Next-Generation Sequencing



Explore the SEQuoia Workflow for Revolutionized RNA Sequencing

- Patented enzymatic technology captures more of the transcriptome
- Optimized reaction generates greater yields with fewer PCR cycles
- Simplified workflow minimizes pipetting steps
- Increased cost savings by multiplexing ribodepletion reactions
- Integrated bioinformatics solution conveniently processes FASTQ files

Overcome the limitations of complicated and biased library prep methods using the SEQuoia RNA-Seq library prep workflow to capture more of the transcriptome. Featuring the latest advancements in patented enzymatic technology, SEQuoia products offer superior construction of RNA-Seq libraries from low-input and low-quality samples. The SEQuoia one-tube continuous synthesis library prep reaction minimizes pipetting steps and shortens the workflow. When used in conjunction with the SEQuoia Dual Indexed Primers and the post-library SEQuoia RiboDepletion Kit, the SEQuoia workflow can greatly reduce the total cost of library preparation without compromising data integrity or quality.

SeqSense NGS Data Analysis Software is a hosted bioinformatics pipeline uniquely optimized for mapping, aligning, counting, and normalizing reads generated from SEQuoia RNA-Seq libraries. Perform secondary analysis, determine the quality of the sequencing dataset, and generate output files ready for tertiary analysis. Analysis toolkits are also available as downloadable docker containers for deployment on local infrastructure.

Explore More with the SEQuoia Workflow

Library Preparation

SEQuoia Complete Stranded RNA Library Prep Kit Purification and cleanup PCR amplification SPRI cleanup Fragmentation Polyadenylation Continuous synthesis reaction <4 hr SEQuoia Express Stranded RNA Library Prep Kit Continuous synthesis reaction SPRI cleanup PCR amplification SPRI cleanup Fragmentation <3hr Ribodepletion SEQuoia RiboDepletion Kit Bead-mediated capture Library amplification Probe hybridization and elongation Sequencing-ready library

<2hr



Table 1. SEQuoia Product Selection.

	SEQuoia Complete Stranded RNA Library Prep Kit	SEQuoia Express Stranded RNA Library Prep Kit	SEQuoia Dual Indexed Primers	SEQuoia RiboDepletion Kit
Capture range	All RNA subtypes >20 bp	Long RNA fragments >200 bp	Unique dual indexed primer set	Post-library depletion kit
Input range	100 pg-1 μg	1 ng–1 μg	optimized for performance with	compatible with most RNA-
Sample type	All sample types, including low-quality formalin-fixed paraffinembedded (FFPE) samples	Standard good-quality sample	SEQuoia Complete and SEQuoia Express Library Prep Kits	Seq libraries, including those constructed using the SEQuoia Complete and SEQuoia Express
Sequencing read	Single-read	Paired-end		Library Prep Kits
Protocol time	4 hr	3 hr		

SEQuoia Complete Stranded RNA Library Prep Kit



A high-performance RNA-Seq library prep kit that efficiently captures all RNA subtypes in a single library, even from limited and low-quality samples.

- Ideal for limited or degraded RNA
- Validated with FFPE and other low-quality samples
- Streamlined protocol (<4 hr)
- Integrated with SeqSense NGS Data Analysis Software, a bioinformatics solution
- Compatible with all Illumina® sequencing platforms

SEQuoia Express Stranded RNA Library Prep Kit



A 3-tube, 3-hr library preparation solution that efficiently captures mRNA and long noncoding RNA fragments.

- Efficient and unbiased capture of mRNA and long noncoding long steps
- Integrated bioinformatics solution

SEQuoia Dual Indexed Primers



High-quality, unique dual indexed (UDI) primer pairs designed for use with the SEQuoia Complete Stranded RNA Library Prep Kit.

- Balanced for optimal multiplexed sequencing results
- Available in 12-UDI or 96-UDI configuration

SEQuoia RiboDepletion Kit



A stand-alone, post-library prep ribosomal RNA depletion kit that minimizes the number of library constructs mapping to ribosomal RNA while retaining more of the transcriptome.

- Efficient removal of RNA-Seq library fragments derived from ribosomal RNA
- Ideal for limited or degraded RNA samples
- Compatible with most RNA library prep kits for use on Illumina sequencing platforms
- Flexible protocol enables depletion of multiple libraries in a single reaction

Ordering Information

Catalog #	Description
17005726	SEQuoia Complete Stranded RNA Library Prep Kit, 24 reactions
17005710	SEQuoia Complete Stranded RNA Library Prep Kit, 96 reactions
12017297	SEQuoia Express Stranded RNA Library Prep Kit, 24 reactions
12017265	SEQuoia Express Stranded RNA Library Prep Kit, 96 reactions
12011928	SEQuoia Dual Indexed Primers Set, 12 vials of unique dual indexed primers, 96 reactions
12011930	SEQuoia Dual Indexed Primers Plate, 96-well plate of unique dual indexed primers, 96 reactions
17006487	SEQuoia RiboDepletion Kit, 24 reactions

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

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