SCALE biosciences

QuantumScale Single Cell RNA

Defy single cell gravity: Escape platform constraints with QuantumScale

Scale Bio's QuantumScale Single Cell RNA redefines what is possible in single cell analysis. Whether conducting a small project with a few samples or analyzing hundreds or thousands of samples in a massive study, this versatile workflow enables unparalleled flexibility with a single technology, making single cell more accessible and cost-effective than ever before.

Our Quantum Barcoding technology dramatically simplifies massively parallelized barcoding by consolidating many levels of barcoding into one streamlined operation, reducing hands-on time by over 75% for large-scale studies. For multi-sample, timepoint, or condition studies, ScalePlex enables effortless multiplexing: analyze over 9,000 unique samples per run.

QuantumScale Single Cell RNA adapts to your research needs with flexible kit sizing and a modular option to run multiple projects while keeping samples separate. Process experiments from 10,000s to millions of cells in just 1.5 days, all using the same powerful technology. Reimagine your single cell experiments without technical constraints on QuantumScale.

Highlights

Maximum Project Flexibility: Perform pilot studies to massive projects with a range of kit sizes (84,000 to 4M cells)

Streamline protocols: Reduce hands-on time by over 75% without any specialized instrumentation

Simplify Sample Multiplexing: ScalePlex enables 10 to >9,000 samples or conditions in a single run

High Performance: Superior transcript sensitivity and 50%-60% cell recovery or higher with low multiplets (≤ 4%)

Minimize Costs: The most cost effective solution per cell, sample, and experiment

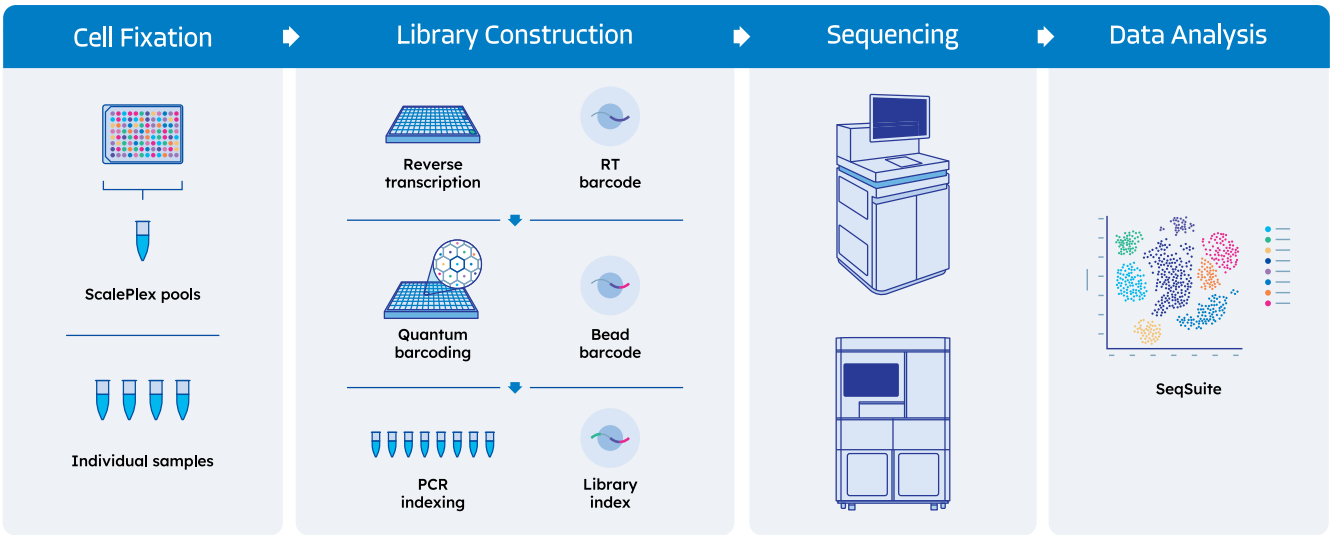
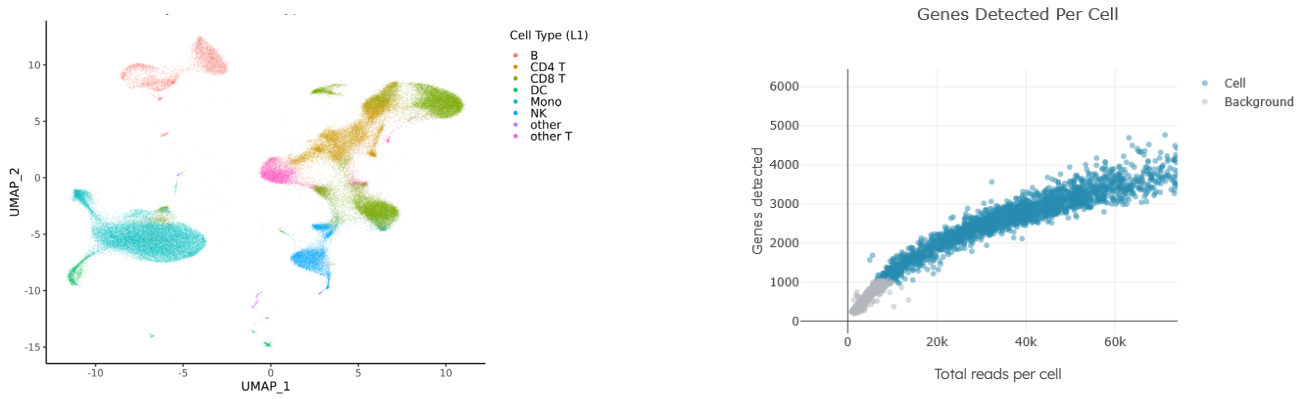


Figure 1. The QuantumScale Single Cell RNA workflow enables efficient RNA processing at any scale. Cells or nuclei are first fixed, with optional ScalePlex barcoding for multiplexing samples. Library construction involves two barcoding steps: RT barcoding during reverse transcription and bead barcoding via the Quantum Barcode plate. After PCR indexing and sequencing, data is analyzed using the Scale Bio SeqSuite pipeline.

PBMC



Mouse brain

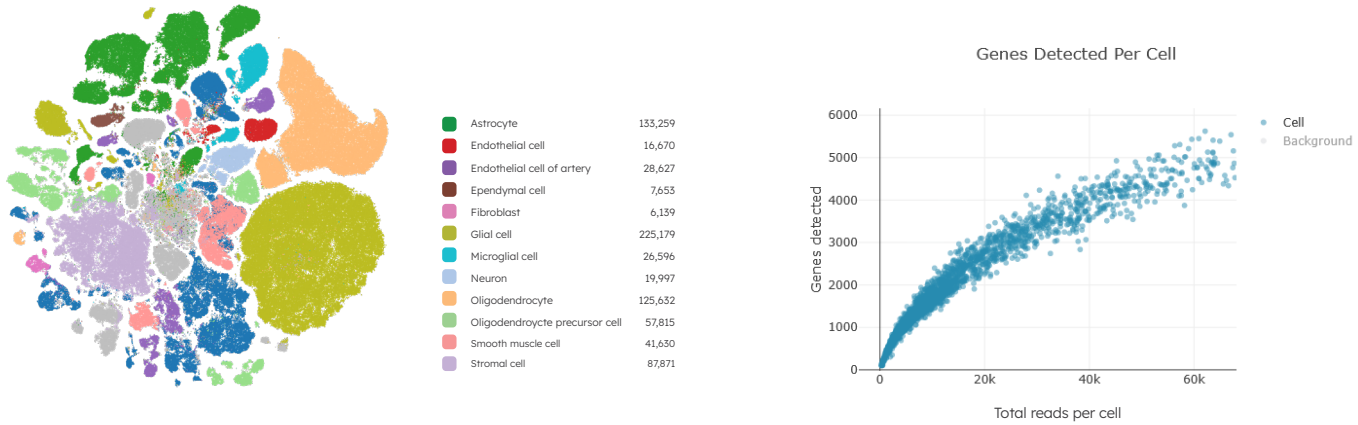


Figure 2. Data generated with QuantumScale Single Cell RNA Sequencing shows high cell type resolution and transcript sensitivity. Libraries generated from 106,036 PBMC cells (top) and 1.2M mouse brain nuclei (bottom).

Choose the QuantumScale kit for your project

Kit	Small	Medium	Large	Extra Large	Modular
Project size (cells)	84K	168K	2M	4M	168K x 12 libraries
Consider this kit for	• Proof-of-concept studies • Fresh clinical samples	• Standard-sized projects	• Time-course, multi-site, multi-condition studies • Cell atlasing • Biobanked specimens		• Multiple projects • Projects needing throughput flexibility
Sample number	1-24	1-24	1-96	1-96	1-96
Sample number with ScalePlex	Up to 2,304		Up to 9,216		Up to 9,216
Library Prep	<1.5 days				Variable

Learn more about QuantumScale Single Cell RNA Sequencing at: scale.bio/single-cell-rna-sequencing-kit/

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