

# NEXTFLEX® RAPID XP DNA-SEQ KIT

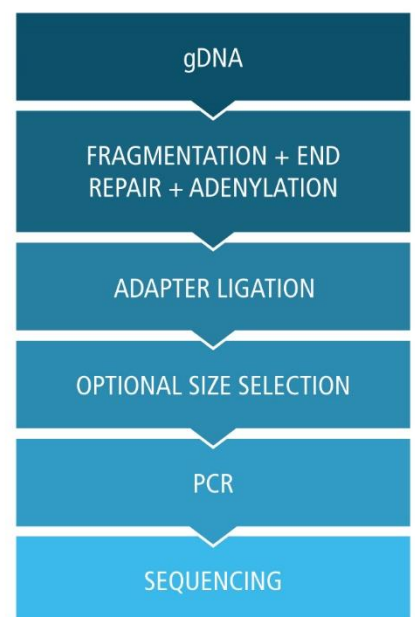
DNA-SEQ · RNA-SEQ · BARCODES · METAGENOMICS · AMPLICON PANELS · TARGET CAPTURE · EPIGENETICS · SMALL RNA-SEQ

## Get Xtra Performance out of Your Library Preparation

The NEXTFLEX® Rapid XP DNA-Seq kit produces libraries for Illumina® sequencing with high yield, high coverage, low duplication rates, and low GC bias. The kit incorporates an enzymatic fragmentation step into a reproducible, streamlined, and single-tube protocol. This all-inclusive kit contains the fragmentation enzyme, library preparation reagents, and cleanup/size selection beads that have been optimized to ensure reliable performance. The NEXTFLEX® Rapid XP DNA-Seq library prep kit is compatible with your NEXTFLEX® barcodes of choice, providing a flexible solution. All NEXTFLEX® barcodes are color-balanced and have undergone proprietary purity QC metrics to give you reliable sequencing results.

### KEY FEATURES

- **Reliable:** Consistent yields and high-quality sequencing metrics
- **Convenient:** Kit includes fragmentation enzyme and cleanup/size selection beads
- **Streamlined:** Single step for fragmentation, end-repair, and adenylation
- **Flexible:** Chemistry optimized with NEXTFLEX® color-balanced barcodes that allow a wide range of multiplexing (2 up to 384 samples in one run)
- **Efficient:** Automated on the PerkinElmer® Sciclone® and Zephyr® NGS workstations



NEXTFLEX® Rapid XP DNA-Seq kit workflow.

For research use only. Not for use in diagnostic procedures.

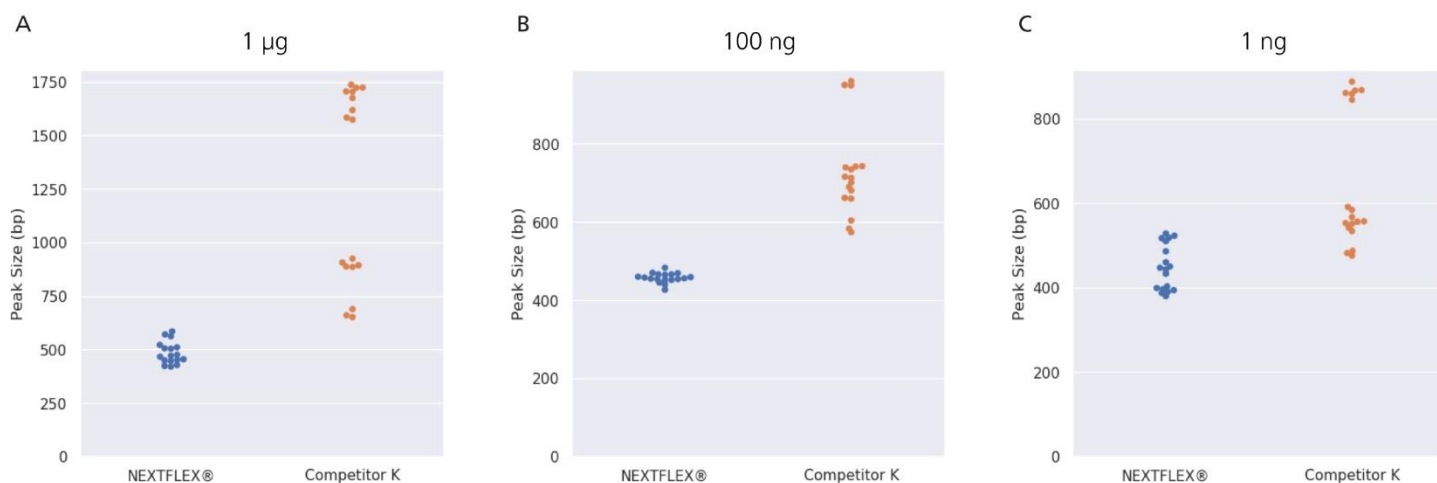
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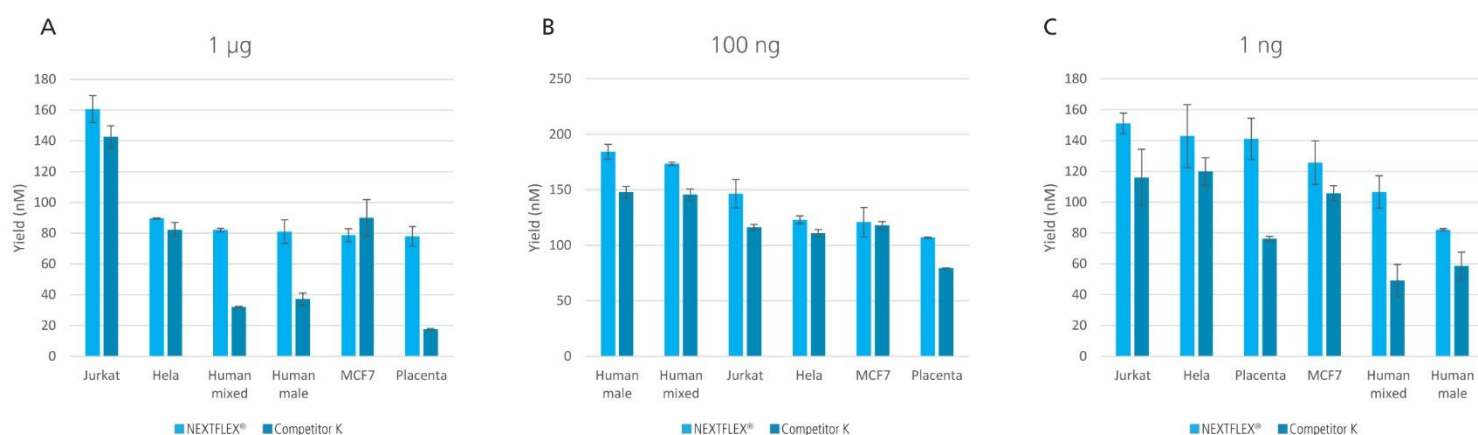
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**Figure 1. Reliable performance of NEXTFLEX® Rapid XP DNA-seq fragmentation enzyme.** DNA is fragmented more evenly and into smaller sizes using the NEXTFLEX® Rapid XP DNA-seq kit than Competitor K's kit. Each dot indicates each library peak size. **(A)** Libraries were prepared from 1 µg of DNA with 7 minutes of fragmentation with 2 PCR cycles: NEXTFLEX® Rapid XP DNA-seq kit ( $484 \pm 52$  bp, 11 %, n=17), Competitor K's kit ( $1266 \pm 451$  bp, 36 %, n=17). **(B)** Libraries were prepared from 100 ng of DNA with 8 minutes of fragmentation with 5 PCR cycles: NEXTFLEX® Rapid XP DNA-seq kit ( $457 \pm 12$  bp, 3 %, n=18), Competitor K's kit ( $730 \pm 119$  bp, 16 %, n=17). **(C)** Libraries were prepared from 1 ng of DNA with 15 minutes of fragmentation with 12 PCR cycles: NEXTFLEX® Rapid XP DNA-seq kit ( $448 \pm 54$  bp, 12 %, n=17), Competitor K's kit ( $628 \pm 160$  bp, 25 %, n=17). All different input libraries were generated from 6 different commercially available DNA samples. (mean  $\pm$  standard deviation, coefficient of variation)



**Figure 2. High yield obtained for libraries prepared using the NEXTFLEX® Rapid XP DNA-seq kit.** Libraries were prepared using both NEXTFLEX® Rapid XP DNA-seq kit and Competitor K's kit. **(A)** Libraries were prepared from 1 µg of DNA with 7 minutes of fragmentation with 2 PCR cycles. **(B)** Libraries were prepared from 100 ng of DNA with 8 minutes of fragmentation with 5 PCR cycles. **(C)** Libraries were prepared from 1 ng of DNA with 15 minutes of fragmentation with 12 PCR cycles.

## ORDERING INFORMATION

| Catalog #    | Kit Name                       | Quantity |
|--------------|--------------------------------|----------|
| NOVA-5149-02 | NEXTFLEX® Rapid XP DNA-Seq Kit | 48 rxn   |

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