

# Twist NGS Library Preparation Kits

High-quality sequencing libraries from low-quality samples

## KEY BENEFITS

### Accommodate Either Enzymatic or Mechanical Fragmentation

- Use enzymatic fragmentation for automated, high-throughput gDNA library construction
- Use mechanical fragmentation for DNA input of varying types and quality

### Accommodate Either Whole Genome Sequencing or Targeted Enrichment

- Use with either Twist full-length CD adapters for PCR-free library preparation
- Use with the Twist Universal Adapter (UDI) System for maximum yield

### Streamline Your Workflow

- Optimized for use in the Twist Targeted NGS workflow
- Flexible DNA sample input from 1 ng – 1 µg (enzymatic)
- Convert DNA samples into robust, amplified libraries in under 2.5 hours
- Combine library preparation steps into a single reaction for improved efficiency and consistent results

Twist Library Preparation Kits streamline the construction of high-quality DNA libraries for next-generation sequencing (NGS) applications. Two configurations accommodate either enzymatic or mechanical DNA fragmentation, and both are optimized to facilitate library preparation for whole genome sequencing and targeted enrichment. The kits combine library preparation steps into a single reaction for improved efficiency and consistent results.

**Twist Library Preparation EF Kit (Enzymatic Fragmentation)** incorporates the reagents and enzymes needed for DNA fragmentation with those for end repair, dA-tailing, and adapter ligation into a single reaction.

- Ideal for automated, high-throughput library preparation
- Produces tunable, reproducible fragment sizes
- Minimizes sequence bias, maximizes coverage depth

**Twist Library Preparation Kit (Mechanical Fragmentation)** is designed for use with gDNA that has already been sheared mechanically. It combines the enzymes and reagents for end repair, dA-tailing, and adapter ligation into a single reaction.

- Accommodates a wide range of DNA input types
- Enables high-quality sequencing of low-quality samples
- Minimizes start / stop site artifacts

## LIBRARY PREPARATION



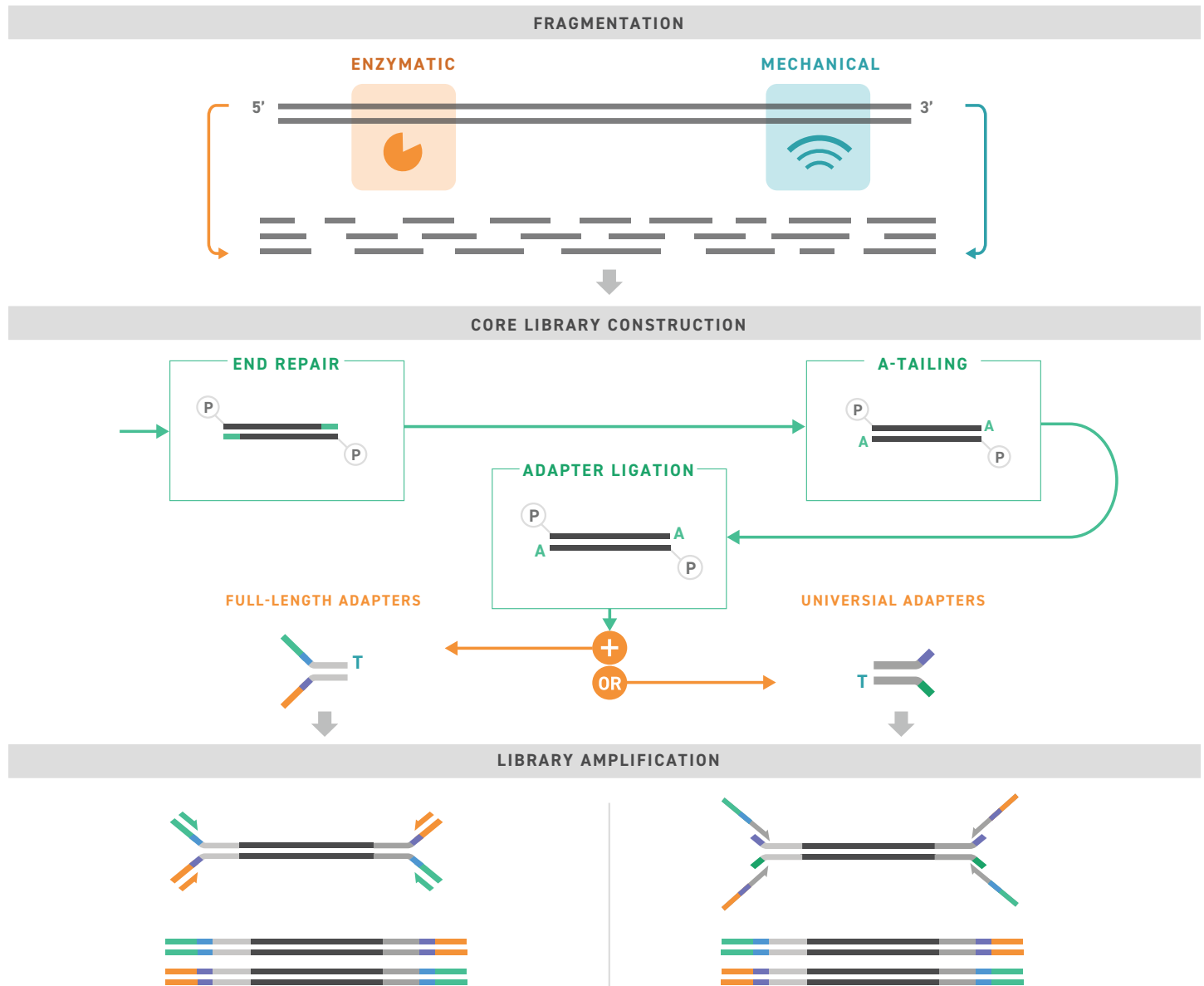
### TARGETED SEQUENCING



### WHOLE GENOME SEQUENCING (ENZYMATIC)



Overview of workflow application options: Based on your application needs, create sequencing ready libraries in as little as two hours.



**Overview of the library preparation workflow.** Both Twist Library Preparation Kits include the reagents required for end repair, dA-tailing, adapter ligation and library amplification. The Enzymatic Fragmentation Kit also incorporates the enzymes for fragmentation of gDNA samples. Following core library construction, either full length or universal adapters can be used to suit your application needs.

Twist Library Preparation Kits are components of the Twist portfolio of products for NGS Target Enrichment. Learn more at [twistbioscience.com/ngs](https://www.twistbioscience.com/ngs).

Contact Twist Bioscience at [sales@twistbioscience.com](mailto:sales@twistbioscience.com) for more information.

### ORDERING INFORMATION

- 104174:** Twist Library Preparation EF Kit with Amp Mix, 16 samples
- 104175:** Twist Library Preparation EF Kit with Amp Mix, 96 samples  
*Reagents, enzymes, and purification beads required for enzymatic fragmentation of gDNA, library construction and library amplification.*
- 104176:** Twist Library Preparation Kit with Amp Mix, Mechanical Fragmentation, 16 Samples
- 104177:** Twist Library Preparation Kit with Amp Mix, Mechanical Fragmentation, 96 Samples  
*Reagents, enzymes, and purification beads required for the library construction and amplification of mechanically fragmented gDNA.*