sparQ PureMag Beads

Fast, reliable nucleic acid purification & size selection for NGS workflows

FEATURES & BENEFITS:

- High recovery of DNA and RNA fragments greater than 100 bp
- Efficient removal of unwanted components from adapter ligation and PCR reactions
- Consistent single or double-sided size selection
- Seamless integration into existing NGS workflows with little or no protocol change
- Easy-to-use and compatible with manual processing or automated liquid handling robots
- Cost-effective alternative to AMPure® XP with equivalent performance

DESCRIPTION:

sparQ PureMag Beads is a fast and reliable nucleic acid purification system for reaction cleanup and size selection in Next Generation Sequencing (NGS) workflows. Based on the reversible nucleic acid-binding properties of magnetic beads, this product can be used to quickly remove primers, primer-dimers, unincorporated nucleotides, salts, adapters and adapter-dimers from NGS library prep reactions to improve downstream sequencing performance. sparQ PureMag Beads allows excellent recovery of fragments greater than 100 bp without centrifugation or filtration. Consistent and reliable size selection can be achieved by simply adjusting the beads to sample ratio. This product is designed for both manual and automated processing, allowing seamless integration into existing workflows.

Consistent and tunable size selection

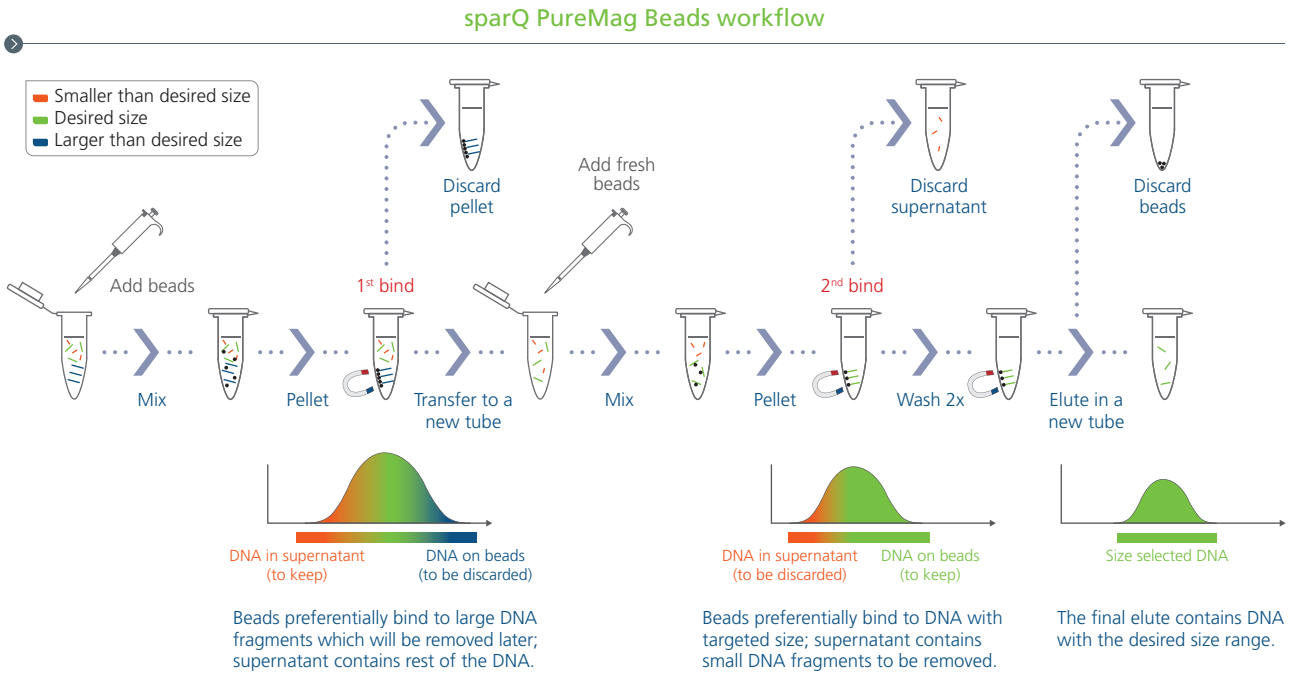
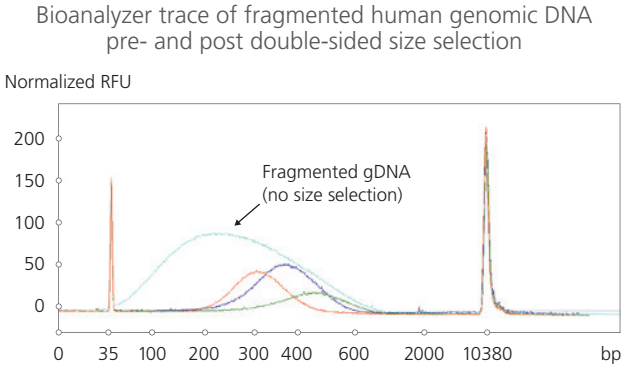


Figure 1 **Double-sided size selection is used to remove smaller and larger fragments from either side of the desired region.** The fragment size can be easily adjusted to suit the application by manipulating the sparQ PureMag Beads to DNA volumetric ratio.



sparQ PureMag Beads DNA ratio	Targeted size range (bp)	Peak average (bp)
0.7x, 0.9x	200–400	301
0.6x, 0.8x	250–500	377
0.5x, 0.7x	300–700	464

Figure 2 **Electropherogram of fragmented human genomic DNA pre- and post double-sided size selection.** Different sparQ PureMag Beads to DNA ratios were used to achieve various targeted size range.

Highly reproducible purification across a range of inputs

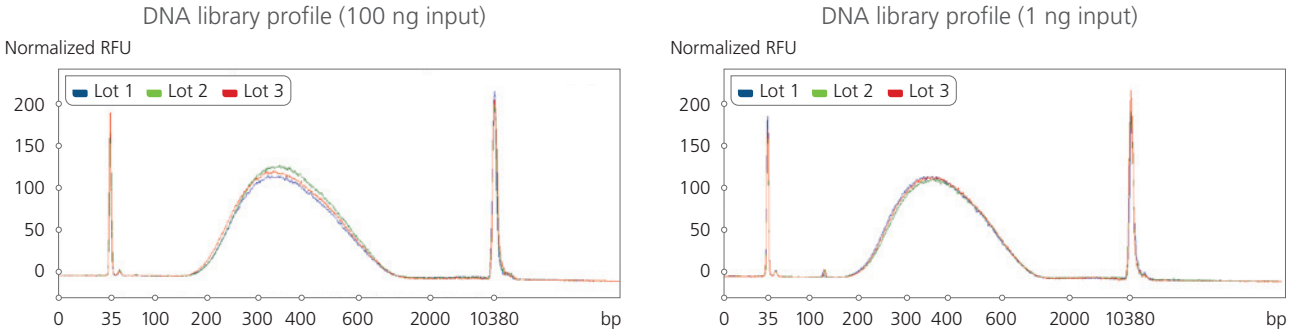


Figure 3 **Highly reproducible DNA library profiles were achieved using different lots of sparQ PureMag Beads and a broad range of input amount.** Libraries were prepared with sparQ DNA Library Prep Kit from 100 ng and 1 ng of fragmented microbial genomic DNA. sparQ PureMag Beads were used post adapter ligation and PCR amplification to effectively remove adapter-dimers and primer-dimers.

Efficient recovery of DNA equivalent to AMPure XP

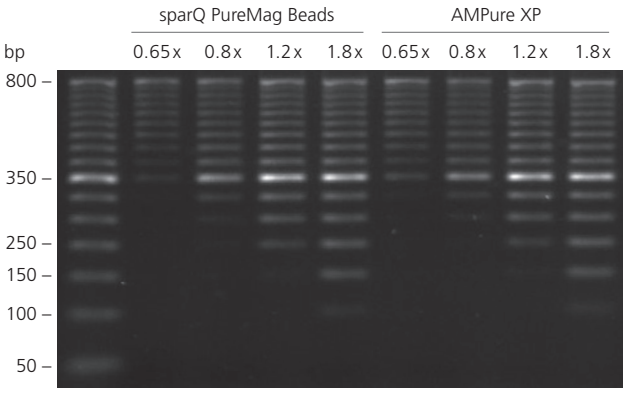


Figure 4 **sparQ PureMag Beads show equivalent performance to AMPure XP for DNA purification.** 50 bp DNA ladder was purified with sparQ PureMag Beads and AMPure XP at different beads to DNA ratios and analyzed on 2% agarose gel.

ORDER INFO

Product Name	Quantabio Catalog Number	Size
sparQ PureMag Beads - 5 ml	95196-005	5 ml
sparQ PureMag Beads - 60 ml	95196-060	60 ml
sparQ PureMag Beads - 450 ml	95196-450	450 ml

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