Consumables and Equipment

Make sure that you have the required user-supplied consumables and equipment before starting the protocol. Some items required depend on the workflow performed (HS or LS) and these items are specified in separate tables.

The protocol has been optimized and validated using the items listed. Comparable performance is not guaranteed when using alternate consumables and equipment.

Table 8 User-Supplied Consumables

Consumable	Supplier
1.7 ml microcentrifuge tubes	General lab supplier
15 ml conical tubes	General lab supplier
10 µl barrier pipette tips	General lab supplier
10 µl multichannel pipettes	General lab supplier
10 µl single channel pipettes	General lab supplier
20 µl barrier pipette tips	General lab supplier

Consumable	Supplier
20 µl multichannel pipettes	General lab supplier
20 µl single channel pipettes	General lab supplier
200 µl barrier pipette tips	General lab supplier
200 µl multichannel pipettes	General lab supplier
200 µl single channel pipettes	General lab supplier
1000 µl barrier pipette tips	General lab supplier
1000 µl multichannel pipettes	General lab supplier
1000 µl single channel pipettes	General lab supplier
96-well storage plates, round well, 0.8 ml (midi plate)	Fisher Scientific, part # AB-0859
One of the following: • DNA 7500 Kit • High Sensitivity DNA Kit	Agilent Technologies, part #: • 5067-1506 • 5067-4626
Ethanol 200 proof (absolute) for molecular biology (500 ml)	Sigma-Aldrich, part # E7023
Ice bucket	General lab supplier
KAPA Library Quantification Kit - Illumina/Universal	KAPA Biosystems, part # KK4824
Microseal 'A' film	Bio-Rad, part # MSA-5001
Microseal 'B' adhesive seals	Bio-Rad, part # MSB-1001
microTUBE AFA Fiber 6x16mm with • Crimp-Cap or • Pre-Slit Snap-Cap (for use with Covaris M220)	Covaris, part # • 520052 or • 520045
PCR grade water	General lab supplier
Qubit dsDNA HS Assay Kit	Life Technologies, catalog # Q32851
RNaseZap (to decontaminate surfaces)	General lab supplier
RNase/DNase-free 8-tube strips and caps	General lab supplier
RNase/DNase-free multichannel reagent reservoirs, disposable	VWR, part # 89094-658
Tris-HCl 10 mM, pH 8.5	General lab supplier
Tween 20	Sigma-Aldrich, part # P7949
[Optional] Fluorometric quantification with dsDNA binding dye reagents	General lab supplier

Table 9 User-Supplied Consumables - Additional Items for HS Workflow

Consumable	Supplier
96-well Hard-Shell 0.3 ml PCR plate	Bio-Rad, part # HSP-9601
96-well 0.3 ml skirtless PCR plates or Twin.tec 96-well PCR plates	E&K Scientific, part # 480096 or Eppendorf, part # 951020303

Table 10 User-Supplied Equipment

Equipment	Supplier
2100 Bioanalyzer Desktop System	Agilent Technologies, part # G2940CA
96-well thermal cycler (with heated lid) See *Thermal Cyclers* on page 33.	General lab supplier
One of the following Covaris systems: • S2 • S220 • E210 • M220	Covaris M220, part # 500295 For all other models, contact Covaris
Magnetic stand-96	Life Technologies, catalog # AM10027
Microplate centrifuge	General lab supplier
Vortexer	General lab supplier
qPCR system See *qPCR Systems* on page 33.	General lab supplier
[Optional] Fluorometer for quantification with dsDNA binding dyes	General lab supplier

Table 11 User-Supplied Equipment - Additional Items for HS Workflow

Equipment	Supplier
High-Speed Microplate Shaker	VWR, catalog # • 13500-890 (110 V/120 V) or • 14216-214 (230 V)
SciGene TruTemp Heating System Note: Two systems are recommended to support successive heating procedures.	Illumina, catalog # • SC-60-503 (110 V) or • SC-60-504 (220 V)
Midi plate insert for heating system Note: Two inserts are recommended to support successive heating procedures.	Illumina, catalog # BD-60-601
Stroboscope	General lab supplier

Thermal Cyclers

The following table lists the recommended settings for the Illumina recommended thermal cycler, and other comparable models. If your lab has a thermal cycler that is not listed, validate the thermal cycler before performing the TruSeq Nano DNA Library Prep protocol.

Thermal Cycler	Temp Mode	Lid Temp	Vessel Type
Bio-Rad DNA Engine Tetrad 2	Calculated	Heated, constant at 100°C	Plate
MJ Research PTC-225 DNA Engine Tetrad	Calculated	Heated, constant at 100°C	Plate
Bio-Rad S1000	N/A	Heated, constant at 100°C	Plate

qPCR Systems

The following table lists the validated qPCR systems for the TruSeq Nano DNA Library Prep protocol.

Equipment	Supplier
CFX96 Touch Real-Time PCR Detection System*	Bio-Rad, part # 185-5195
Mx3000P qPCR System	Agilent, part # 401511

* Use CFX Manager software version 3.0 with Cq Determination mode: Single Threshold; Baseline Setting:Baseline Subtracted Curve Fit and Apply Fluorescent Drift Correction for data analysis. This setting can correct for abnormalities in fluorescence intensity of the standard curve caused by the instrument. For software installation, contact Bio-Rad.