

Tapestri[®] scMRD Training Checklist

Objective

The aim of scMRD training is to demonstrate the full functionality of the Tapestri Single-Cell MRD Platform, to train the operator(s) on the instrument, and to help the operator(s) familiarize themselves with the experimental workflow.

Equipment/Reagents/Consumables Provided by Mission Bio

Item	Shipping Temperature	Storage Temperature
Tapestri Instrument	Ambient	Ambient
Self-Install DNA Cartridge + Gasket	Ambient	Ambient
USB Drive	Ambient	Ambient
Base Plate	Ambient	Ambient
Tapestri Single-Cell DNA Cartridge Kit v3	Ambient	Ambient
Tapestri Single-Cell DNA Core +4 °C Kit v3	Ambient	+4 °C
Tapestri Single-Cell DNA Core -20 °C Kit v3	-20 °C	-20 °C
Tapestri Single-Cell DNA Bead Kit v3	-20 °C	-20 °C
Tapestri Protein Staining Kit	Ambient	+4 °C
TotalSeq™-D scMRD AML Cocktail	Ambient	+4 °C
Tapestri Single-Cell DNA scMRD AML Panel	Ambient	-20 °C

Equipment Provided by Customer

- P-10, P-200, P-1000 single-channel pipettes
- Serological pipettor and pipettes (5 mL and 10 mL)
- Thermal cycler programmable with temperature ramp rates from 1 °C/s to 4 °C/s
- Vortexer
- Rotating shaker (Thermo Fisher, 15920D or equivalent)
- Heat block holding 1.5 mL Eppendorf tubes
- Benchtop centrifuge (temperature controlled, with swinging buckets), mini centrifuge
- 1.5 mL magnetic separation rack (New England Biolabs, S1506S or equivalent)
- 0.2 mL 8-strip PCR tube magnetic rack (Thermo Fisher 492025 or equivalent)
- Countess[®] 3 FL Automated Cell Counter (Thermo Fisher AMQAF2001 or equivalent), Light Cubes (AMEP4955 and AMEP4950) and slides
- *Qubit Fluorometer (Thermo Fisher, Q33238)
- *Agilent Bioanalyzer or TapeStation (or equivalent)
- *OctoMACS™ Separator (Miltenyi Biotec, 130-042-109)
- *MACS[®] MultiStand (Miltenyi Biotec, 130-042-303)
- *OctoMACS™ Acrylic Tube Rack (Miltenyi Biotec, 130-090-448)

*Do not substitute.

Sample Provided by Customer

□ *Training cells

- KG-1 preferred, other human cell lines acceptable (BSL-2 or lower, cell size <30 µm)
- 2+ replicates with 5 x10⁶ cells each, cryopreserved or in culture

Reagents/Consumables Provided by Customer

IMPORTANT Please ensure that all listed reagents are ready to use and not expired.

□ *Emulsion-safe PCR tubes (one of the following):

- 0.2 mL Axygen MAXYmum Recovery PCR Tubes (Axygen, PCR-02-L-C or PCR-02D-L-C)
- 0.2 mL TempAssure PCR Flex-Free 8-Tube Strips (USA Scient., 1402-4700, color: natural)
- 0.2 mL 8-Strip Non-Flex PCR Tubes (Starlab, I1402-3700, color: natural)

□ 200 µL gel tips (Axygen, TGL200RD57R or equivalent)

□ Nuclease-free microcentrifuge tubes (1.5 mL, 0.2 mL), 8-strip 0.2 mL tubes

□ DNase-free filter pipette tips (P-10, P-200, P-1000)

□ Wide bore pipette tips (P-200, P-1000)

□ 15 mL conical tubes (Eppendorf, DNA low-bind [30122208] or regular-bind [30122151])

□ 1.5 mL DNA low-bind tubes (Eppendorf, 0030108035)

□ 1.5 mL protein low-bind tubes (Eppendorf, 22431081)

□ Ethanol, molecular biology grade (Sigma, E7023 or equivalent)

□ DPBS w/o Ca²⁺/Mg²⁺ (1X)

□ Nuclease-free water

□ Fetal bovine serum (ATCC, 30-2021 or equivalent)

□ Propidium iodide (Thermo Fisher, P3566)

□ *AMPure XP Reagent (Beckman Coulter, A63880)

□ *Agilent High Sensitivity DNA Kit for BioAnalyzer or TapeStation

□ *Qubit® dsDNA HS Assay Kit + Tubes (ThermoFisher Scientific, Q32851)

□ *Cell Staining Buffer (BioLegend, 420201)

□ *Human TruStain FcX (Fc Receptor Blocking Solution) (BioLegend, 422301)

□ *autoMACS® Rinsing Solution (Miltenyi Biotec, 130-091-222)

□ *MACS® BSA Stock Solution (Miltenyi Biotec, 130-091-376)

□ *CD34 MicroBead Kit UltraPure, human (Miltenyi Biotec, 130-100-453)

□ *CD117 MicroBead Kit, human (Miltenyi Biotec, 130-091-332)

□ *MS Columns plus tubes (Miltenyi Biotec, 130-122-727)

□ *Trisodium citrate dihydrate [CAS number 6132-04-3] (Millipore Sigma, 1064321000)

□ *Citric acid monohydrate [CAS number 5949-29-1] (Millipore Sigma, 1002431000)

□ *D-(+)-Glucose monohydrate [CAS number 14431-43-7] (Millipore Sigma, 1083421000)

[OPTIONAL] EasySep™ Dead Cell Removal Kit (Stemcell Technologies, 17899)

[OPTIONAL] RBC Depletion Reagent (Stemcell Technologies, 18170)

[OPTIONAL] Calcium Chloride (for use with Dead Cell Removal Kit) (Sigma-Aldrich, 21115)

[OPTIONAL] Sterile single-pack CellTrics™ filters, 30 µm (Sysmex, 04-004-2326)

[OPTIONAL] Trypan blue (Thermo Fisher, 15250061 or equivalent)

*Do not substitute.

Note that part numbers for third-party vendors may change. If you have any questions, please contact support@missionbio.com.