

Tapestri[®] DNA + RNA Training Checklist v3

Objective

The aim of DNA+Protein Tapestri training is to demonstrate the full functionality of the Tapestri Single Cell Multi-omics 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 2-Rxn +4 °C Kit v3	Ambient	+4 °C
Tapestri Single-Cell DNA 2-Rxn -20 °C Kit v3	-20 °C	-20 °C
Tapestri Single-Cell DNA 2-Rxn Bead Kit v3	-20 °C	-20 °C
Tapestri Single-Cell RNA Expression -20 °C Kit	-20 °C	-20 °C
Tapestri Single-Cell RNA Expression Kit +4 °C Kit	-20 °C	+4 °C
Tapestri Single-Cell DNA Myeloid Panel	Ambient	-20 °C
Tapestri Single-Cell Targeted RNA Expression Catalog Panel	Ambient	-20 °C

Equipment Provided by Customer

- P-10, P-200, P-1000 single-channel pipettes
- Pipette-aid for serological pipettes
- Thermal cycler programmable with temperature ramp rates from 1 °C/s to 4 °C/s
- Vortexer
- 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)

RNA Specific Equipment Provided by Customer

- Horizontal Gel Electrophoresis Unit (ThermoFisher G9110 or equivalent)
- E-Gel Camera (ThermoFisher G9200 or equivalent)
- Safe Imager Viewing Glasses (ThermoFisher S37103 or equivalent)

Sample Provided by Customer

- ❑ Training cells (one of the following):
 - K562, RAJI or equivalent (BSL-2 or lower, cell size <30 µm)
 - 2+ replicates with 1-2 x 10⁶ cells each, cryopreserved or in culture
 - Suggested vendor (USA): ATCC (Example: [K562](#), [RAJI](#))

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, for Europe)
- ❑ 200 µL gel tips (Axygen, TGL200RD57R or equivalent)
- ❑ DNase-free filter pipette tips (P-10, P-200, P-1000)
- ❑ Serological pipettes (5 mL and 10 mL)
- ❑ 15 mL DNA conical tubes (Eppendorf, low-bind [30122208] or regular-bind [30122151])
- ❑ 1.5 mL DNA low-bind tubes (Eppendorf, 0030108035)
- ❑ Ethanol, molecular biology grade (Sigma, E7023 or equivalent)
- ❑ DPBS w/o Ca²⁺/Mg²⁺ (1X) (Gibco 14190-144 or equivalent)
- ❑ Nuclease-free water
- ❑ [OPTIONAL] Propidium iodide (Thermo Fisher, P3566)
- ❑ *AMPure XP Reagent (Beckman Coulter, A63880)
- ❑ Agilent High Sensitivity DNA Kit for BioAnalyzer or TapeStation (or equivalent)
- ❑ *Qubit® dsDNA HS Assay Kit + Tubes (ThermoFisher Scientific, Q32851)
- ❑ Sterile single-pack CellTrics™ filters, 30 µm (Sysmex 04-004-2326)
- ❑ [OPTIONAL] Flowmi™ Cell Strainers for 1000 µL pipette tips, 40 µm (Fisher Scientific, 14-100-150)
- ❑ [OPTIONAL] Trypan blue (Thermo Fisher, 15250061 or equivalent)

RNA Specific Reagents/Consumables

- ❑ RNaseZap™ (Invitrogen AM9780)
- ❑ Invitrogen™E-Gel™ Sizing DNA Ladder (ThermoFisher 10-488-100)
- ❑ Zymoclean Gel DNA Recovery Kit (Zymo Research D4001)
- ❑ E-Gel® EX 2% Precast Agarose Gel with SYBR® Gold II DNA Gel Stain Thermo Fisher (ThermoFisher G401002 or equivalent)
- ❑ Gel Knife (spatula) (Thermofisher EI9010 or equivalent)
- ❑ Surgical Design Disposable Scalpels (# 11) (FisherScientific 22-079-708 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.