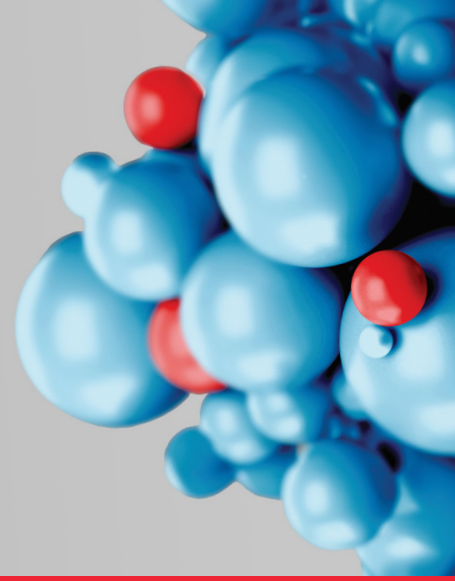# Get the whole picture— down to the Single-cell level.

Introducing the Tapestri Single-cell Multiple Myeloma Multiomics Assay

TAPESTRI® SINGLE-CELL MULTIOMICS PLATFORM

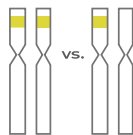## Track cancer's most critical moments

Tapestri single-cell multiomics analysis transforms how you tackle the complexities of multiple myeloma (MM) and its precursor stages by integrating genomic, proteomic, and clonotypic subclonal assessment with single-cell resolution, all within a single assay.

With the Tapestri Single-Cell Multiple Myeloma Multiomics Solution, you gain crucial insights into the clonal and subclonal heterogeneity and evolution underlying myeloma progression, therapy response, and relapse often missed by traditional bulk methods, potentially improving the identification of novel biomarkers and the development of better therapies.
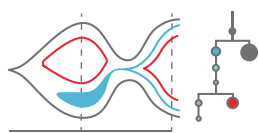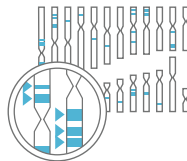

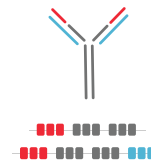| **Hotspot Mutations in Driver & Resistance Genes**	**Zygosity**	**Genome-wide CNV**	**V(D)J Clonotyping**	**Surface Immunophenotype**
Assess clonal heterogeneity & evolution in multiple myeloma (includes SNV and focal CNA)	Discern zygosity of detected mutations impacting disease progression or drug resistance	Analyze whole genome copy number gains and losses	Identify Ig clonotype in the CDR3 region	Classify cell types and identify immunotherapy targets such as BCMA

This flexible solution includes configurable assays that can be combined or used as stand-alone to suit your needs. Measure specific attributes of your interest or correlate multiple clonal features using the Tapestri software analysis solution to untangle the complex genomic-proteomic-clonotypic relationships at play in myeloma progression and therapeutic resistance.

The Tapestri multiple myeloma workflow

| Bone Marrow Sample Input | → | Sample Multiplexing (up to 3) | → | Cell Staining | → | Tapestri Encapsulation + Barcoding | → | Library Prep + NGS | → | Software and Automated Reporting |
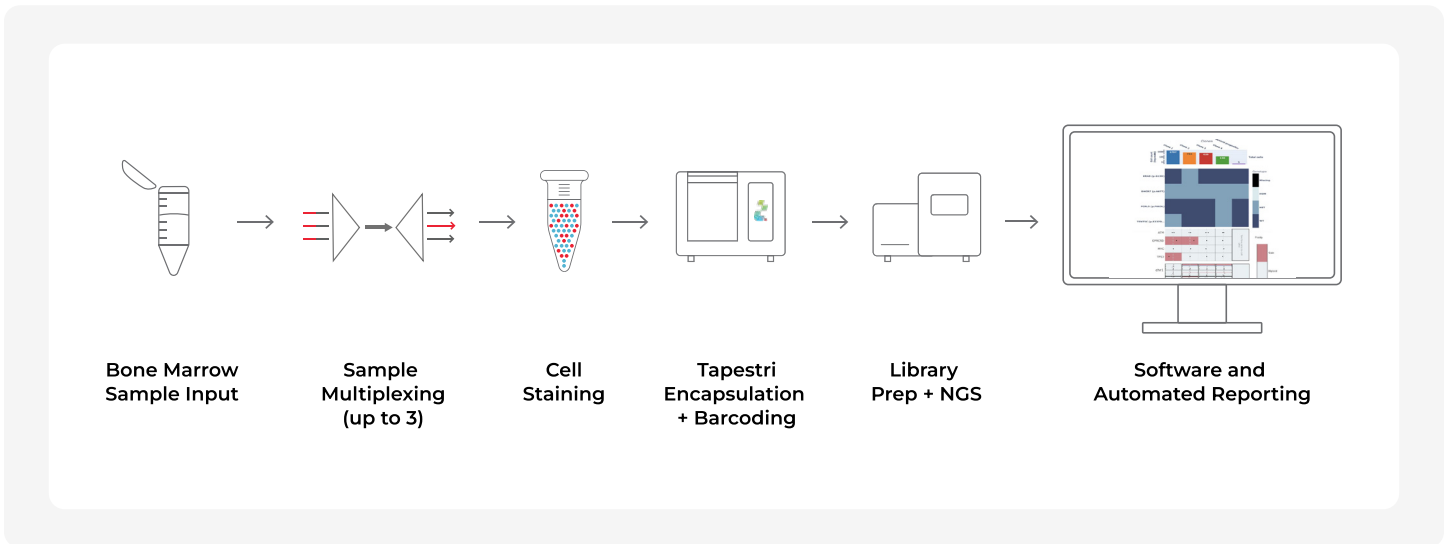
Flexible solution with modular assays

— Coverage of key driver and resistance genes, genome-wide copy number variations (CNVs), V(D)J clonotype, and cell lineage & immunotherapy markers.

— Available to purchase as a complete solution or as standalone panels.

Panel	Analyte(s)	Targets covered
Tapestri Single-Cell DNA Multiple Myeloma Panel	Hotspot mutations in driver & resistance genes	47 genes associated with multiple myeloma and therapy resistance
	Focal copy number aberrations (CNA)	10 genes with focal copy number aberrations
	V(D)J clonotype	CDR3 region of the IgH, IgK, and IgL chains
Tapestri Single-Cell DNA Genome-Wide CNV Panel	Genome-wide copy number variations	All chromosomes except chrY
TotalSeq-D Multiple Myeloma Antibody Cocktail	Cell surface antigens	19-plex antibody oligonucleotide conjugates targeting cell lineage markers & theraputic targets

Multiple myeloma assay content

TAPESTRI SINGLE-CELL DNA MULTIPLE MYELOMA PANEL

34 genes with hotspot mutations

Driver genes commonly associated with multiple myeloma curated based on consultation with global experts and publications.

ACTG1	ATM	BRAF	CCND1	CCND3
CDKN1B	CDKN2C	CYLD	DIS3	EGR1
EZH2	FAM46C	FGFR3	IDH1	IDH2
IKZF1	IRF4	KRAS	LTB	MAF
MAX	MYC	NFKBIA	NRAS	PRDM1
PTPN11	RB1	SF3B1	SLAMF7	SP140
TP53	TRAF2	TRAF3	XBP1	

13 genes with resistance mutations

Genes associated with therapy resistance in multiple myeloma curated based on consultation with global experts and publications.

CD38	CRBN	CUL4B	FCRL5	FRG1
FRMPD3	GPRC5D	NR3C1	OGT	RARA
TNFRSF17	TRAPPC8	UNC13C		

10 genes with focal copy number aberrations

Genes with focal CNAs commonly associated with multiple myeloma curated based on consultation with global experts and publications.

|				
ATM / BIRC2/3 (11q22.3)	CDKN2A/B (9p21.3)	CDKN2C (1p32.3)	EVI5 / RPL5 (1p22.1)	FAM46C / TENT5C (1p12)
GPRC5D / CDKN1B (12p13.1)	MYC (8q24.21)	RB1 (13q14.2)	TNFRSF17 (16p13.13)	TP53 (17p13.1)

V(D)J clonotype

Forward and reverse primers targeting the CDR3 region of the IgH, IgK, and IgL chains.

Targets	# of fwd / rev primers	# of V/J genes targeted
BCR-IGH	38/5	8 V subgroups (447/450 alleles)
BCR-IGK	15/4	6 J subgroups (13/13 alleles)
BCR-IGL	20/5	7 V subgroups (126/126 alleles)

TAPESTRI SINGLE-CELL DNA GENOME-WIDE CNV PANEL

Genome-wide copy number variations

500-amplicon panel uniformly covering nearly the entire genome.
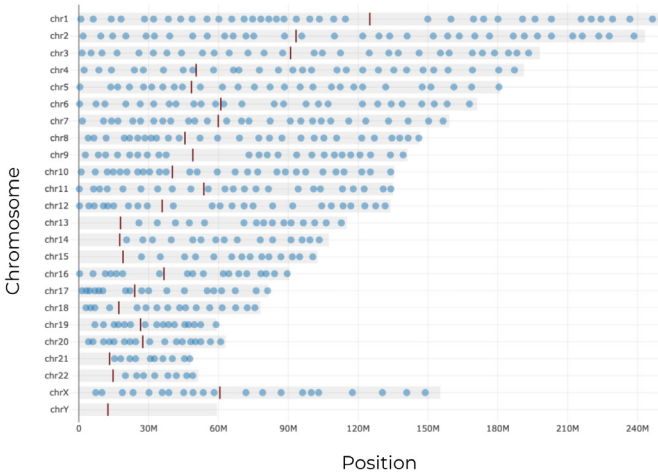
TOTALSEQ-D MULTIPLE MYELOMA ANTIBODY COCKTAIL

19 antibody oligonucleotide conjugates (AOCs)

Surface antigen markers for cell type classification and therapeutic target identification.

CD138	CD7
CD38	CD28
CD56	CD81
CD33	CD83
CD117	BCMA
HLA-DR / CD74	FcRH5 / FcRL5 / CD307e
CD19	GPRC5D*
CD22	CD200/OX2
CD45	CD47
CD3	Mouse IgG1

*GPRC5D: Tested by Mission Bio but not included in this panel.

Automated multiple myeloma report

Tapestri automatically generates comprehensive and intuitive reports with data visualizations to help you easily correlate various clonal and subclonal attributes..

SUMMARY MAP

V(D)J CLONES AND PROPORTIONS

- ■ IGH-J3:V3-30:D6-19
- ■ IGH-Missing

DNA AND PROTEIN SIGNATURES

DNA Cluster Signature, Subsorted by Protein

GENOME-WIDE CNV PROFILE

PROTEIN EXPRESSION UMAP

mission bio