

# Where simplicity meets scalability

ScaleBio's Single Cell RNA Sequencing Kit overcomes limitations of traditional single cell technologies. With massively parallelized single cell barcoding and effortless sample multiplexing, it enables large-scale, multi-sample, high-throughput screening studies with improved flexibility, cost efficiency, and data quality.

Each sample's unique biology is captured using fixation, which allows long-term storage and enables downstream simultaneous processing across timepoints or collection sites, minimizing batch effects. With ScalePlex technology, you can conduct experiments of any size and sample number seamlessly, efficiently, and cost-effectively. It overcomes the limitations of traditional lipid- or antibody-based single cell multiplexing technologies by utilizing a novel modified oligo tag added during fixation. The simple workflow eliminates the need for individual fixation and washing steps prior to sample pooling as well as eliminating upfront optimizations or titrations. The library preparation workflow also includes thoughtfully designed consumables to further reduce hands-on time, and the kit integrates with existing automation platforms, streamlining research and increasing lab productivity.

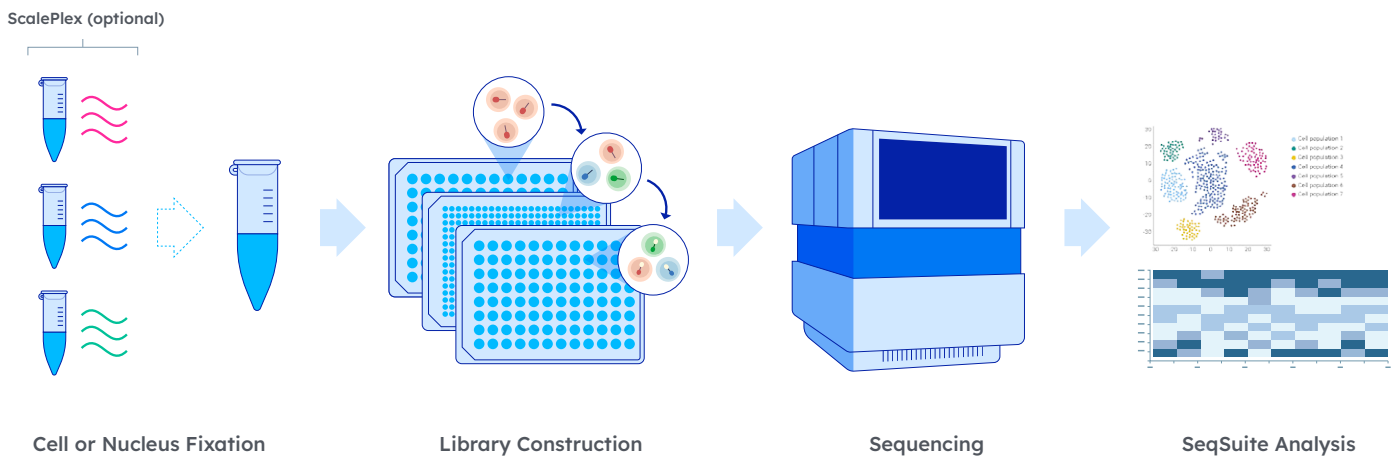
## Highlights

**Maximum Scalability:** Capture up to 500,000 cells or nuclei from any species while utilizing the most effortless multiplexing workflow on the market

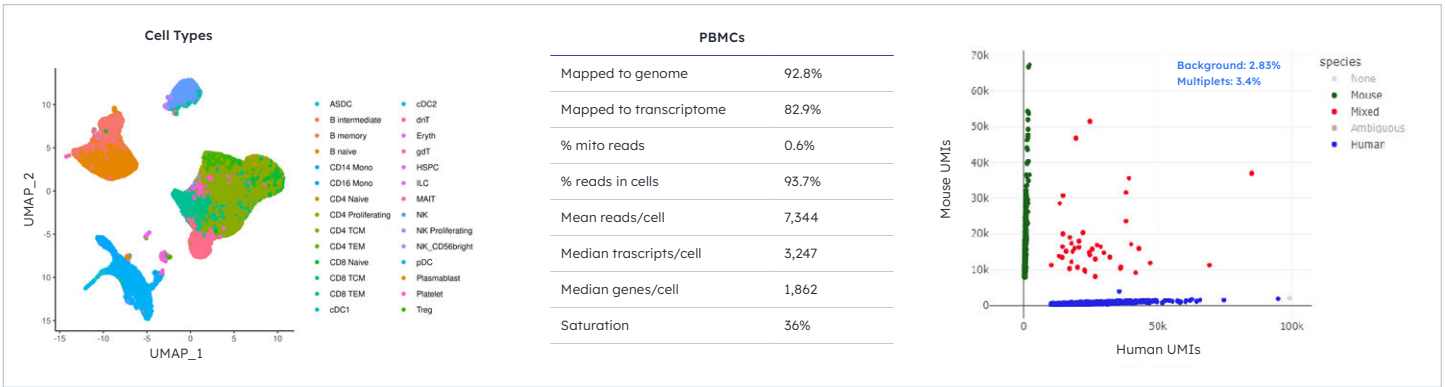
**Streamlined Sample Multiplexing:** Novel oligo-based ScalePlex technology allows you to run 10s to 100s of samples or conditions in a single run without the need for upfront optimization or individual fixation and washing steps

**Superior Data Quality:** No need to compromise on performance with high sensitivity and demonstrated low multiplet rate of <5%

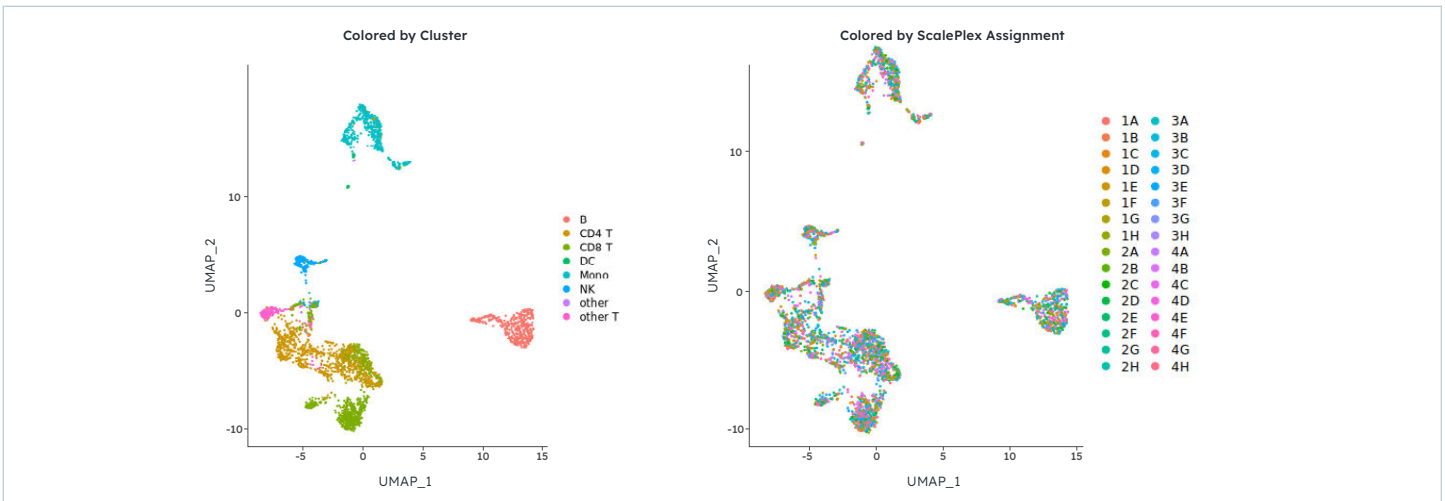
**Efficient Workflow and Automation Ready:** Minimal hands-on time and seamless integration with automation platforms



**Figure 1. Scalable and efficient workflow for single cell gene expression studies.** Start by fixing cells or nuclei to preserve biology and enable processing flexibility. Oligo-based ScalePlex streamlines sample multiplexing by eliminating individual washing steps prior to pooling. Library construction involves massively parallelized single cell barcoding, which leverages the cell as the reaction compartment, to uniquely label transcripts with sequential barcoding steps. After sequencing, process data with SeqSuite, our integrated analysis pipeline.



**Figure 2.** Data generated with ScaleBio's Single Cell RNA Sequencing Kit shows high quality data with low effective doublet rates. Libraries generated from >680,000 PBMC cells (left and center) capture all major cell types. Human K562 cells were mixed 1:1 with mouse 3T3 cells and 8 wells were sequenced, demonstrating effective multiplet rates <5% (right).



**Figure 3.** ScalePlex technology enables streamlined multiplexing. UMAP plots from 32 PBMC samples multiplexed using ScalePlex technology and processed together with the ScaleBio single cell RNA sequencing workflow (99.8% of cells assigned to a ScalePlex oligo). Individual ScalePlex tags can be detected in each cell cluster.

## Product specifications

- Capture up to 500,000 cells per run, with multiplexing capabilities of up to hundreds of samples
- Streamlined sample multiplexing; no need for upfront optimization or individual fixation and washing steps with ScalePlex
- Efficient workflow that can be seamlessly integrated with automation platforms
- Compatible with nuclei and cells from any species with no limits on cell size
- Low demonstrated doublet rate of <5%
- No specialized equipment or service contracts needed

Product Code	Product Description
2020001	ScaleBio Sample Fixation Kit
950884	ScaleBio Single Cell RNA Sequencing Kit v1.1
936360	ScaleBio Single Cell RNA Extended Throughput Kit v1.1
1067927	ScaleBio Single Cell RNA Extended Throughput Kit 3-Pack
1072042	ScaleBio ScalePlex Fixation Kit

Learn more about our Single Cell RNA Sequencing Kit at: [scale.bio/single-cell-rna-sequencing-kit/](https://scale.bio/single-cell-rna-sequencing-kit/)



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