## Single Cell ATACseq at SCALE.

## Process up to 300,000 nuclei per run with the ScaleBio scATAC Pre-Indexing Kit.

ScaleBio's scATAC Pre-Indexing Kit enables the high-throughput processing of up to 300,000 nuclei per run.

Upfront barcoding of isolated nuclei enables superloading of existing droplet systems, allowing for a 10 -fold increase in throughput at a significant reduction in cost.


Pre-indexing workflow: 1.5 hours with 30 minutes of hands-on time

Nuclei loaded into each barcoded tagmentation well (x24)

Pre-indexed nuclei are pooled


Up to 100,000 nuclei are loaded per channel

Recover 300,000 nuclei per run


ScaleBio's bioinformatics pipeline resolves the combinatorial barcode, rescuing data from multiplets and maintaining a 3-5\% effective doublet rate.

| Throughput |  |
| :--- | :---: |
| Nuclei loaded into Scale plate | 1.2 M |
| Recovery after tagmentation plate | $\sim 600 \mathrm{~K}$ |
| Nuclei loaded into on-market system | 600 K |
| Recovery from sequencing | $\sim 300 \mathrm{~K}$ |

Even with extensive overloading, consistent reads per nuclei detected


High nuclei recovery, low background, and clean cell type identification
Human PBMCs show distinct phenotypic clusters

| Metric | Value |
| :--- | :--- |
| Total Reads | $4,341,281,402$ |
| Aligned passing reads | $92.2 \%$ |
| Mitochondrial reads | $3.6 \%$ |
| Nuclei above threshold | 70,496 |
| \% reads in nucleus | $62.1 \%$ |
| Mean reads per nucleus | 35,259 |
| Median unique reads per nucleus | 16,744 |
| Saturation in nucleus | $48 \%$ |



SCALE your projects and expand your research
Achieve the benefits of combinatorial indexing technology with ScaleBio

Cost-effective library preparation
UMAP Dimension 1


