

Sequencing-Ready DNA Libraries from 1 ng – 1 µg of DNA in 2 Hours

## NEXTflex® RAPID DNA-SEQ KIT

- Flexible amounts of input DNA from 1 ng to 1 µg
- Fast workflow requiring 2 hours, with minimal hands-on time
- Enhanced Adapter Ligation Technology offers a larger number of unique sequencing reads
- Creates libraries with less bias than alternative methods
- Automation-friendly workflow is compatible with liquid handlers
- Flexible barcode options – Up to 384 samples can be multiplexed
- Compatible with Illumina® sequencing platforms
- Prepare single, paired-end and multiplexed genomic DNA libraries
- Bulk pricing available to meet research goals

Bioo Scientific's NEXTflex® Rapid DNA-Seq Kit allows researchers to build sequencing-ready libraries for sequencing on Illumina® sequencing platforms from as little as 1 ng of DNA in two hours. This kit is ideal for use with genomic DNA, FFPE samples, ChIP DNA and low input clinical samples. The NEXTflex Rapid DNA-Seq Kit is highly flexible in terms of sample requirements, accommodating a 3-log range of input DNA amounts from 1 ng to 1 µg. A bead-based, gel-free size selection protocol eliminates the need for agarose gels in size selection, and the availability of up to 384 unique single-index adapter barcodes facilitates high-throughput applications. The NEXTflex Rapid DNA-Seq Kit incorporates "Enhanced Adapter Ligation Technology", which facilitates ligation of long adapters, resulting in longer and more diverse sequencing reads. Bioo Scientific's NEXTflex® Ligation and Polymerase reaction mixes ensure the highest quality libraries for superior performance.

### NEXTflex® Rapid DNA-Seq Kit Bundles

To simplify your DNA sequencing Bioo Scientific now offers affordable bundles containing NEXTflex Rapid DNA-Seq library prep reagents and NEXTflex® DNA Barcodes. There are two different versions of this kit. They each contain the 48 rxn NEXTflex Rapid DNA-Seq Kit and 24 unique NEXTflex DNA Barcodes (in aliquots of 2 reactions each).

### Flexible Multiplexing Options

The NEXTflex® Adapters are long, annealed adapters containing indexed sequences that offer an improved multiplexing workflow and flexible setup. These barcodes can be used with single, paired-end and multiplex reads. The NEXTflex Rapid DNA-Seq Kit is designed to be used with the NEXTflex DNA Barcodes, NEXTflex-96™ DNA Barcodes, NEXTflex-HT™ Barcodes and NEXTflex® Dual-Indexed Barcodes for 10 ng or more of starting material or the NEXTflex® ChIP-Seq Barcodes and NEXTflex-96™ ChIP-Seq Barcodes for less than 10 ng of starting material.



Figure 1. Simplified NEXTflex Rapid DNA-Seq Workflow

## Automation Compatibility

The NEXTflex Rapid DNA-Seq Library Prep Kit was designed for easy migration onto automated liquid handling platforms. Currently methods are available for the following platforms: PerkinElmer® Sciclone® NGS/NGSx Workstation and the Beckman Coulter® Biomek® FX and Biomek® FXP Laboratory Automation Workstations.

## Whitepaper: Optimizing Library Preparation: Enhanced Adapter Ligation Technology

Read the entire whitepaper as it pertains to the NEXTflex Rapid DNA-Seq Kit at <http://www.bioscientific.com/Whitepapers>.

## Publications that Cite Using the NEXTflex Rapid DNA-Seq Kit

Campbell, M. A., et al. (2015) Genome expansion via lineage splitting and genome reduction in the cicada endosymbiont *Hodgkinia*. PNAS. doi: 10.1073/pnas.1421386112.

Gal, C. et. al. (2015) The impact of the HIRA histone chaperone upon global nucleosome architecture. *Cell Cycle*. 14:1, 123-134. doi:10.4161/15384101.2014.967123.

Laver, T., Harrison, J., O'Neill, P. A., Moore, K., Farbos, A., Paszkiewicz, K. and Studholme, D. J. (2015) Assessing the performance of the Oxford Nanopore Technologies MinION. *Biomolecular Detection and Quantification* 3 (2015) 1–8. doi :10.1016/j.bdq.2015.02.001.

Cat #	Product	Quantity
NOVA-5144-01	NEXTflex® Rapid DNA-Seq Kit	8 rxns
NOVA-5144-02	NEXTflex® Rapid DNA-Seq Kit	48 rxns
NOVA-5144-03	NEXTflex® Rapid DNA-Seq Bundle - Barcodes 1-24	48 rxns
NOVA-5144-04	NEXTflex® Rapid DNA-Seq Bundle - Barcodes 25-48	48 rxns
NOVA-514101	NEXTflex® DNA Barcodes - 6	48 rxns
NOVA-514102	NEXTflex® DNA Barcodes - 12	96 rxns
NOVA-514103	NEXTflex® DNA Barcodes - 24	192 rxns
NOVA-514104	NEXTflex® DNA Barcodes - 48	384 rxns
NOVA-514105	NEXTflex-96™ DNA Barcodes - 96	768 rxns
NOVA-514160	NEXTflex® Dual-Indexed DNA Barcodes (1-96)	768 rxns
NOVA-514161	NEXTflex® Dual-Indexed DNA Barcodes (97-192)	768 rxns
NOVA-514120	NEXTflex® ChIP-Seq Barcodes - 6	48 rxns
NOVA-514121	NEXTflex® ChIP-Seq Barcodes - 12	96 rxns
NOVA-514122	NEXTflex® ChIP-Seq Barcodes - 24	192 rxns
NOVA-514123	NEXTflex® ChIP-Seq Barcodes - 48	384 rxns
NOVA-514124	NEXTflex-96™ ChIP-Seq Barcodes - 96	768 rxns
NOVA-514170	NEXTflex-HT™ Barcodes (in tubes) - 6	48 rxns
NOVA-514174	NEXTflex-HT™ Barcodes 1-96 (in plates)	192 rxns
NOVA-514175	NEXTflex-HT™ Barcodes 97-192 (in plates)	192 rxns
NOVA-514176	NEXTflex-HT™ Barcodes 193-288 (in plates)	192 rxns
NOVA-514177	NEXTflex-HT™ Barcodes 289-384 (in plates)	192 rxns



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