

## Equipment, Materials, & Reagents for Protein nCounter Assays on GeoMx™ DSP

See the tables below for information on equipment, materials, and reagents needed for GeoMx protein slide preparation and nCounter readout preparation. Separate lists are included for manual slide prep and for Leica Biosystems autostainer slide prep. This information is also available under **Support Documents** at [www.nanostring.com/GeoMxDSP](http://www.nanostring.com/GeoMxDSP)).

### EQUIPMENT

The following pieces of equipment are recommended for the GeoMx DSP workflow but are not provided by NanoString.

Table 1: Equipment not provided by NanoString.

Stage	Equipment	Manufacturer	Part Numbers
<b>General</b>	Baking oven	Quincy Lab, Inc. (or comparable)	<a href="#">Various GC models</a>
(optional)	UV Light Box	VWR	<a href="#">Various</a>
<b>MANUAL Slide Prep only</b>	TintoRetriever Pressure Cooker <b>Note:</b> A TintoRetriever Pressure Cooker is recommended for this protocol. Other alternatives may be acceptable, but have not been validated by NanoString and will require optimization. Any model used needs to have a temperature gauge. The TintoRetriever is rated for <b>110V</b> ; a <b>transformer is required for 220V</b> .	<a href="#">BioSB</a>	<a href="#">BSB 7008</a>
<b>LEICA Slide Prep only</b>	BOND RX or RX™ Compact, Fully Automated Advanced Stainer	<a href="#">Leica Biosystems</a>	<a href="#">Contact Leica Biosystems</a>
	BOND RX Controller, running BOND RX software version 6.0 and above	Leica Biosystems	<a href="#">Contact Leica Biosystems</a>

Stage	Equipment	Manufacturer	Part Numbers
nCounter Readout	Vortex	Various	Various
	Picofuge	Various	Various
	ALPS 50 plate sealer (see Materials list ( <a href="#">see Table 2</a> ) for compatible heat-sealing foil)	Thermo Fisher	<a href="#">AB-1443A</a>
	Heatblock or thermal cycler Note: ensure that this is compatible with hybridization plate used (see the materials list for <a href="#">nCounter Readout on page 4</a> ).	Various, such as <a href="#">Bio-Rad C1000 deep-well model</a>	Various, such as <a href="#">1851197</a>
	Plate spinner/centrifuge (up to at least 2000 g)	Various	Various

**MATERIALS**

The following materials are recommended for the GeoMx DSP workflow but are not provided by NanoString.

Table 2: Materials not provided by NanoString.

Stage	Materials	Manufacturer	Part Numbers
<b>General</b>	Pipettes for 5–1,000 µL	Various	Various
	12-channel P20 multi-channel pipetter	Various	Various
	Filter Tips (RNase/DNase free)	Various	Various
	Microtubes	Sarstedt (or comparable)	<a href="#">72.785.005</a>
	SuperFrost Plus microscopic slides	Fisher Scientific (or comparable)	<a href="#">12-550-15</a>
	Tissue-Tek Staining Dish (plastic Coplin Jars) or equivalent	Sakura (or comparable)	<a href="#">25608-904</a> or <a href="#">25608-906</a>
	Humidity Chamber	Simport	<a href="#">M920-1</a>
	Hydrophobic Barrier Pen	Vector Labs (or comparable)	<a href="#">H-4000</a>
	Razor Blades	Various	Various
(optional)	Cover slips	Various	Various
<b>MANUAL Slide Prep only</b>	Heat/cold protectant handling glove	Various	Various
<b>LEICA Slide Prep only</b>	BOND Research Detection System (includes 6x 30 mL Open Containers)	Leica Biosystems	<a href="#">DS9455</a>
	BOND Titration Kit (includes 50 inserts)	Leica Biosystems	<a href="#">OPT9049</a>
	BOND Universal Covertiles	Leica Biosystems	<a href="#">S21.2001</a>
	BOND Open Containers 30 mL (if	Leica Biosystems	<a href="#">OP309700</a>

Stage	Materials	Manufacturer	Part Numbers
	needed)		
	BOND Titration Container Inserts (if needed)	Leica Biosystems	<a href="#">OPT9179</a>
<b>nCounter Readout</b>	Permeable membrane (dry-down seal, optional)	Sigma	<a href="#">A9224</a>
	Eppendorf 96-Well twin.tec PCR Plates, semi-skirted, 250 µl  <b>or</b> 96-well plate (compatible with most thermocyclers)	Fisher Scientific	<a href="#">Cat. No. E951020346</a>  <a href="#">BC2496</a>
	96 well plate stickers (freezing and storing plates)	Various	Various
	Heat-sealing foil seals	Fisher Scientific	<a href="#">AB-0559</a>

**REAGENTS**

The following reagents are recommended for the GeoMx DSP workflow but are not provided by NanoString.

Table 3: Reagents not provided by NanoString.

Stage	Reagent	Source/ Part Number	Storage
<b>General</b>	DEPC-treated water	ThermoFisher, <a href="#">AM9922</a> (or comparable)	RT
	10X tris buffered saline (TBS)	Cell Signaling Technologies, <a href="#">Cat # 12498S</a>	RT
	10X tris buffered saline with tween 20 (TBS-T)	Cell Signaling Technologies, <a href="#">Cat # 9997S</a>	RT
	4 or 16% paraformaldehyde (PFA) <b>Note:</b> Use <i>only</i> for post-fix step	Thermo Scientific, 4% concentration, <a href="#">Cat # FB002, R37814</a> 16% concentration (must be diluted to 4%), <a href="#">Cat # 28906, 28908</a> (or comparable)	-20°C
	10X phosphate buffered saline pH 7.4 (PBS)	Sigma Aldrich, <a href="#">SKU P5368-10PAK, P5368-5X10PAK</a> (or comparable)	RT
(optional)	Fluoromount-G mounting media	SouthernBiotech, <a href="#">Cat. No. 0100-01</a>	RT
<b>MANUAL Slide Prep only</b>	Citrisolv or Xylene	Fisher Scientific, <a href="#">Cat # 04-355-121</a> Sigma Aldrich, <a href="#">SKU 183164-100ML or 183164-500ML</a> (or comparable)	RT
	100% ethanol (EtOH): ACS grade or better	Various	RT
	10X citrate buffer pH 6	Sigma Aldrich, <a href="#">SKU C9999-100ML or C9999-1000ML</a> (or	4°C

Stage	Reagent	Source/ Part Number	Storage
		comparable)	
<b>LEICA Slide Prep only</b>	BOND Dewax Solution – 1 L	Leica Biosystems, <a href="#">AR9222</a>	4°C or RT
	BOND Epitope Retrieval 1, 1 L	Leica Biosystems, <a href="#">AR9961</a>	4°C
	BOND Wash Solution 10X Concentrate – 1 L	Leica Biosystems, <a href="#">AR9590</a>	4°C

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