

NUPURE SIZE SELECTION KIT

INTRODUCTION

The NuPure Size Selection Kit is designed for tunable size selection of nucleic acid fragments in the library construction process for next generation sequencing (NGS). The magnetic beads in this kit feature a high binding capacity, slow sedimentation rate and are suspended in a special binding buffer that facilitates ratio-metric size selection of NGS input DNA/RNA and library prep adapter ligation end products.

HIGHLIGHTS

- Superior performance and optimized and designed to match or outperform other competitors.
- **High quality** DNA yields relative to other magnetic bead-based methods.
- Scalable for higher and lower input volumes from 10 μl to 1 ml
- Automation-friendly with proven adaptability to open-ended magnetic particle processors and liquid handlers.
- **Eco-friendly** with no costly columns required and minimal use of plastics.

DOWNSTREAM APPLICATIONS

- PCR
- NGS Library Prep
- Fragment analysis
- DNA/RNA Cleanup
- Molecular Cloning

Easily Integrated into Existing Workflows

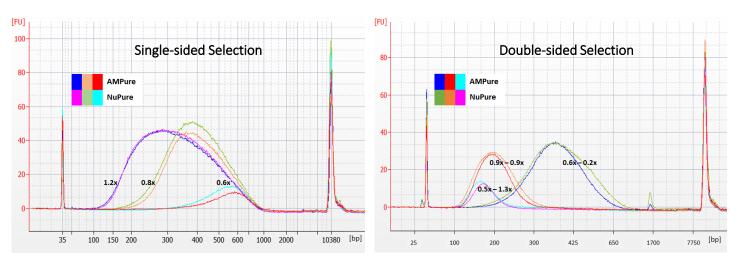


Figure 1. Example of input DNA subjected to bead-based size selection using NuPure Size Selection Kit and Agentcourt AMPure XP beads.

The NuPure Size Selection Kit provide equivalent performance to Agentcourt AMPure XP beads and can be used to clean-up reactions or selectively bind DNA fragments of various lengths that are required in your specific workflows.

Simple and Quick Workflow

Step 1. Add Beads to DNA Sample. Mix and incubate at room temperature for 5 mins. Step 2. Place tube on a magnetic separator and collect beads for 2 mins. Step 3. For single selection, discard supernatant and proceed to Step 4. For double selection, transfer supernatant to a new tube and add Beads. Repeat Steps 1-3, then proceed to Step 4. Wash beads twice with Wash Solution. Incubate for 30 secs for each wash. Step 5. Air dry beads for 5 mins. Step 6. Add Elution Buffer and resuspend beads to elute DNA. Transfer supernatant to new microcentrifuge tube.

Figure 2. Illustration showing size selection procedures using the NuPure Size Selection Kit

By adjusting the volume of NuPure beads to sample volume, one can tune the size distribution of isolated nucleic acids. After a quick binding reaction, beads are washed, air-dried and nucleic acids are eluted in a user-defined volume.

Tunable Size Selection

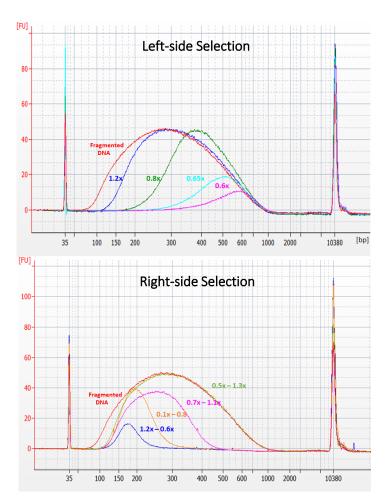


Figure 3. Example of (A) left side size selection and (B) right side size selectionusing NuPure Size Selection Kit.

The NuPure Size Selection Kit offer flexible and adjustable size selection parameters to achieve desired DNA fragment lengths for your specific application.

Visit our website: www.oceannanotech.com to view our complete line of products and innovative sample preparation kits.



