

Multiplex Samples by Genotyping

Unlock critical single-cell insights with increased throughput and cost-efficiency



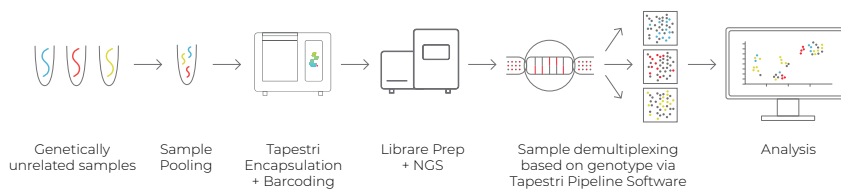
TAPESTRI® SINGLE-CELL MULTI-OMICS PLATFORM

Sample Multiplexing by Genotyping

Sample multiplexing allows multiple samples to be pooled and processed simultaneously in a single run on the Tapestri Platform. Sample Multiplexing by Genotyping is an approach that leverages the genetic information of the relevant variants obtained by bulk next-generation sequencing to distinguish samples.

In this approach, genetically unrelated samples are combined, run on Tapestri, and then demultiplexed based on genotype using the Tapestri Pipeline Software. This approach allows you to multiplex samples using the standard Tapestri core reagents, with minimal cell manipulation and workflow modification.

TAPESTRI WORKFLOW WITH SAMPLE MULTIPLEXING BY GENOTYPING

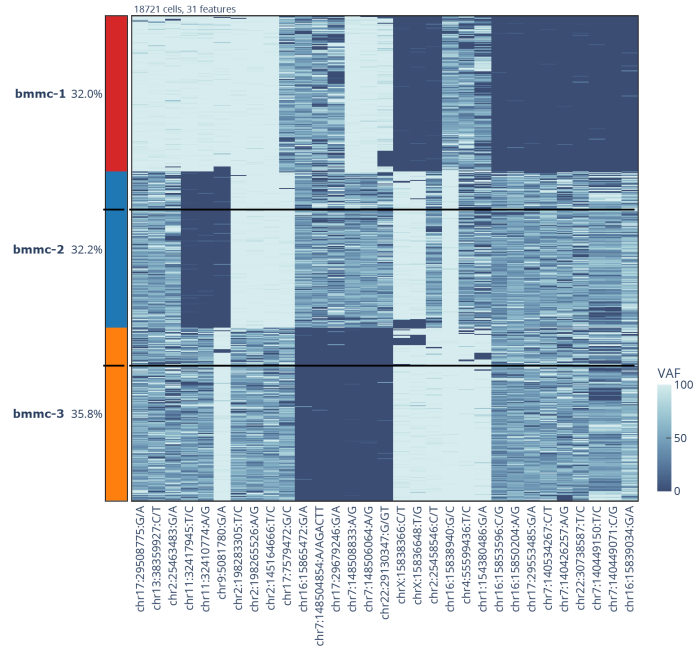


Combine genetically unrelated samples. The Demultiplexing Module in the Tapestri Pipeline Software enables separation of multiplexed samples with minimal intervention from the user.

KEY BENEFITS

- **Fast high-throughput strategy**
Multiple samples are processed in a single experiment, allowing for more statistically-significant studies.
- **Cost-efficient method**
Sample pooling improves efficiency by minimizing hands-on time and reducing per-sample costs by up to 60%*
- **Streamlined analysis**
Automatic sample demultiplexing using the Tapestri Pipeline Software.
- **Consistently robust performance**
Increase throughput and cost-efficiency without sacrificing sensitivity and specificity

TAPESTRI PIPELINE SOFTWARE EFFICIENTLY DEMULTIPLEXES SAMPLES POST-SEQUENCING



Heatmap demonstrating the clean separation of human bone marrow mononuclear cell (BMMCs) samples by germline single-nucleotide polymorphisms (SNPs) in three samples.

COMPARISON OF SAMPLE MULTIPLEXING STRATEGIES

Choose the approach that best fits your study.

Sample Multiplexing by Genotyping	Sample Multiplexing by Antibody Hashing†
<ul style="list-style-type: none"> — Multiplex samples with minimal cell manipulation and workflow change — Save two days of hands-on-time — Requires at least 50K cell input — Requires bulk sequencing data to distinguish samples. Must be unique, genetically unrelated samples** 	<ul style="list-style-type: none"> — Universally adopted and verified technique for sample multiplexing — Save one day of hands-on-time — Requires at least 1M cell input — No bulk sequencing data required. Allows multiplexing regardless of genetic relation

*Per-sample cost is dependent on the NGS platform and reagents used. Contact a Mission Bio representative to discuss.

**Tapestri Bulk NGS Ancillary Kit available for samples that were not previously characterized via NGS.

†Sample Multiplexing by Antibody Hashing capability is currently available only for Tapestri single-cell DNA workflows.

[CONTACT US TO LEARN MORE](#)

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ORDERING INFORMATION

Product	Part Number
Tapestri Instrument	MB01-0020
Tapestri Single-cell DNA Core Kit v3	MB03-0083
Tapestri Single-Cell DNA + Protein Core Kit v3	MB03-0084
Tapestri Single-Cell DNA Cartridge Kit v3	MB03-0100
Tapestri Bulk NGS Ancillary Kit	MB03-0106
Tapestri Pipeline Software with Demultiplexing Module	Available via the Mission Bio Portal