

# AMPINEXT™ High-Sensitivity DNA Library Preparation Kit (Illumina)

**A complete set of optimized reagents to prepare a DNA library from very small amount of samples for use in next-generation sequencing applications.**

The AMPINEXT™ High-Sensitivity DNA Library Preparation Kit (Illumina) is a complete set of optimized reagents to prepare a DNA library from very small amount of samples for use in next-generation sequencing applications. This kit is suitable for preparing a DNA library using sub-nanogram amounts of DNA input for next generation sequencing applications using an Illumina sequencer. These applications include genomic DNA-seq, ChIP-seq, MeDIP/hMeDIP-seq, traditional bisulfite-seq, and targeted re-sequencing. The optimized protocol and components of the kit allow both non-barcoded (singleplexed) and barcoded (multiplexed) DNA libraries to be constructed quickly with reduced bias.

## Ordering Information

[Order Online »](#)

ENZ-GEN505-0012	12Reactions
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## Manuals, SDS & CofA

[View Online »](#)

- **High sensitivity and flexibility** - Use with non-barcoded (singleplexed) and barcoded (multiplexed) DNA library preparation.
- **Fast and streamlined procedure** - No clean-up is required between each step and all reactions take place in the same tube.
- **Highly convenient** - The kit contains all required components for each step of DNA library preparation,
- **Minimized bias** - Ultra HiFi amplification and optional PCR-free step.

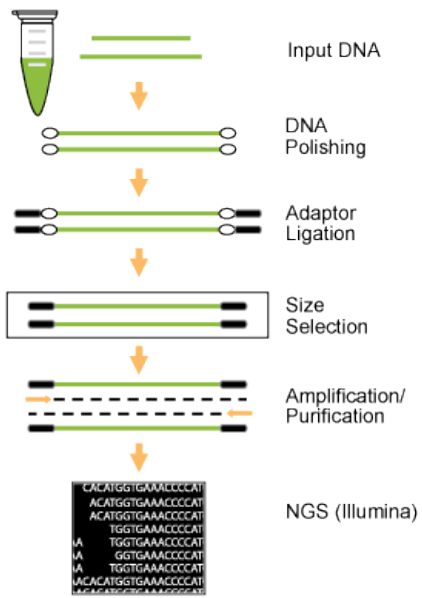


Figure 1. Schematic Procedure for using the AMPINEXT High-Sensitivity DNA Library Preparation Kit

# Handling & Storage

**Use/Stability** Upon receipt: Store the following components at -20°C immediately: 10X End Polishing Buffer, End Polishing Enzyme Mix, End Polishing Enhancer, 2X Ligation Buffer, T4 DNA Ligase, Adaptors, 2X HiFi PCR Master Mix, Primer U, Primer I, and Elution Buffer. Store the following components at 4°C: MQ Binding Beads. Store all other components at room temperature. □

**Shipping** Blue Ice

**Regulatory Status** RUO - Research Use Only

## Product Details

**Application Notes** A complete set of optimized reagents to prepare a DNA library from very small amount of samples for use in next-generation sequencing applications.

**Assay Time** 1 hour 30 minutes

**Contents**

- 10X End Polishing Buffer
- End Polishing Enzyme Mix
- End Polishing Enhancer
- 2X Ligation Buffer
- T4 DNA Ligase
- Adaptors (50 µM)
- MQ Binding Beads
- 2X HiFi PCR Master Mix
- Primer U (10 µM)
- Primer I (10 µM)
- Elution Buffer

**Technical Info / Product Notes** Starting materials can include fragmented dsDNA isolated from various tissue or cell samples, dsDNA enriched from a ChIP reaction, MeDIP/hMeDIP reaction, or exon capture. DNA should be relatively free of RNA because large fractions of RNA will impair end repair and dA-tailing, resulting in reduced ligation capabilities. The input amount of DNA can be from 0.2 ng to 100 ng. For optimal preparation, the input amount should be 10 ng to 50 ng.

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