

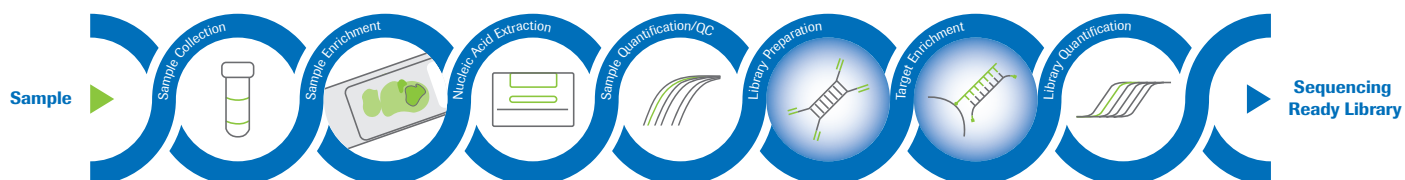
# KAPA HyperPure Beads

Attract what matters



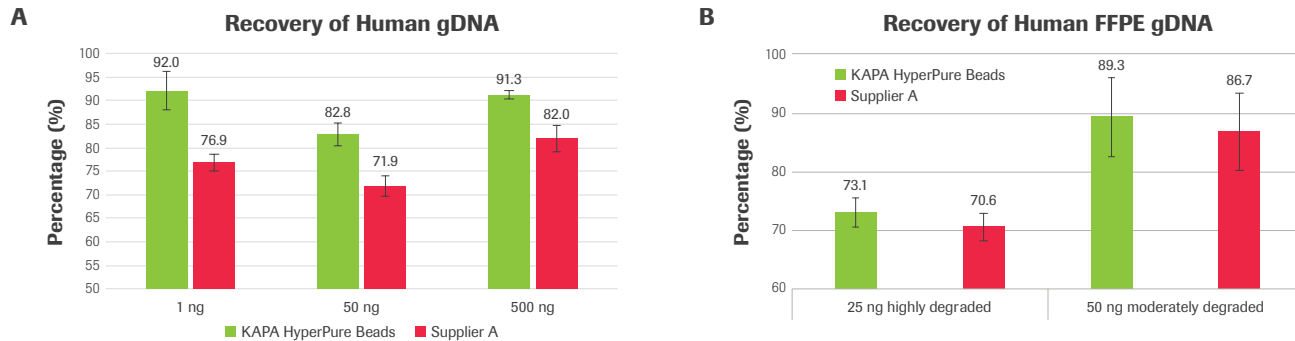
As a part of the dynamic Roche Sample Prep Solutions portfolio, **KAPA HyperPure Beads** offer a tunable and highly consistent solution for size selection and reaction purification in DNA library construction workflows for next-generation sequencing.

- Achieve high recovery of DNA across a wide range of input amounts and input quality
- Implement tunable size selection at multiple stages of DNA library construction
- Reduce sequencing costs and maximize library diversity with improved bead wash efficiency
- Remove undesirable reaction components with fast bead cleanup steps
- Choose from five pack sizes for workflow flexibility



## High DNA recovery

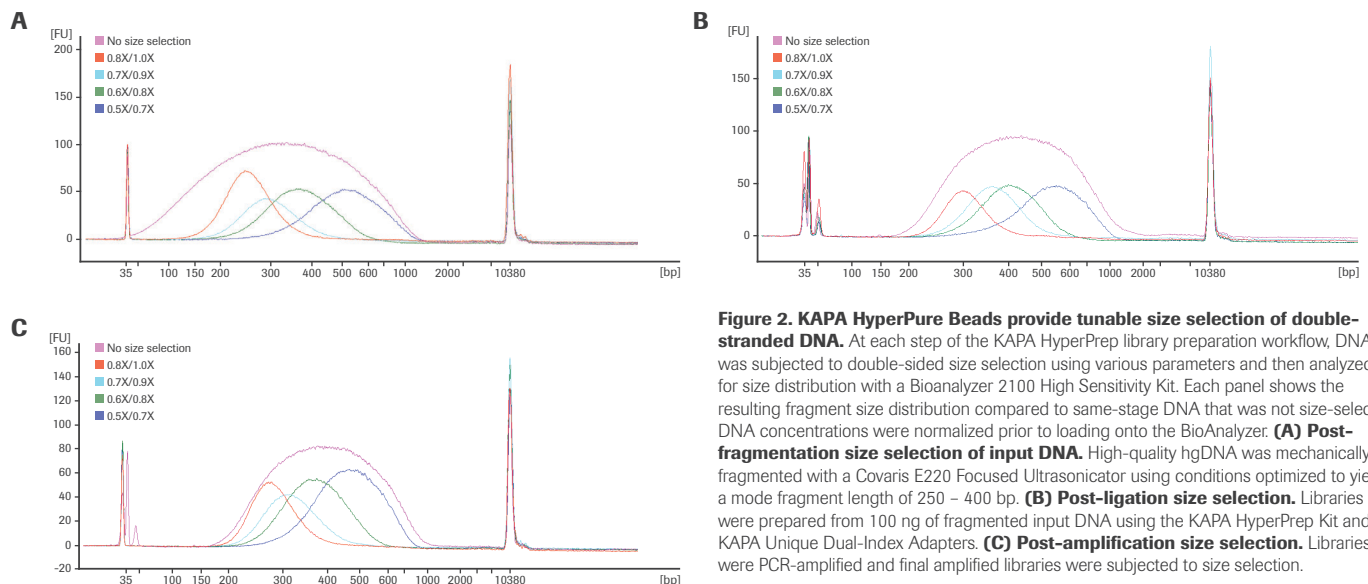
- Obtain high yields of unfragmented DNA prior to library construction compared to the market leader (Supplier A)
- Recover degraded DNA with efficiency comparable to Supplier A



**Figure 1. KAPA HyperPure Beads provide superior recovery performance to Supplier A in DNA workflows.** (A) Recovery of unfragmented human gDNA. (*n*=4) (B) Recovery of highly degraded and moderately degraded formalin-fixed paraffin-embedded (FFPE) human genomic DNA. Highly degraded DNA obtained from FFPE clinical research samples (*n*=12); moderately degraded DNA obtained from Horizon Reference FFPE DNA (*n*=9). For both (A) and (B), KAPA HyperPure Beads and Supplier A beads were used at a 3X ratio to clean up DNA inputs of various amounts. Recovery was measured using the Qubit Fluorometer 3 dsDNA HS Assay Kit before and after cleanup. Error bars represent standard deviation.

## Tunable, flexible size selection

- Perform size selection at multiple steps throughout DNA library preparation workflows
- Optimize insert fragment size to meet specific application needs



**Figure 2. KAPA HyperPure Beads provide tunable size selection of double-stranded DNA.** At each step of the KAPA HyperPrep library preparation workflow, DNA was subjected to double-sided size selection using various parameters and then analyzed for size distribution with a Bioanalyzer 2100 High Sensitivity Kit. Each panel shows the resulting fragment size distribution compared to same-stage DNA that was not size-selected. DNA concentrations were normalized prior to loading onto the BioAnalyzer. (A) **Post-fragmentation size selection of input DNA.** High-quality hgDNA was mechanically fragmented with a Covaris E220 Focused Ultrasonicator using conditions optimized to yield a mode fragment length of 250 – 400 bp. (B) **Post-ligation size selection.** Libraries were prepared from 100 ng of fragmented input DNA using the KAPA HyperPrep Kit and KAPA Unique Dual-Index Adapters. (C) **Post-amplification size selection.** Libraries were PCR-amplified and final amplified libraries were subjected to size selection.

### Ordering information for KAPA HyperPure Beads

Roche Cat. No.	KAPA Code	Description	Pack Size
08963835001	KK8007	KAPA HyperPure Beads	5 mL
08963843001	KK8008	KAPA HyperPure Beads	30 mL
08963851001	KK8009	KAPA HyperPure Beads	60 mL
08963878001	KK8011	KAPA HyperPure Beads	4 x 60 mL
08963860001	KK8010	KAPA HyperPure Beads	450 mL

Published by:

**Roche Sequencing and Life Science**  
9115 Hague Road  
Indianapolis, IN 46256

[sequencing.roche.com](http://sequencing.roche.com)

[go.roche.com/HyperPureBeads](http://go.roche.com/HyperPureBeads)