Mission Bio Tapestri Single-cell DNA Panels & Protein Panels

Uncover genotypic and phenotypic insights simultaneously from single cells

mission bio

Target with precision

Tapestri® Single-cell DNA panels and protein panels are highly sensitive and customizable panels that enable simultaneous targeted single-cell DNA and protein analysis on the Tapestri Platform. Whether identifying rare subclones missed by standard bulk sequencing, or identifying co-mutation patterns and zygosity in subclones, Tapestri Single-cell DNA panels and protein panels can be applied across a wide range of discovery and translational research applications, including hematologic malignancy, solid tumor, genome editing, biomarker discovery and cell and gene therapy.

TAPESTRI SINGLE-CELL APPLICATIONS

 **Hematologic malignancy**	 **Solid tumor**	 **Genome editing**	 **Biomarker discovery**	 **Cell & gene therapy**

Key benefits of Tapestri Single-cell DNA panels & protein panels

- Identify SNVs, indels, CNVs, LOHs and translocations from thousands of single cells
- Pair with protein panels to gain phenotype to genotype insights simultaneously from single cells
- Leverage the flexibility in experimental design and budget with targeted panels focused on your genes or regions of interest

"Knowing the clonal architecture and the immunophenotype on a single cell level . . . that opens doors to new therapeutic strategies and to figuring out resistance mechanisms and allowing us to hopefully circumvent those."

- Linde Milles, Ph.D.

Memorial Sloan Kettering Cancer Center

Choose a panel type that fits your needs

Tapestri Single-cell DNA panels are available as pre-designed panels or custom panels. Oligo-tagged protein antibodies from BioLegend can be integrated into your Tapestri experiments to enable concurrent measurement of proteins, uncovering both genotypes and phenotypes from the same cell, across thousands of cells. To browse pre-designed panels or customize your own panel, visit Tapestri Designer (tapestridesigner.com).

DNA		PROTEIN
Tapestri Single-cell DNA Pre-designed Panels	**Tapestri Single-cell DNA Custom Panels**	**BioLegend Protein Panels**
• 13 hematology DNA panels • 12 solid tumor DNA panels	Design a 20-1,000 amplicon panel via our online design software or White Glove service	• TotalSeq-D Heme Oncology Cocktail • Custom antibody conjugates

Hematology DNA panels

Clonal evolution is foundational to disease progression in hematologic malignancies which can impact therapy response, resistance, relapse, and residual disease. Tapestri Single-cell DNA panels and protein panels for research in hematologic malignancies provide unprecedented resolution to understand tumor heterogeneity driving disease.

Featured panels

TAPESTRI SINGLE-CELL DNA AML PANEL

20-GENE AML PANEL

ASXL1	GATA2	KIT	PTPN11	TET2
DNMT3A	IDH1	KRAS	RUNX1	TP53
EZH2	IDH2	NPM1	SF3B1	U2AF1
FLT3	JAK2	NRAS	SRSF2	WT1

Target hotspots across 20 genes implicated broadly in acute myeloid leukemia (AML). No. of amplicons: 127

TAPESTRI SINGLE-CELL DNA MYELOID PANEL

45-GENE MYELOID PANEL

ASXL1	DNMT3A	IDH2	MYD88	RAD21	TET2
ATM	ERG	JAK2	NF1	RUNX1	TP53
BCOR	ETV6	KDM6A	NPM1	SETBP1	U2AF1
BRAF	EZH2	KIT	NRAS	SF3B1	WT1
CALR	FLT3	KMT2A	PHF6	SMC1A	ZRSR2
CBL	GATA2	KRAS	PPM1D	SMC3	-
CHEK2	GNAS	MPL	PTEN	STAG2	-
CSF3R	IDH1	MYC	PTPN11	STAT3	-

Targets hotspots across 45 genes implicated broadly in myeloid disorders. No. of amplicons: 312

More hematology DNA panels

Visit Tapestri Designer to get the gene list and more details.

- Acute lymphoblastic leukemia
- Chronic lymphocytic leukemia
- Chronic myeloid leukemia
- Classic Hodgkin's lymphoma
- Diffuse large B-cell lymphoma
- Follicular lymphoma
- Mantle cell lymphoma
- Multiple myeloma
- Myelodysplastic syndromes
- Myeloproliferative neoplasms
- T-cell lymphoma (all types)

Hematology protein panels

The linkage of genotype and phenotype in individual cells offers the resolution for uncovering unique disease signatures for personalized therapeutics. TotalSeq™ oligo-conjugated antibodies from BioLegend enable measurement of proteins at a single-cell level and integrate seamlessly into the Tapestri single-cell DNA sequencing workflow to amplify the power of single-cell analysis.

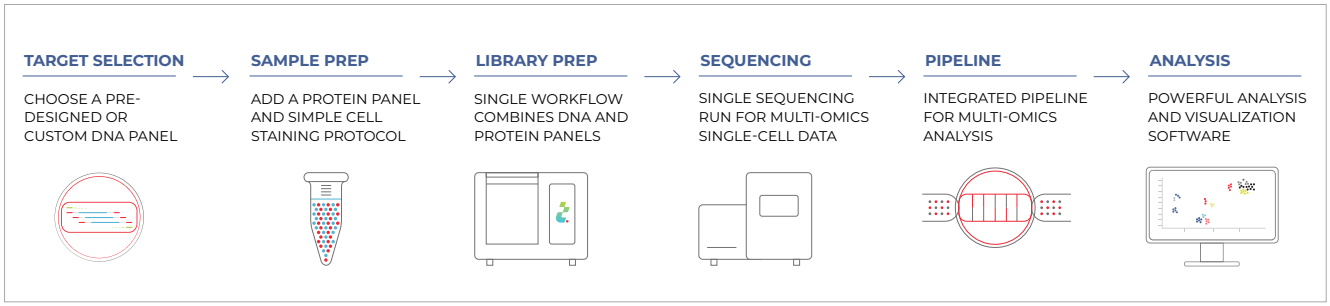
TOTALSEQ-D HEME ONCOLOGY COCKTAIL

45-PROTEIN HEME ONCOLOGY PANEL

CD1c	CD11c	CD34	CD62P	CD141
CD2	CD13	CD38	CD64	CD163
CD3	CD14	CD44	CD69	CD303
CD4	CD16	CD45	CD71	CD304
CD5	CD19	CD45RA	CD83	FcεRIα
CD7	CD22	CD45RO	CD90	HLA-DR
CD8	CD25	CD49d	CD117	IgG1 control
CD10	CD30	CD56	CD123	IgG2a control
CD11b	CD33	CD62L	CD138	IgG2b control

Target 42 heme cell surface lineage marker antibodies and 3 negative isotype controls

THE TAPESTRI SINGLE-CELL MULTI-OMICS WORKFLOW



Solid tumor DNA panels

Cellular heterogeneity in solid tumor cancers impacts clonal evolution and patient outcomes. Single-cell DNA solid tumor profiling enables high resolution of the genomic diversity in a variety of tumor types.

Featured panels

TAPESTRI SINGLE-CELL DNA TUMOR HOTSPOT PANEL

59-GENE TUMOR HOTSPOT PANEL

ABL1	CSF1R	FGFR1	IDH2	MLH1	RB1
AKT1	CTNNB1	FGFR2	JAK1	MPL	RET
ALK	DDR2	FGFR3	JAK2	MTOR	SMAD4
APC	EGFR	FLT3	JAK3	NOTCH1	SMARCB1
AR	ERBB2	GNA11	KDR	NRAS	SMO
ATM	ERBB3	GNAQ	KIT	PDGFRA	SRC
BRAF	ERBB4	GNAS	KRAS	PIK3CA	STK11
CDH1	ESR1	HNF1A	MAP2K1	PTEN	TP53
CDK4	EZH2	HRAS	MAP2K2	PTPN11	VHL
CDKN2A	FBXW7	IDH1	MET	RAF1	-

Target hotspots across 59 oncogenes and tumor suppressor genes relevant in a range of solid tumors
No. of amplicons: 234

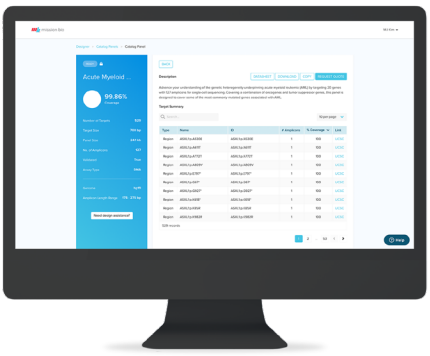
More solid tumor DNA panels

Visit Tapestri Designer to get the gene list and more details.

- Breast invasive carcinoma
- Colon adenocarcinoma
- Glioblastoma multiforme
- Kidney renal clear cell carcinoma
- Liver hepatocellular carcinoma
- Lung adenocarcinoma
- Lung squamous cell carcinoma
- Ovarian serous cystadenocarcinoma
- Pancreatic adenocarcinoma
- Prostate adenocarcinoma
- Skin cutaneous melanoma

Custom panels

For maximum flexibility, use the intuitive Tapestri Designer software to tailor a custom DNA panel to the most relevant genomic regions of heterogeneity for your research within minutes. Primer design algorithms and multiplex PCR biochemistry have been optimized for the Tapestri Platform, so you can be confident of high design coverage and high panel uniformity.



Inquire about custom oligo-conjugated antibodies for concurrent measurement of proteins.

PANEL	PART NUMBER
Tapestri Single-Cell DNA AML Panel Kit	MB03-0016
Tapestri Single-Cell DNA CLL Panel Kit	MB03-0019
Tapestri Single-Cell DNA Myeloid Panel Kit	MB03-0017
Tapestri Single-Cell DNA Tumor Hotspot Panel Kit	MB03-0018
Tapestri Single-Cell DNA Custom Panel Kits	missionbio.com/panels/custom-panels
BioLegend TotalSeq-D Heme Oncology Panel	missionbio.com/panels/totalseq-d-heme-oncology

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