

CLEANNGS

DNA AND RNA CLEAN-UP FOR NEXT GENERATION SEQUENCING LIBRARY CONSTRUCTION

Description

The CleanNGS kit offers a highly efficient magnetic bead based clean-up system for the purification of both DNA and/or RNA for next-generation sequencing workflows. CleanNGS provides maximum flexibility allowing for left, right or double-sided size selection by easily adjusting the sample to CleanNGS volume ratio(s).

Based on our proprietary chemistry CleanNGS removes, salts, primers, primer-dimers and dNTPs, while DNA and/or RNA fragments are selectively bound to the magnetic particles based on their size. Purified DNA and RNA is eluted of the magnetic particles using water or a low salt buffer and can be used directly for downstream applications such. The protocol can be adapted to your current liquid handling workstation (e.g. Hamilton, Beckman, Agilent, Caliper, Perkin Elmer, Tecan and Eppendorf) utilizing your current protocol as well as being used manually.

Features & Benefits

- **Improved size selection for Next-Generation Sequencing**
 - making CleanNGS compatible with both existing and the latest commercially available library preparation kits
- **Faster separations due to improved magnetic beads**
 - allowing shortening of the process time
- **Better DNA/RNA recovery, due to improved magnetic beads**
 - creating ease of use and improved recovery by eliminating bead loss
- **Produced RNase free**
 - allowing CleanNGS to be used for your delicate RNA and cDNA sample material
- **Efficient removal of unincorporated dNTPs, primers, primer dimers and other contaminants**
 - increasing downstream reaction efficiency and reducing overall costs

Ordering Information

Catalog No#	Product Description	Preps ²⁾
CNGS-0005	CleanNGS (5 mL)	277
CNGS-0050	CleanNGS (50 mL)	2,777
CNGS-0500	CleanNGS (500 mL)	27,777

1) The PCR process is covered by patents owned by Roche Molecular Systems, Inc., and F. Hoffmann-La Roche, Ltd.

2) Number of reactions is based on a typical 10 µL PCR reaction volume

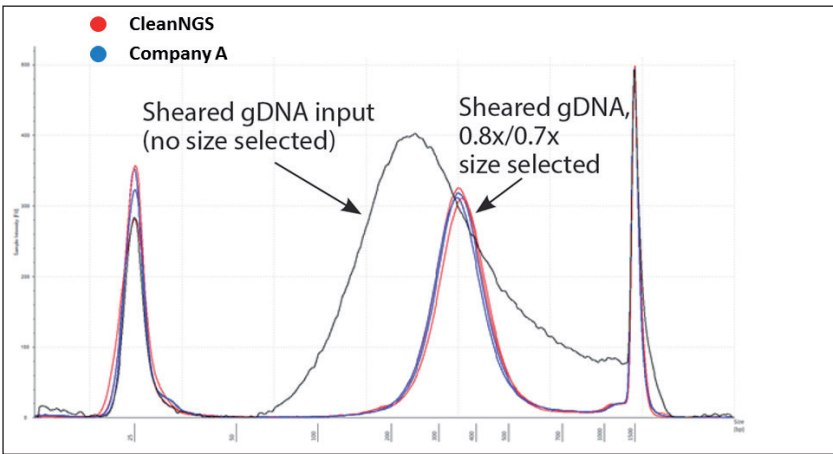
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Leidse Schouw 2 | 2408 AE Alphen aan den Rijn | The Netherlands | Tel. +31 (0) 172 782 170 | Fax. +31 (0) 172 782 174 | E. info@cleanna.com | W. www.cleanna.com
CleanNA is a registered trademark of GC biotech BV

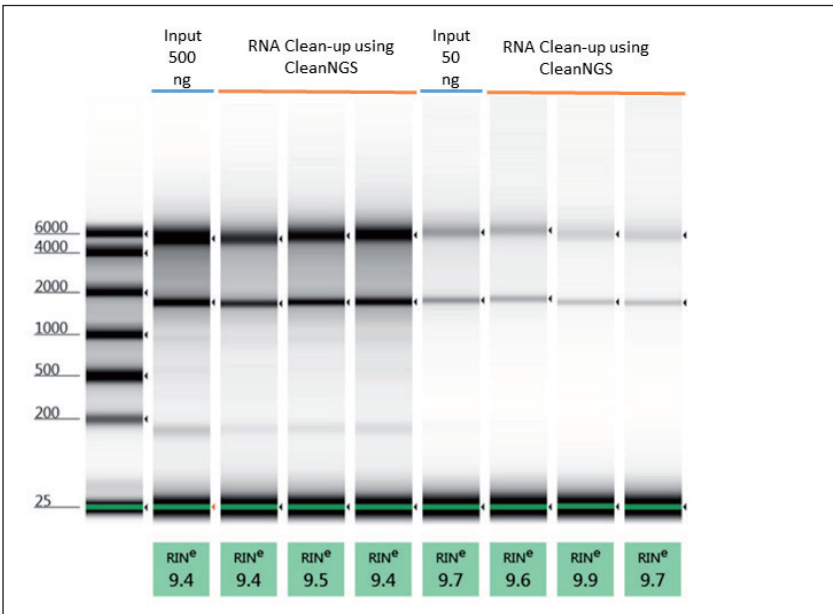
Downstream Applications

- Next-Generation Sequencing
- PCR ¹⁾
- Genomic DNA clean up
- RNA clean up
- Fragment Analysis
- Microarrays
- Restriction enzyme clean up
- Cloning

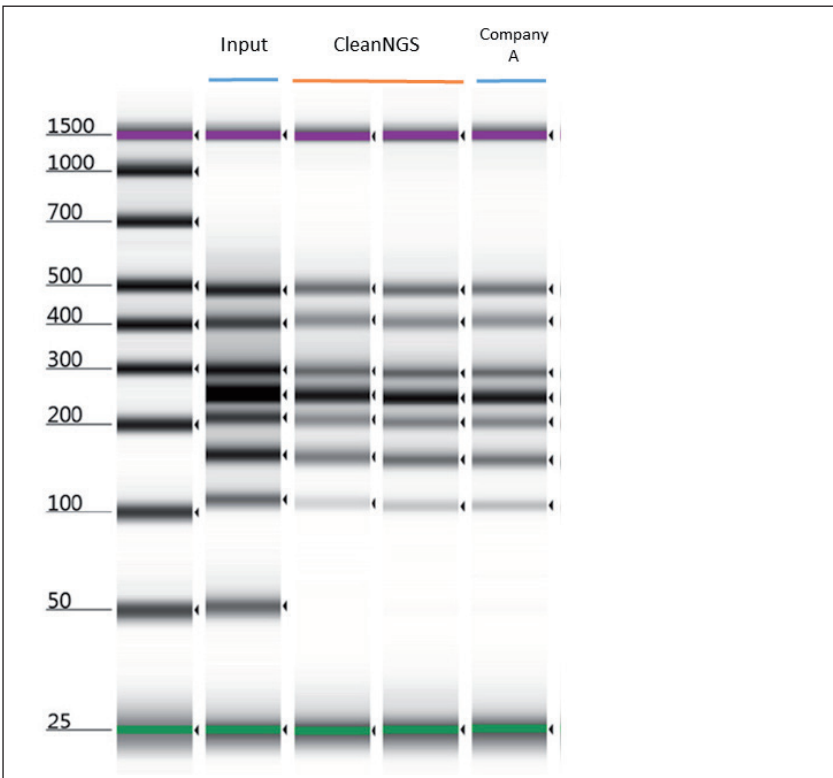


Sheared gDNA was used for a double-sided size selection using 0.8x/0.7x ratio's (left/right) using CleanNA's CleanNGS versus company A following the manufacturer's recommended protocols and eluted in 25 μ L. The DNA was analyzed using an Agilent TapeStation 2200.

	Average bp selected
CleanNGS	348 bp
Company A	350 bp



A volume of 10 μ L of total RNA with 500 and 50 ng total input was purified using CleanNA's CleanNGS, following manufacturer's recommended protocol. The purified RNA was eluted in 20 μ L and analyzed using Agilent's TapeStation 2200. Total RNA recovery was 86-94% respectively.



10 μ L of a 50 bp ladder was purified using CleanNA's CleanNGS versus Company A according the manufacturer's protocols and eluted in 20 μ L. DNA was analyzed using Agilent's TapeStation 2200.

