

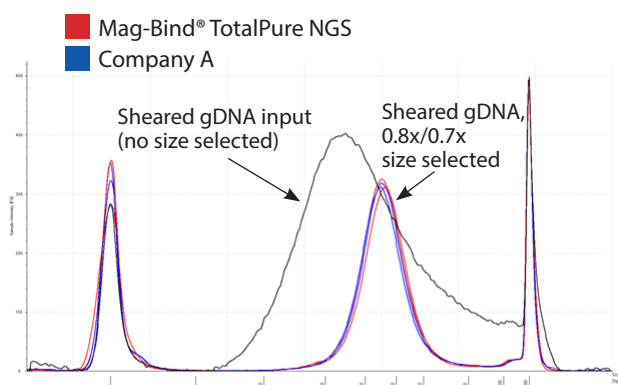
Mag-Bind® TotalPure NGS

Purification of DNA or RNA for next-generation sequencing workflows

Features and Benefits

- One stop solution for both DNA and RNA clean-up
- Double-sided size selection capability
- No centrifugation steps
- Manual and automation-friendly sample processing in 96- and 384-well formats

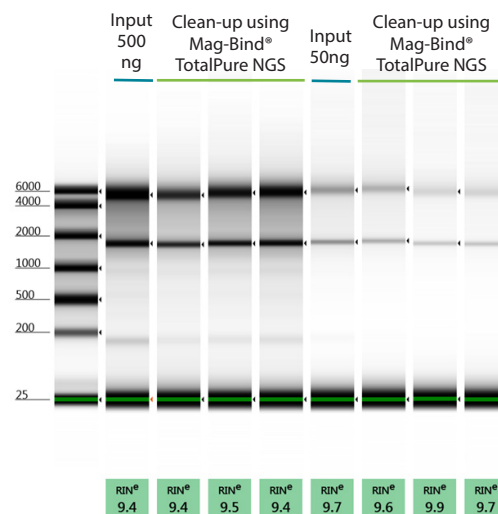
Double-Sided Size Selection



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 µL and analyzed on Agilent's TapeStation 2200.

Mag-Bind® TotalPure NGS offers an easy-to-use, reliable solution for the purification of both DNA and 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.

Total RNA Clean-up



Product Info

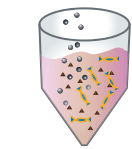
Part Number	Preparations
M1378-00	5 mL
M1378-01	50 mL
M1378-02	500 mL

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

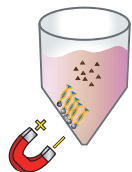
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Workflow



Add Mag-Bind® Total Pure NGS and mix

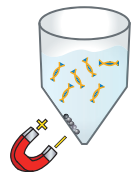


Magnetize and remove supernatant

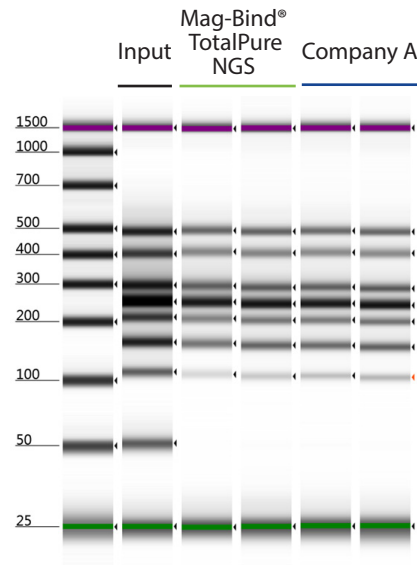


Wash twice with 70% ethanol

Dry



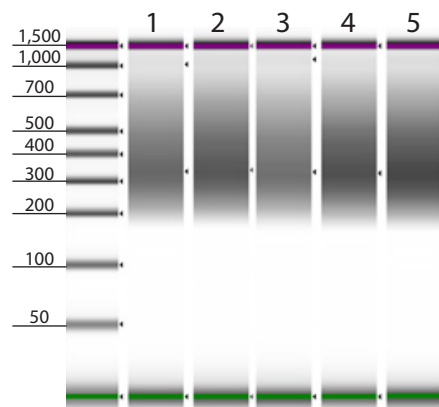
Elute DNA



10 µL of 50 bp 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 µL and analyzed on Agilent's TapeStation 2200.

Automated Library Prep of Kapa Biosystem HyperPrep Kits for Illumina

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



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