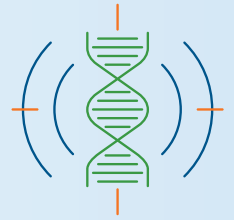


Library Prep Kit for myBaits[®]

Robust library prep for targeted sequencing



End-to-end workflow with myBaits hybridization capture

The new Library Prep Kit uses enzymatic fragmentation to generate high-complexity libraries ready for hybridization capture. Available in two sizes (32 or 128 reactions) that enable pooling multiple libraries in each myBaits hybridization capture reaction if desired, the Library Prep Kit is your seamless start to generating high-quality targeted sequencing data from double-stranded DNA (dsDNA) samples.

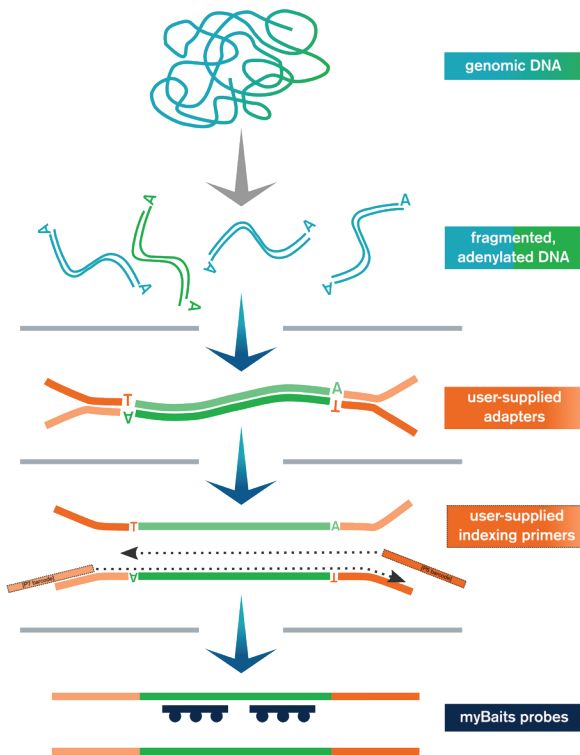


Figure 1. Genomic or dsDNA is enzymatically fragmented, end-polished, and adenylated. User-supplied adapters are ligated to the end-repaired fragments. Ligation products are purified and then amplified using user-supplied or kit-supplied primers. Libraries are purified again, assayed for quantity and morphology, and taken into user's myBaits capture kit of choice.

Compatible with a wide range of input DNA qualities

Generating a comprehensive, representative NGS library is the critical first step for any successful hybridization capture project. With the Library Prep Kit for myBaits, you can use the same kit even for low input, sensitive, and/or degraded DNA samples. And with tunable fragmentation times, you control library size while avoiding time-consuming, costly sonication-based shearing.

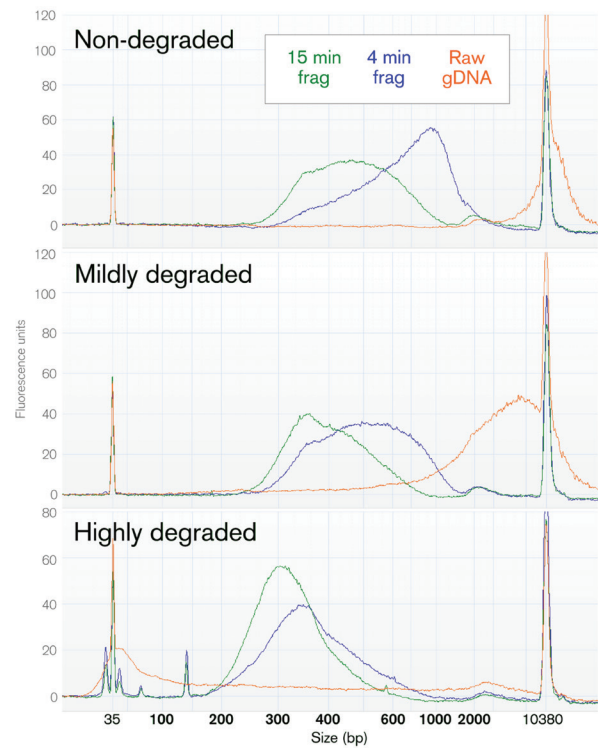


Figure 2. Example library morphologies following amplification. Three different genomic DNA samples (top, high-molecular weight [HMW]; middle, degraded; bottom, highly degraded) are shown in orange, with post-amplification traces for corresponding libraries in green (15 min fragmentation) and blue (4 min).

Specifications

Input DNA quantity	1–500 ng
Input DNA quantity	High-molecular weight or degraded double-stranded DNA
Shearing	Enzymatic
Adapter ligation	Sticky-end (A/T-overhang based)
Compatible adapters / barcoding	User-preferred double-stranded adapters with T-overhang (full-length barcoded adapters, or Y-shaped/stubby adapters and indexing primers)
Post-ligation PCR	Yes
Intended use	Preparation of NGS libraries from dsDNA, prior to myBaits hybridization capture

Applications

- DNA samples for targeted sequencing
 - Human, plant, animal, fungus, virus, or bacteria samples
 - FFPE or cfDNA samples
 - Degraded, museum, herbarium, or historical samples
- Hybridization capture or target enrichment
- Targeted gene or exon sequencing
- Viral, bacterial, or microbial genome sequencing
- Metagenomic or microbiome targeted sequencing
- 16S or AMR capture sequencing
- Whole exome sequencing (WES)
- Phylogenetics or evolutionary biology
- Genotyping and population genetics

Ordering information

Catalog #	Description
910032	Library preparation kit for myBaits, 32 samples
910128	Library preparation kit for myBaits, 128 samples