

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"> • SLAS 1–2004 microplate format with 96 pyramidal or conical bottom wells and a 240 ml minimum capacity. • Polypropylene with preference for low DNA binding for all sample contact surfaces. • Internal dimensions (liquid level) are compatible with automated aspiration and dispensing steps of VeriSeq NIPT Microlab STAR. • Height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR. 	<p>General lab supplier</p> <p>Compatible reservoirs:</p> <ul style="list-style-type: none"> • Corning Axygen, product # RES-SW96-HP-SI • Agilent, product # 201246-100
<p>Reagent tub with the following specifications:</p> <ul style="list-style-type: none"> • 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. • Polypropylene that is free from RNase/DNase. • 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. • Height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR. 	<p>Compatible tubs:</p> <ul style="list-style-type: none"> • Illumina Reagent Tub, product # 20095418

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

Consumable	Supplier
<p>96-well plate with the following specifications:</p> <ul style="list-style-type: none"> • 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. • Polypropylene that is free from RNase/DNase with low DNA binding for all sample contact surfaces. • Well dimensions generate liquid levels that are compatible with automated aspirating and dispensing steps of VeriSeq NIPT Microlab STAR. • Plate height dimensions are compatible with automated movements of VeriSeq NIPT Microlab STAR. <p>NOTE: Compatible plasticwares with different part numbers, for example, compatible 96 well plates from different manufacturers, may not be directly interchangeable without part-specific calibration of the VeriSeq NIPT Microlab STAR system by Illumina service and support staff. To change between plasticwares, consult your Illumina support team.</p> <ul style="list-style-type: none"> • Plate skirt that permits placement of plate barcodes to required position with secure, flat surface adhesion. • Compatible with thermal cyclers for denaturing. 	<p>General lab supplier</p> <p>Compatible plates:</p> <ul style="list-style-type: none"> • Eppendorf, part # 0030129512 • Eppendorf, part # 30129580 • Eppendorf, part # 30129598 • Eppendorf, part # 30129660 • Eppendorf, part # 30129679 • Bio-Rad, part # HSP9601
<p>One of the following seals:</p> <ul style="list-style-type: none"> • Microseal 'F' Foil • Foil seals 	<p>Bio-Rad, catalog # MSF1001 Beckman Coulter, item # 538619</p>
<p>Certified DNase/RNase-free water – molecular biology grade</p>	<p>General lab supplier</p>
<p>Ethanol, 100% (200 proof), molecular biology grade*</p>	<p>General lab supplier</p>
<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"> • NextSeq 550Dx High Output Reagent Kit v2.5, 75 cycles 	<p>Illumina, part # 20028870</p>
<p>Cell-Free DNA BCT CE</p>	<p>Streck, catalog # 218997</p>
<p>Push Caps</p>	<p>Sarstedt, order # 65.802</p>
<p>2 ml Screw-cap tubes</p>	<p>General lab supplier</p>
<p>20 µl filter tips for 20 µl pipettor</p>	<p>General lab supplier</p>

Consumable	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"> An alcohol-based rapid disinfectant spray A solution of disinfecting detergent 	
Recommended:	
<ul style="list-style-type: none"> Deionized water and 70% ethanol 	

* Nonmolecular biology grade ethanol can potentially 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"> 2 x 36 bp paired-end sequencing Compatible with VeriSeq NIPT Sample Prep Kit dual index adapters Automatic production of BCL files Two channel chemistry 400 million paired-end reads per run Compatible with VeriSeq NIPT Assay Software v2 or a NextSeq 550Dx Sequencing System. 	Instrument supplier or Illumina, part # 20005715

Equipment	Supplier
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
Centrifuge and rotor assembly for blood collection tubes	
Equivalent:	General lab supplier
<ul style="list-style-type: none"> • Refrigerated centrifuge capable of 1600 × g with no-brake option • Swinging bucket rotor with buckets • Bucket inserts with 76 mm minimum depth • Insert adapters to support 16 mm x 100 mm blood collection tubes 	
Recommended:	
• Allegra X12R Series Centrifuge, 1600 g	Beckman Coulter, item # 392304 (120 V or 230 V)
• Allegra Centrifuge GH-3.8 Rotor with buckets	Beckman Coulter, item # 369704
• Allegra Centrifuge Bucket Covers, set of two	Beckman Coulter, item # 392805
• Allegra Centrifuge Adapter Assembly, 16 mm, set of four	Beckman Coulter, item # 359150
Centrifuge and rotor assembly for microplates	

Equipment	Supplier
<p>Equivalent:</p> <ul style="list-style-type: none"> • Centrifuge capable of 5600 × g • Swinging plate rotor with 96-well plate carriers, 76.5 mm minimum depth. • Multifuge X4 Pro-MD 120 V TX-1000BT • Sorvall Legend XTR Centrifuge • HIGHPlate 6000 Microplate Rotor • Rotor high plate 6000 <p>Support base for microplates</p> <ul style="list-style-type: none"> • Recommended: <ul style="list-style-type: none"> • MicroAmp 96-Well Support Base • 96-Well PCR Plate Carrier 	<p>General lab supplier</p> <p>Thermo Scientific VWR, catalog # 75016034</p> <p>Thermo Fisher Scientific, catalog # 75004521 (120 V) or catalog # 75004520 (230 V)</p> <p>Thermo Fisher Scientific, catalog # 75003606</p> <p>Thermo Scientific VWR, catalog # 97040-244</p> <p>Thermo Fisher Scientific, catalog # 4379590</p> <p>Thermo Fisher Scientific, catalog # AB-0563/1000</p>
<p>One of the following microplate readers, or equivalent, (fluorometer) with SoftMax Pro v6.2.2–7.1.2:</p> <ul style="list-style-type: none"> • Gemini XPS • SpectraMax M2, M3, M4, and M5. <ul style="list-style-type: none"> • Purple insert is required with microplate reader for use in workflow. 	<p>Molecular Devices, part # XPS</p> <p>Molecular Devices, part # M2, M3, M4, and M5</p>
<p>SpectraMax High-Speed USB, Serial Adapter</p>	<p>Molecular Devices, part # 9000-0938</p>
<p>Thermal cycler with the following specifications:</p> <ul style="list-style-type: none"> • Heated lid • 4°C to 98°C temperature range • ±2°C temperature accuracy • 2°C per second minimum ramp rate • Compatible with Twin.tec PCR Plate 96-well, full skirt 	<p>General lab supplier</p>
<p>VeriSeq NIPT Microlab STAR</p>	<p>Hamilton, part # 95475-01 (115 V), part # 95475-02 (230 V), or part # 806288 (for Hamilton Company Bonaduz)</p>
<p>VeriSeq Onsite Server v2 or an upgraded VeriSeq Onsite Server</p>	<p>Illumina, part # 20028403 or # 20047000 (v2) or # 20101927, # 15076164, or # 20016240 (upgraded)</p>

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 Kit

Consumable	Part #
VeriSeq NIPT Sample Prep Kit (24 Samples)	20025895
VeriSeq NIPT Sample Prep Kit (48 Samples)	15066801
VeriSeq NIPT Sample Prep Kit (96 Samples)	15066802