NGS Library Preparation

Trusted Thermal Cyclers for NGS Library Preparation

Next-generation sequencing (NGS) library preparation workflows can include several steps, such as RNA/DNA extraction, RNA integrity analysis, fragmentation, adapter sequence addition, cDNA synthesis, target enrichment, and amplification. Robust thermal cyclers, such as PTC Tempo Thermal Cyclers, are a vital part of the NGS workflow. Bio-Rad thermal cyclers utilize Peltier technology for precise temperature control and thermal gradient technology for simplified PCR optimization.

Need flexibility?

Utilize the PTC Tempo 48/48 Thermal Cycler with dual reaction blocks to simultaneously run 2 independent protocols

Need higher reaction volumes?

Consider the PTC Tempo Deepwell Thermal Cycler to accommodate volumes up to 125 μ l, perfect for NGS library prep volume requirements

Need reliability?

- Reproducible results, due to rapid arrival at target temperature and superior uniformity
- Trusted thermal cyclers for more than 35 years, worldwide
- Bio-Rad thermal cyclers have been recommended in protocols by leading sequencing companies

Need high throughput?

Drive sample throughput and minimize errors with the automation-compatible PTC Tempo Deepwell Thermal Cycler

Make Bio-Rad thermal cyclers a part of your NGS library prep workflow.



Fragmentation



Adapter Sequence Addition







In addition to thermal cyclers, Bio-Rad offers these essential tools for the NGS library preparation workflow.

Explore the SEQuoia™ Workflow for Revolutionized RNA Sequencing



Featuring the latest advancements in enzyme technology, SEQuoia products offer superior construction of RNA sequencing libraries from low-input and low-quality samples. The SEQuoia one-tube continuous synthesis library prep reaction minimizes pipetting steps and shortens the workflow. The SEQuoia workflow can greatly reduce the total cost of library preparation without compromising data integrity or quality.

Visit bio-rad.com/NGS to learn more.

Electrophoresis and Plastic Consumables Ideal for NGS Library Preparation

Select fragment sizes and evaluate RNA integrity with horizontal electrophoresis products





Sub-Cell™ GT Cells are versatile and enable multisample, high-throughput nucleic acid applications.

Save preparation time and standardize electrophoresis runs with premixed electrophoresis running buffers that are compatible with handcast or precast gels.

Visit bio-rad.com/DNAElectro to learn more.

Ensure sequencing success with Hard-Shell™ PCR Plates and Microseal™ PCR Plate Seals



Hard-Shell PCR Plates are precisely manufactured for optimal fit and cycling performance.

Adhesive foils and optically clear seals are designed with a strong adhesive that minimizes sample evaporation.

Visit bio-rad.com/PCRPlastics to learn more.

Ordering Information

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Catalog #	Description
12015392	PTC Tempo Deepwell Thermal Cycler
12015309	PTC Tempo 48/48 Thermal Cycler
1640301	Wide Mini-Sub™ Cell GT Horizontal Electrophoresis System,
	includes 15- and 20-well combs, gel caster, 15 x 10 cm
	UV-transparent tray, PowerPac Basic Power Supply
1814000	PX1 PCR Plate Sealer
17005710	SEQuoia Complete Stranded RNA Library Prep Kit, 96 reactions
12017265	SEQuoia Express Stranded RNA Library Prep Kit, 96 reactions
17006487	SEQuoia RiboDepletion Kit, 24 reactions
12011930	SEQuoia Dual Indexed Primers Plate
MSB1001	Microseal 'B' PCR Plate Sealing Film, adhesive, optically clear, 100
MSF1001	Microseal 'F' PCR Plate Seal, foil, pierceable, 100
HSP9601	Hard-Shell 96-Well PCR Plates, low profile, thin wall, skirted,
	white shell, clear well, 50
HSP9655	Hard-Shell 96-Well PCR Plates, low profile, thin wall, skirted.

Catalog # Description

MLP4801 Multiplate 48-Well PCR Plates, high profile, unskirted, clear, 50 MLL4801 Multiplate 48-Well PCR Plates, low profile, unskirted, clear, 50

Visit bio-rad.com/PTCTempo for more information.

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Bio-Rad PCR reagents and analytical instruments are manufactured under an ISO 13485:2016 certified Quality Management System and are quality control tested to ensure consistent product performance you can trust.



Bio-Rad Laboratories, Inc.

white shell, white well, 50

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