



# Tapestri® Single-Cell DNA Custom Panels

The only customizable single-cell DNA targeted solution for high impact applications

Mission Bio's Tapestri Platform performs a unique 2-step droplet workflow to access genomic DNA and detect SNVs, indels, CNVs and translocations at single-cell resolution. Target up to 1,000 genomic regions to resolve the clonal heterogeneity of cancers or the performance of gene-editing protocols across thousands of single cells.

Our easy to use Tapestri Designer software is specifically optimized for multiplex PCR droplet chemistry to create custom Single-Cell DNA-Seq panel designs within minutes. Custom DNA panels can also be paired with oligo-conjugated antibodies to enable multi-omic detection of cell surface proteins to observe genotype and phenotype from the same cell.



## Key Features

- High-quality custom panels made specifically for 2-step droplet chemistry and powered by AI
- Whole genome coverage of human and mouse genomes
- Easy-to-use in which custom panels are designed in minutes

## Custom, Targeted Approach With Maximum Flexibility

Tapestri Single-Cell DNA Custom Panels offer unprecedented flexibility to target regions across the genome. Our design solution covers the whole genome for human or mouse samples to target key genetic alterations. The panels are also scalable to fit your project time and sequencing budget/capacity (Table 1). Tapestri's targeted chemistry is a practical solution for single-cell DNA-Seq offering high resolution at a fraction of the cost of whole genome sequencing.

## Easy to Customize With Tapestri Designer

The simple intuitive interface of Tapestri Designer allows you to complete custom designs in 3 easy steps (Figure 1). Custom designs are typically completed within minutes. Browse through panel content in our catalog panels to get started, adding and subtracting your genes of interest, or start with your own gene list and start a design from scratch.

## Approximate number of sequencing reads recommended

(80x average coverage per amplicon per cell and 2x150bp paired-end sequencing)

Number of amplicons in panel

	50	250	500
<b>10,000 Cells</b>	40M	200M	400M

Table 1. Flexible range of custom panel sizes to match your experimental needs.

1

### SETUP ACCOUNT

Enter credentials to access Tapestri Designer, Tapestri Pipeline, and Tapestri Insights

2

### UPLOAD/ENTER TARGETS

Upload your CSV files or enter gene name, SNP IDs, or coordinate targets

3

### SUBMIT DESIGN

Submit your targets and your Single-Cell DNA Custom Panel is available within minutes

Figure 1. Three simple steps to create custom panels.

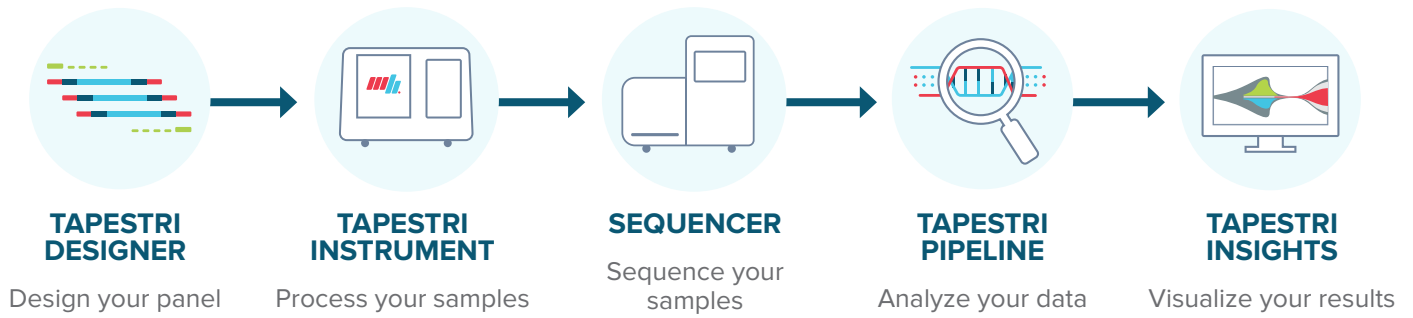


Figure 2. Tapestri workflow overview.

## Simplified targeted DNA single cell analysis

### Confidence in Quality and Performance

Tapestri Designer software leverages our multidisciplinary team with decades of expertise in primer design algorithms and multiplex PCR biochemistry optimized for the Tapestri Platform. Researchers can expect similar high design coverage and high panel uniformity that is typical of Tapestri Single-Cell DNA Catalog Panels (Figure 3).

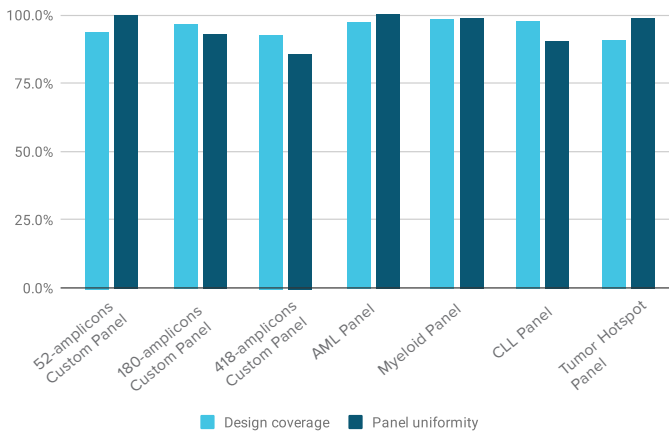


Figure 3. Observed panel performance for Tapestri Single-Cell DNA Custom and Catalog Panels. Design coverage is percentage of targets designed of targets submitted. Panel uniformity is the percentage of targets that meet at least 20% of the average depth of coverage.

### Get Started With Tapestri Designer

To design a custom panel, start with gene names, SNV IDs, or genomic coordinates and submit them to Tapestri Designer at [www.designer.missionbio.com](http://www.designer.missionbio.com)

#### Tapestri Designer

- Create Human (hg19) or Mouse (mm10) designs from coordinates, gene names or SNV IDs
- Accepts common database inputs such as COSMIC, HGVS, or dbSNP
- Create a design in just minutes
- Superior oligo design engine based on actual single cell wet-lab data and machine learning algorithm
- Design to the genetic elements key to understanding different cancers such as SNV/indels, translocations, and gene-level or chromosome-level CNV
- Technical support consultation to help you

*“As I want to maximize the data from a single cell sequencing study of rare patient samples, it is imperative that the targeted panel is built wisely. Tapestri Designer does just that - with an easy to use interface, and high coverage of my genomic regions of interest.”*

- Guy Ledergor, MD, PhD

**UCSF** Helen Diller Family  
Comprehensive  
Cancer Center

**CONTACT US TO LEARN MORE**

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