-specific RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**CROP-Seq**: Cellular RNA-Seq. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Mosaic-Seq**: Mosaic single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Act-Seq**: Active RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Seq-Well**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Microwell-seq**: Microfluidic RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Nanogrid**: Nanogrid-based RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**MULTI-Seq**: Multiple RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Hi-SCL**: High-throughput single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**inDrop**: In-droplet RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**Nuc-Seq**: Nuclear RNA sequencing. Process: Single nucleus, lysis, reverse transcription, PCR amplification, sequencing.

**Div-Seq**: Dividing cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**SCRIB-Seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

### Integrated Techniques

**SIDR**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**DR-Seq**: Digital RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**GST-Seq**: Genome-wide single cell transcriptome. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sciM&T-Seq**: Single cell multi-omics. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sci-CAR**: Single cell chromatin accessibility. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sciTriO-Seq**: Single cell transcriptome. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sciTriO-Seq2**: Single cell transcriptome 2. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sciNMT-seq**: Single cell nuclear transcriptome. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

**sciCool-Seq**: Single cell RNA sequencing. Process: Single cell, lysis, reverse transcription, PCR amplification, sequencing.

### References

Act-Seq Wang et al. (2017) Nature 549: 103-107	CEL-seq Liu et al. (2015) Nature 526: 673-677	CITE-Seq Stuart et al. (2015) Nature 527: 68-75	Drop-Seq Ziegenfuss et al. (2015) Nature 526: 678-682	Hi-SCL Wang et al. (2017) Nature 549: 103-107	inDrop Wang et al. (2017) Nature 549: 103-107	MALBAC Zhang et al. (2012) Nature 485: 67-71	MARS-seq Wang et al. (2015) Nature 526: 678-682	Quartz-seq Wang et al. (2015) Nature 526: 678-682	Quartz-seq2 Wang et al. (2015) Nature 526: 678-682	SCRIB-Seq Wang et al. (2015) Nature 526: 678-682	sci-CAR Wang et al. (2015) Nature 526: 678-682	sciTriO-Seq Wang et al. (2015) Nature 526: 678-682	sciTriO-Seq2 Wang et al. (2015) Nature 526: 678-682	sciNMT-seq Wang et al. (2015) Nature 526: 678-682	sciCool-Seq Wang et al. (2015) Nature 526: 678-682
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### Sequencing by Synthesis

Sequencing by synthesis involves the synthesis of a complementary strand from a template strand. The process is monitored by the detection of fluorescently labeled nucleotides as they are incorporated into the growing strand. This method is used for high-throughput DNA sequencing.

### TruSeq and Nextera Kits

**TruSeq PCR Free**: Library preparation without PCR amplification.

**TruSeq Nano**: Library preparation for single-cell RNA-seq.

**AmpliSeq for Illumina**: Targeted sequencing for high depth.

**TruSeq RNA**: Total RNA sequencing.

**TruSeq Small RNA**: Small RNA sequencing.

**TruSeq Stranded RNA**: Stranded RNA sequencing.

**TruSeq RNA Exome**: Exome RNA sequencing.

**TruSeq Targeted RNA Expression**: Targeted RNA expression analysis.

**Nextera Library Preparation**: Standard library preparation.

**Nextera Rapid Capture**: Targeted sequencing library preparation.

**Nextera Mate Pair**: Long-range sequencing library preparation.

### SureCell WTA 3g

Single cell whole transcriptome amplification (WTA) using SureCell technology. This method allows for the amplification of RNA from a single cell, providing a comprehensive view of the transcriptome.

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This poster was compiled by the Illumina Scientific Affairs. Additional information, the latest version of the poster, and a comprehensive list of seq methods, are available at <http://www.illumina.com/libraryprepsheets>. Please contact Scientific Affairs with any questions, comments, or suggestions.

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