

## Consumables and Equipment List

### Consumables

Consumable	Supplier
1000 µl Conductive Non-Sterile Filter Tips	Hamilton, part # 235905
300 µl Conductive Non-Sterile Filter Tips	Hamilton, part # 235903
50 µl Conductive Non-Sterile Filter Tips	Hamilton, part # 235948
<p>Deep-well reservoir with the following specifications:</p> <ul style="list-style-type: none"> <li>• SLAS 1–2004 microplate format with 96 pyramidal or conical bottom wells and a 240 ml minimum capacity.</li> <li>• Polypropylene with preference for low DNA binding for all sample contact surfaces.</li> <li>• Internal dimensions (liquid level) are compatible with automated aspiration and dispensing steps of VeriSeq NIPT Microlab STAR.</li> <li>• Height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR.</li> </ul>	<p>General lab supplier</p> <p>Compatible reservoirs:</p> <ul style="list-style-type: none"> <li>• Corning Axygen, product # RES-SW96-HP-SI</li> <li>• Agilent, product # 201246-100</li> </ul>
<p>Reagent tub with the following specifications:</p> <ul style="list-style-type: none"> <li>• Tub that fits securely, but not forced, into the carrier of the VeriSeq NIPT Microlab STAR with tapered bottom and a 20 ml minimum capacity.</li> <li>• Polypropylene that is free from RNase/DNase.</li> <li>• Internal reservoir dimensions (liquid level) generate liquid levels using assay reagent volumes that are compatible with automated aspirating and dispensing steps of VeriSeq NIPT Microlab STAR.</li> <li>• Height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR.</li> </ul>	<p>General lab supplier</p> <p>Compatible tubs:</p> <ul style="list-style-type: none"> <li>• Illumina Reagent Tub, product # 020095418</li> </ul>

Consumable	Supplier
<p>Deep-well plates with the following specifications:</p> <ul style="list-style-type: none"> <li>• SLAS 1–2004, 3–2004, and 4–2004 microplate format with 96 pyramidal or conical bottom wells and a 2 ml minimum well capacity.</li> <li>• Translucent polypropylene, with preference for low DNA binding material for all sample contact surfaces.</li> <li>• Well dimensions generate a liquid level that is compatible with automated aspiration and dispensing steps of VeriSeq NIPT Microlab STAR.</li> <li>• Plate skirt that permits placement of plate barcodes to require position with secure, flat surface adhesion.</li> <li>• Torque-resistant frame able to sustain a minimum of 5600 × g.</li> <li>• Plate height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR</li> </ul>	<p>General lab supplier</p> <p>Compatible plates:</p> <ul style="list-style-type: none"> <li>• Eppendorf, part # 0030505301</li> <li>• Eppendorf, part # 30502302</li> <li>• USA Scientific, part # 1896-2000</li> </ul>
<p>384-well plate with the following specifications:</p> <ul style="list-style-type: none"> <li>• Microplate with 384 wells, optimized for low-volumes, with a 50 µl minimum well capacity.</li> <li>• Black opaque polystyrene with light-blocking and low DNA binding for all sample contact surfaces.</li> <li>• Well dimensions generate liquid levels that are compatible with automated aspiration and dispensing steps of VeriSeq NIPT Microlab STAR.</li> <li>• Plate height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR.</li> <li>• Plate skirt that permits placement of plate barcodes to required position with secure, flat surface adhesion.</li> </ul>	<p>General lab supplier</p> <p>Compatible plates:</p> <ul style="list-style-type: none"> <li>• Corning, product # 3820</li> </ul>

Consumable	Supplier
<p>96-well plate with the following specifications:</p> <ul style="list-style-type: none"> <li>• Microplate with a torque-resistant frame able to sustain a minimum of 5600 × g and 96 translucent wells with tapered bottoms, raised rims, and a 150 µl minimum well capacity.</li> <li>• Polypropylene that is free from RNase/DNase with low DNA binding for all sample contact surfaces.</li> <li>• Well dimensions generate liquid levels that are compatible with automated aspirating and dispensing steps of VeriSeq NIPT Microlab STAR.</li> <li>• Plate height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR.</li> <li>• Plate skirt that permits placement of plate barcodes to required position with secure, flat surface adhesion.</li> <li>• Compatible with thermal cyclers for denaturing.</li> </ul>	<p>General lab supplier</p> <p>Compatible plates:</p> <ul style="list-style-type: none"> <li>• Eppendorf, part # 0030129512</li> <li>• Eppendorf, part # 30129580</li> <li>• Eppendorf, part # 30129598</li> <li>• Eppendorf, part # 30129660</li> <li>• Eppendorf, part # 30129679</li> <li>• Bio-Rad, part # HSP9601</li> </ul>
<p>One of the following seals:</p> <ul style="list-style-type: none"> <li>• Microseal 'F' Foil</li> <li>• Foil seals</li> </ul>	<p>Bio-Rad, catalog # MSF1001</p> <p>Beckman Coulter, item # 538619</p>
DNase/RNase-free water	General lab supplier
Ethanol, 100% (200 proof), molecular biology grade*	General lab supplier
<p>Sequencing reagents and consumables required for the next-generation sequencing (NGS) system.</p> <p>If using a NextSeq 550Dx Sequencing System:</p> <ul style="list-style-type: none"> <li>• NextSeq 550Dx High Output Reagent Kit v2.5, 75 cycles</li> </ul>	
Cell-Free DNA BCT CE	Illumina, part # 20028870
Push Caps	Streck, catalog # 218997
2 ml Screw-cap tubes	Sarstedt, order # 65.802
2 ml Screw-cap tubes	General lab supplier
20 µl filter tips for 20 µl pipettor	General lab supplier
200 µl filter tips for 200 µl pipettor	General lab supplier
1000 µl filter tips for 1000 µl pipettor	General lab supplier
Equivalent:	General lab supplier
<ul style="list-style-type: none"> <li>• An alcohol-based rapid disinfectant spray</li> <li>• A solution of disinfecting detergent</li> </ul> <p>Recommended:</p> <ul style="list-style-type: none"> <li>• Deionised water and 70% ethanol</li> </ul>	

\* Nonmolecular biology grade ethanol can negatively impact performance of the assay.

## Optional Consumables

Consumable	Supplier
Dulbecco's Phosphate-Buffered Saline (DPBS) for no template control (NTC)	General lab supplier
Tube, screw cap, 10 ml (for control samples only)	Sarstedt, order # 60.551
Tube, screw cap, 50 ml	General lab supplier
25 ml serological pipettes	General lab supplier
10 ml serological pipettes	General lab supplier

## Equipment Required, Not Provided

Equipment	Supplier
A next-generation sequencing (NGS) system with the following capabilities: <ul style="list-style-type: none"> <li>• 2 x 36 bp paired-end sequencing</li> <li>• Compatible with VeriSeq NIPT Sample Prep dual index adapters</li> <li>• Automatic production of BCL files</li> <li>• Two channel chemistry</li> <li>• 400 million paired-end reads per run</li> <li>• Compatible with VeriSeq NIPT Assay Software v2 or a NextSeq 550Dx Sequencing System.</li> </ul>	Instrument supplier or Illumina, part # 20005715
Basic lab equipment: safety glasses, lab coats, powder-free protective gloves, stopwatch or timer, ice bucket	
Freezer, -25°C to -15°C	General lab supplier
Microcentrifuge	General lab supplier
Pipette aid	General lab supplier
Refrigerator, 2°C to 8°C	General lab supplier
20 µl single-channel pipettes	General lab supplier
200 µl single-channel pipettes	General lab supplier
1000 µl single-channel pipettes	General lab supplier
Vortexer	General lab supplier

Equipment	Supplier
Centrifuge and rotor assembly for blood collection tubes	
<p>Equivalent:</p> <ul style="list-style-type: none"> <li>Refrigerated centrifuge capable of 1600 × g with no-brake option</li> <li>Swinging bucket rotor with buckets</li> <li>Bucket inserts, 24, 48, or 96 tube capacity, 76 mm minimum depth</li> <li>Insert adapters to support 16 x 100 mm blood collection tubes</li> </ul>	<p>General lab supplier</p>
Recommended:	
<ul style="list-style-type: none"> <li>Allegra X12R Series Centrifuge, 1600 g</li> </ul>	Beckman Coulter, item #392304 (120 V or 230 V)
<ul style="list-style-type: none"> <li>Allegra Centrifuge GH-3.8 Rotor with buckets</li> </ul>	Beckman Coulter, item #369704
<ul style="list-style-type: none"> <li>Allegra Centrifuge Bucket Covers, set of two</li> </ul>	Beckman Coulter, item #392805
<ul style="list-style-type: none"> <li>Allegra Centrifuge Adapter Assembly, 16 mm, set of four</li> </ul>	Beckman Coulter, item #359150
Centrifuge and rotor assembly for microplates	
<p>Equivalent:</p> <ul style="list-style-type: none"> <li>Centrifuge capable of 5600 × g</li> <li>Swinging plate rotor with 96-well plate carriers, 76.5 mm minimum depth.</li> <li>Multifuge X4 Pro-MD 120V TX-1000BT</li> <li>Sorvall Legend XTR Centrifuge</li> <li>HIGHPlate 6000 Microplate Rotor</li> <li>Rotor high plate 6000</li> </ul>	<p>General lab supplier</p> <p>Thermo Scientific VWR catalog number 76326-256 Thermo Fisher Scientific, catalog # 75004521 (120 V) or catalog # 75004520 (230 V) Thermo Fisher Scientific, catalog # 75003606 Thermo Scientific VWR catalog number 97040-244</p>
Support base for microplates	
<ul style="list-style-type: none"> <li>Recommended: <ul style="list-style-type: none"> <li>MicroAmp 96-Well Support Base</li> <li>96-Well PCR Plate Carrier</li> </ul> </li> </ul>	<p>Thermo Fisher Scientific, catalog # 4379590 Thermo Fisher Scientific, catalog # AB-0563/1000</p>

Equipment	Supplier
<p>One of the following microplate readers, or equivalent, (fluorometer) with SoftMax Pro v6.2.2 or higher:</p> <ul style="list-style-type: none"> <li>Gemini XPS</li> <li>SpectraMax M2, M3, M4, and M5.                             <ul style="list-style-type: none"> <li>Purple insert is included with microplate reader for use in workflow.</li> </ul> </li> </ul>	<p>Molecular Devices, part # XPS</p> <p>Molecular Devices, part # M2, M3, M4, and M5</p>
SpectraMax High-Speed USB, Serial Adapter	Molecular Devices, part # 9000-0938
<p>Thermal cycler with the following specifications:</p> <ul style="list-style-type: none"> <li>Heated lid</li> <li>4°C to 98°C temperature range</li> <li>±2°C temperature accuracy</li> <li>2°C per second minimum ramp rate</li> <li>Compatible with Twin.tec PCR Plate 96-well, full skirt</li> </ul>	General lab supplier
VeriSeq NIPT Microlab STAR	Hamilton, part # 95475-01 (115 V), part # 95475-02 (230 V), or part #806288 (for Hamilton Company Bonaduz)
VeriSeq Onsite Server v2 or an upgraded VeriSeq Onsite Server	Illumina, part # 20028403 or 20047000 (v2) or #15076164 or # 20016240 (upgraded)

## Optional Equipment

Equipment	Supplier
Pluggo Decapper System	LGP Consulting, part # 4600 4450
SpectraMax SpectraTest FL1 fluorescence validation plate	Molecular Devices, part # 0200-5060
Tube Revolver/Rotator, 15 ml tubes, 40 rpm, 100–240 V	Thermo Scientific, catalog # 88881001 (US) or catalog # 88881002 (EU)

## VeriSeq NIPT Sample Prep

Consumable	Part #
VeriSeq NIPT Sample Prep (24 Samples)	20025895

Consumable	Part #
VeriSeq NIPT Sample Prep (48 Samples)	15066801
VeriSeq NIPT Sample Prep (96 Samples)	15066802