

KAPA EvoPrep Boost Kit

Streamline your workflow, boost your performance from mechanically fragmented DNA and cfDNA

Achieve enhanced NGS sample prep performance and confidence, even with difficult cfDNA and FFPE DNA inputs, with **KAPA EvoPrep Boost Kit**. This streamlined, automation-friendly workflow for NGS library prep of mechanically or naturally fragmented DNA includes an optimized amplification mix to ensure high-quality results for WGS, WES, and targeted sequencing applications.

- **Increase efficiency and convenience** with all-in-one enzyme & buffer ReadyMixes—available in either automation-friendly reagent plates or tubes
- **Maximize sequencing efficiency** by ensuring high uniformity and fewer dropouts in difficult regions with an optimized low-bias PCR mix (KAPA EvoAmp ReadyMix)
- **Cover regions of interest with depth and accuracy** in target enrichment workflows



2.3 hrs
Workflow Time

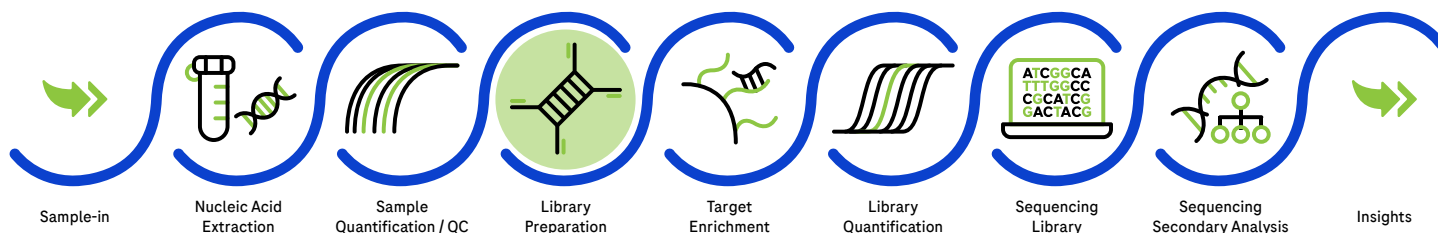


30 min
Hands-on Time



0.1-500 ng
Input Amount

Constantly evolving, efficient, and complete solutions

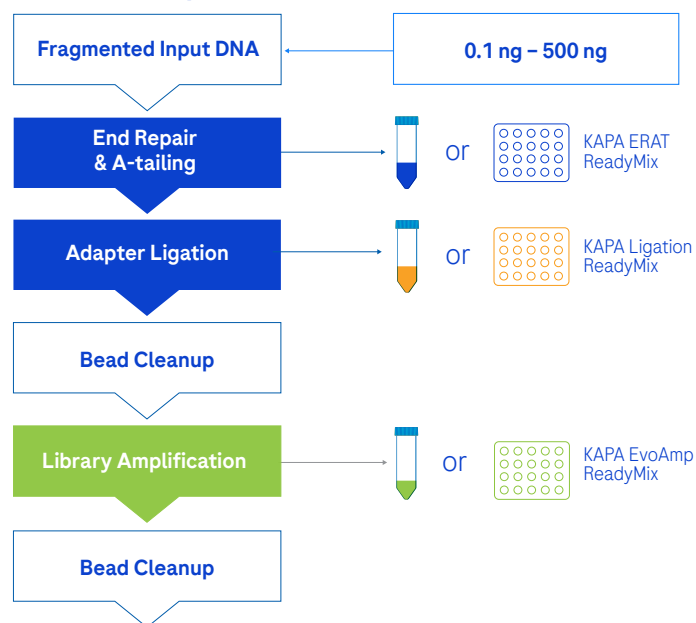


Increase efficiency and convenience

- Analyze a greater variety of samples with a wide range of DNA inputs (0.1 ng-500 ng)
- Reduce hands-on-time and the number of reagent tubes with ReadyMix formulations, available in tubes or automation-friendly plates
- Shorten workflow time without compromising results with a 5-minute ligation time

Figure 1: Streamline DNA library prep from 0.1-500 ng of input DNA with KAPA Evo Prep Boost Kits' ready-to-use master mixes. Avoid reagent preparation with master mixes available in tubes or pre-plated.

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Maximize sequencing efficiency

- Increase data confidence with reduced artifact rate
- Minimize coverage bias for highly uniform results and more cost-effective sequencing

A. Coverage uniformity

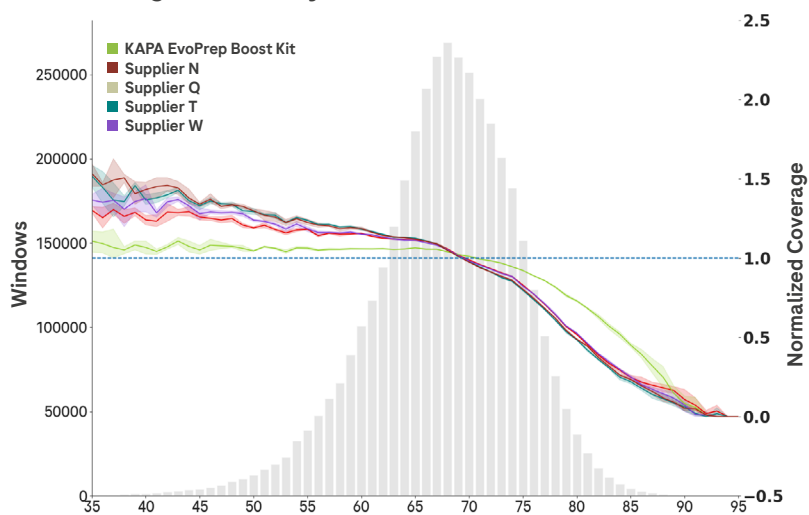
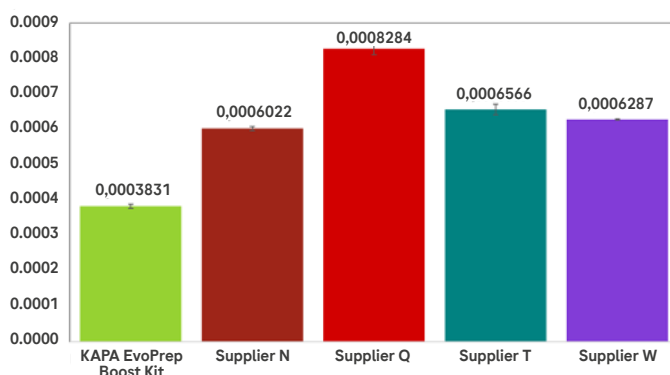
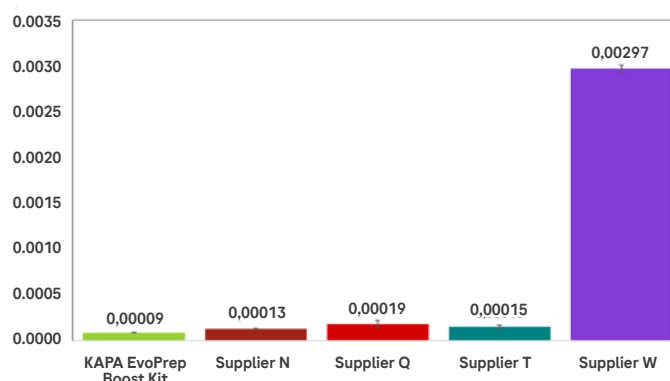


Figure 2. KAPA EvoPrep Boost Kits deliver low-bias amplification, exceptional accuracy, and minimal artifacts for superior sequencing quality. Whole genome sequencing libraries were prepared using 0.1 ng of DNA (*B. pertussis*) with the KAPA EvoPrep Boost Kit, Supplier N, Supplier Q, Supplier T and Supplier W, following each supplier's instructions for use. (A) Lower amplification bias with the KAPA EvoPrep Boost Kits, resulting in more uniform coverage across the *B. pertussis* genome. Best balance of highest sequencing economy and result confidence observed with the KAPA EvoPrep Boost Kits by (B) lowest error rate and (C) ultra-low artifact rate compared to other suppliers.

B. Error rate



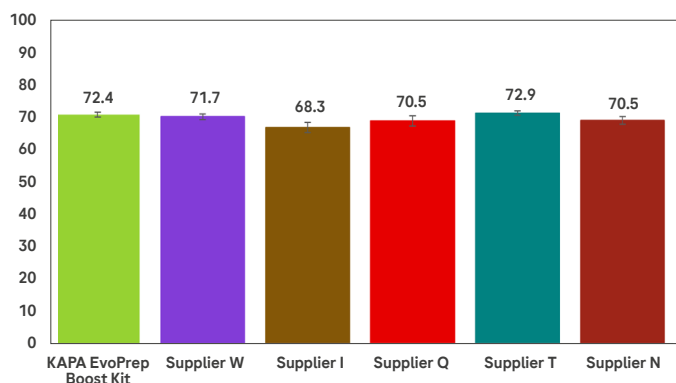
C. Artifact rate



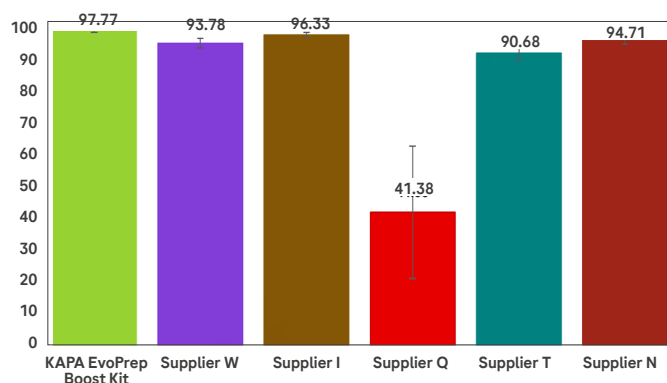
Cover regions of interest with depth and accuracy

- Achieve high specificity and broadest target coverage at high sequencing depths
- Read deeper by recovering more unique molecules

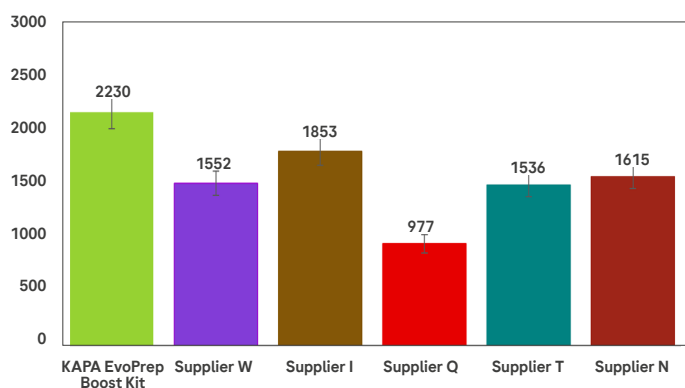
Specificity by % reads on-target



% Target bases covered at 1000X



Unique depth barcode deduplicated



Genome equivalent recovery rate (%)

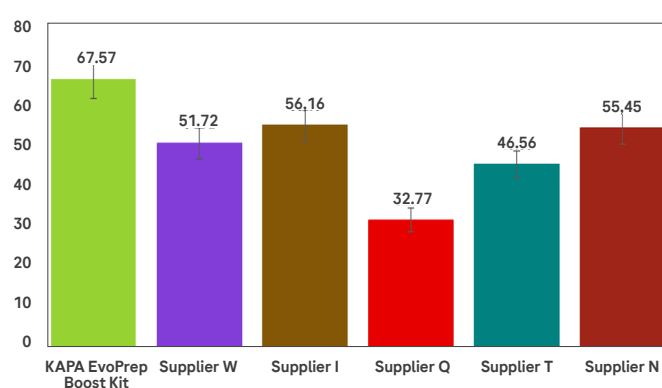


Figure 3: Improved sequencing performance in target capture workflow utilizing cfDNA. 10 ng of cfDNA was used to prepare triplicate libraries with the KAPA EvoPrep Boost Kit or Supplier I, Supplier N, Supplier Q, Supplier T and Supplier W, following each supplier's instructions for use. Libraries were enriched with the KAPA HyperCap Oncology Panel (214 Kb), following the KAPA HyperCap cfDNA Evolved workflow instructions¹. The KAPA EvoPrep Boost Kit had the highest percentage of target coverage at $\geq 1000X$ compared to other suppliers and the highest unique depth compared to other suppliers, thereby showcasing the utilization of sequencing throughput by higher uniformity; as well as highest genome equivalent recovery rate compared to Supplier I, Supplier N, Supplier Q, Supplier T and Supplier W, resulting in higher data confidence².

1. KAPA EvoPrep Boost Kit data generated in 2025, separate from other supplier data generated in 2024.

2. McNulty, et al. (2020). Impact of reducing DNA input on next-generation sequencing library complexity and variant detection. *The Journal of Molecular Diagnostics*, Volume 22, Issue 5, May 2020, Pages 720-727.

Ordering Information

Roche Cat. No	Description	Kit size	Format
10613653001	KAPA EvoPrep Boost (24rxn)*	24 reactions	Tube
10613661001	KAPA EvoPrep Boost (96rxn)*	96 reactions	Tube/Bottle
10613670001	KAPA EvoPrep Boost (384rxn)*	384 reactions	Bottle
10613688001	KAPA EvoPrep Boost, plated format (96rxn)*	96 reactions	Plate
07958994001	KAPA Library Amplification Primer Mix (250rxn)	250 reactions	Tube
09420410001	KAPA Library Amplification Primer Mix (384 rxn)	384 reactions	Tube
09420479001	KAPA Library Amplification Primer Mix 96-well plate (96rxn)	96 reactions	Plate

*KAPA full-length UDI adapters are only available in 96-well plates. KAPA Universal Adapters, which are used in combination with KAPA UDI Primer Mixes and require amplification, are available in tube format. KAPA HyperPure Beads, UDI Adapter Kits & KAPA Library Amplification Primer Mix (10X) are sold separately.

Contact your local representative to request an evaluation.



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