

MagMAX Pure Bind beads Magnetic bead solution for DNA cleanup and size selection for NGS workflows

Applied Biosystems[™] MagMAX[™] Pure Bind beads offer an alternative solution for high-performing DNA cleanup and size selection for next-generation sequencing (NGS) library preparation and PCR applications. This technology allows you to maintain high-quality results with both cost and energy savings. MagMAX Pure Bind beads are compatible with both manual and automated protocols and were manufactured to provide a plug-and-play replacement to prevent disruption to established workflows.

Pair MagMAX Pure Bind beads with automated Thermo Scientific[™] KingFisher[™] Purification Systems for reduced hands-on time and high-throughput cleanup. Save energy with ambient temperature storage, and reduce wait time by eliminating the need to bring your beads to room temperature prior to use. Discover how MagMAX Pure Bind beads compare to beads from the leading bead supplier in the market and allow you to save without compromising on performance (Figures 1-4).

Seamless integration Performance equal to that of gold-standard magnetic beads

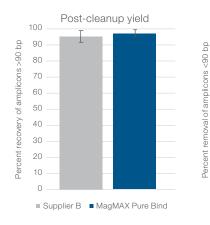








High-performing DNA cleanup



Efficient removal of unwanted fragments 100 90

<06> 80 removal of amplicons 70 60 50 40 30 Percent 20 10 0

Supplier B MagMAX Pure Bind

Figure 1. High recovery, and successful removal of unwanted fragments. PCR reactions were cleaned with MagMAX Pure Bind beads and supplier B's beads following a standard protocol. Inputs of 500 ng of fragmented DNA, at a sample-to-bead ratio of 1.8, were used, and post-cleanup recovery and removal efficiency were calculated as percentages of pre-cleanup input amount. MagMAX Pure Bind beads were shown to be functionally comparable to supplier B's beads and enabled effective removal of fragments smaller than 90 bp, with high

recovery of amplicons larger than 90 bp at a ~90% success rate.

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Equivalent cleanup performance

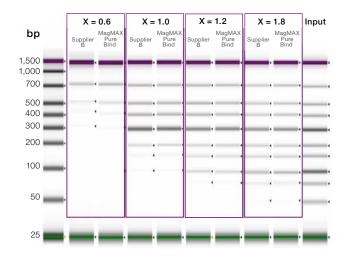


Figure 2. Performance equivalent to that of gold-standard magnetic beads. Following a standard protocol, inputs of 500 ng of DNA were cleaned using MagMAX Pure Bind beads and supplier B's beads. Cleanup was performed with sample-to-bead ratios (X) varying from 0.6 to 1.8, and post-cleanup fragments were compared. MagMAX Pure Bind beads gave cleanup profiles equivalent to those of supplier B's beads, across the range of sample-to-bead ratios.

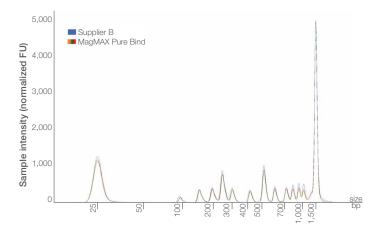


Figure 3. Consistent cleanup profile. Following a standard protocol, inputs of 500 ng of DNA were cleaned using MagMAX Pure Bind beads and supplier B's beads. Cleanup was performed with a sample-to-bead ratio of 1.8, and post-cleanup profiles were compared. MagMAX Pure Bind beads gave a cleanup profile equivalent to that of supplier B's beads, at the recommended sample-to-bead ratio of 1.8.

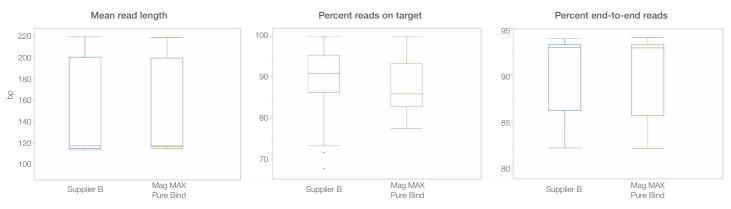


Figure 4. Reliable downstream NGS analysis. Following a standard protocol, library cleanup was performed with MagMAX Pure Bind beads and supplier B's beads. Templates were then prepared with the Ion Chef[™] System and sequenced utilizing the Ion GeneStudio[™] S5 System. Sequencing data were analyzed and mean read length, reads on target, and end-to-end reads were compared. Sequencing results generated from upstream use of MagMAX Pure Bind beads provided NGS results comparable to those generated using supplier B's beads.

Ordering information

Product	Quantity	Cat. No.
MagMAX Pure Bind beads	5 mL	A58521
	50 mL	A58522
	250 mL	A58523

Learn more at thermofisher.com/magmaxpurebind

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Maintain quality downstream results