

Mag-Bind® TotalPure NGS

Bead-based purification of DNA or RNA for next-generation sequencing workflows

CAT NO: M1378



No Protocol Change

Drop in replacement



Double Sided Size Selection

Use your current ratios



DNA Clean-Up
PCR Clean-Up

RNA Clean-Up
cDNA or RNA purification



Automatable

Adaptable on most open-ended liquid handlers

Cost Effective

30% less than the competition on average



Mag-Bind® TotalPure NGS offers an easy-to-use, reliable solution for the purification of both DNA or RNA for next-generation sequencing workflows with high recovery rates. Mag-Bind® TotalPure NGS is capable of selectively binding fragments depending on the reagent to sample ratio used, giving the user flexibility to perform left, right or double-sided size selection. This product is designed for both manual and fully automated purification of DNA and RNA samples, as well as for the purification of PCR products. The system combines Omega Bio-tek's proprietary chemistries with reversible nucleic acid-binding properties of magnetic beads to selectively bind fragments larger than 100 bp and eliminate excess nucleotides, primers and small, non-targeted products such as primer-dimers. Purified DNA and RNA is suitable for a variety of downstream applications such as NGS library preparation, microarrays, automated fluorescent sequencing, and restriction enzyme digestion.

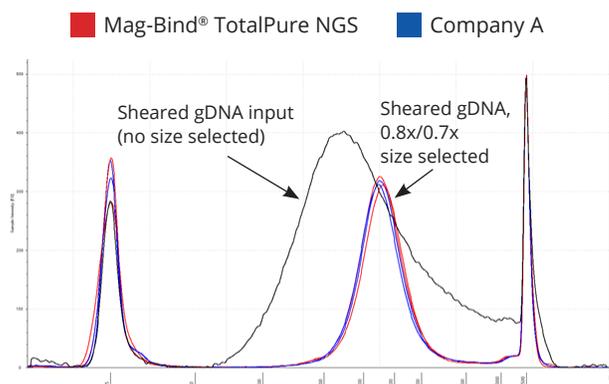


Figure 1.

Double-Sided Size Selection

Figure 1. Electropherogram overlay of the double-sided size selection on sheared gDNA at 0.8x/0.7x ratio set using Omega Bio-tek's Mag-Bind® TotalPure NGS and a comparable product from Company A following manufacturer's recommended protocols. The DNA was eluted in 25 μ L and analyzed on Agilent's TapeStation® 2200.

Total RNA Clean-Up

Figure 2. 10 μ L of RNA at 50 ng/ μ L and 5 ng/ μ L was cleaned up with Omega Bio-tek's Mag-Bind® TotalPure NGS following manufacturer's recommended protocols. The RNA was eluted in 20 μ L and analyzed on Agilent's TapeStation® 2200. Recovery rates ranged between 85-92% respectively.

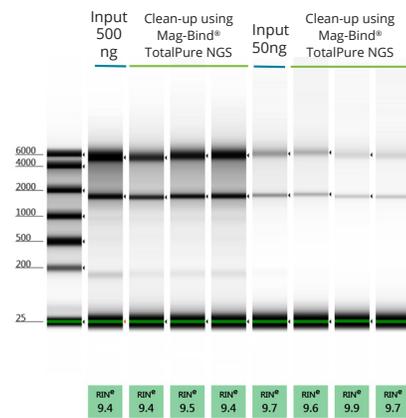


Figure 2.



innovations in nucleic acid isolation

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Illustrated Protocol

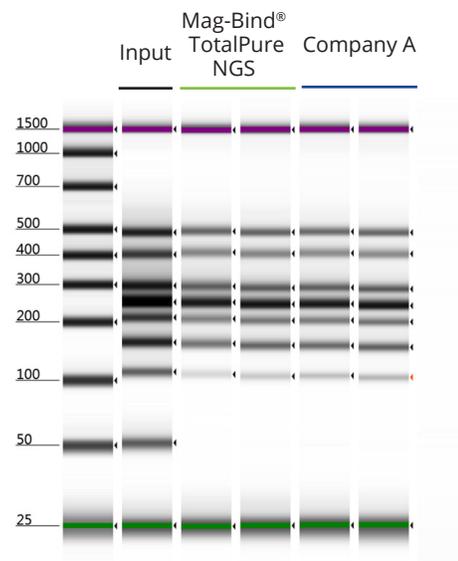
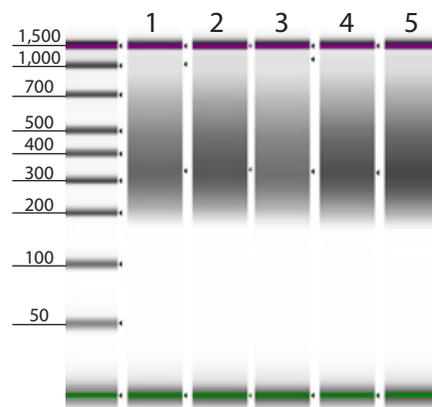


Figure 3. 10 μ L of 50 bp DNA ladder was purified with Omega Bio-tek's Mag-Bind® TotalPure NGS and a comparable product from Company A following manufacturer's recommended protocols. The DNA was eluted in 20 μ L and analyzed on Agilent's TapeStation® 2200.

Automated Library Prep of KAPA Biosystems' HyperPrep Kits for Illumina

Figure 4. Next-generation sequencing libraries prepared from 350 ng sheared genomic DNA using KAPA Biosystems' HyperPrep Kits (KK8504) and Omega Bio-tek's Mag-Bind® TotalPure NGS on the Hamilton Microlab® STAR. Mag-BIND® TotalPure NGS was used for 2 clean-up steps (0.8x and 1.0x) following KAPA Biosystems recommended protocol for library prep. DNA was analyzed on Agilent's TapeStation® 2200 following library construction.

Sample No.	DNA Average Size (bp)	Conc. (ng/ μ L)
1	427	30.4
2	431	33.7
3	426	28.5
4	424	37.4
5	419	38.7



Product Description	Vol	Cat No.
Mag-Bind® TotalPure NGS	5 mL	M1378-00
	50 mL	M1378-01
	500 mL	M1378-02

For free samples of any of our kits, visit www.omegabiotek.com