VAHTS RNA Clean Beads

Catalog # N412

Version 6.1

Vazyme biotech co., ltd.

Introduction

The Vazyme **VAHTS RNA Clean Beads** is based on SPRI (Solid Phase Reverse Immobilization) and is applicable for RNA purification. This kit selectively binds RNA to the beads and efficiently removes all proteins, salt ions, and other impurities.

The usage of **VAHTS RNA Clean Beads** is the same as the Agencourt® RNAClean® XP Beads (Beckman Coulter, Cat.No. #A63987), which is widely used currently. The cost-effective **VAHTS RNA Clean Beads** serves as a seamless alternative for Agencourt® RNAClean® XP Beads.

Contents of Kit

	N412-01	N412-02	N412-03
VAHTS RNA Clean Beads	5 ml	40 ml	450 ml

Storage

All the components can be stored at 2-8℃ for one year.

Additional Materials Required

Ethanol (100%)

Nuclease-free water

Magnetic stand

Nuclease-free tubes

Application

Applicable for RNA purification from *in vitro* reaction mixtures, i.e. RNA library preparation.

Not applicable for direct RNA purification from cells or tissues.

Protocol

1. Equilibrate the **VAHTS RNA Clean Beads** to room temperature and suspend the beads thoroughly by vortexing before use.
2. Pipet the **VAHTS RNA Clean Beads** to the RNA solution. The volumn of beads should be 1.8-fold of the volumn of RNA solution.
3. Mix thoroughly by pipetting for 10 times.
4. Incubate for 5 min at room temperature for the binding of RNA to beads.
5. Place the sample on a magnetic stand for 5 min. Wait until the solution becomes clear. Keep it on the magnetic stand and carefully discard the supernatant without disturbing the beads.
6. Keep the sample on magnetic stand, add 200 μl of freshly prepared 80% ethanol to rinse the beads. **DO NOT re-suspend the beads!** Incubate for 30 sec at room temperature and carefully discard the supernatant without disturbing the beads.
7. Repeat the step 6.
8. Keep the sample on the magnetic stand, open the tube lid and air-dry the beads for 5-10 min.
9. Take the sample off from magnetic stand. Add nuclease-free water to elute the RNA. Mix thoroughly by pipetting for 10 times, and then incubate for 5 min at room temperature.
10. Place the tube back on the magnetic stand and wait until the solution clarifies (about 5 min). Carefully transfer the supernatant to a new nuclease-free tube without disturbing the beads.
11. Store the supernatant at -20℃ or proceed to the next step immediately.

Tips

1. Equilibrate the **VAHTS RNA Clean Beads** to room temperature before use and suspend the beads thoroughly by vortexing every time before pipetting.
2. Avoid the contamination of RNase and nucleic acid during the experiment.
3. The 80% ethanol should be prepared with nuclease-free water to avoid RNA degradation by RNase.
4. When air-drying the beads, do not over-dry it. Over-dried beads with cracks on the surface will lead to reduced elution efficiency of RNA.
5. In the protocol Step 10, avoid pipetting beads when transferring the supernatant, i.e. leave behind 2-3 μl of supernatant.
6. The **VAHTS RNA Clean Beads** is compatible for various library prep kits, such as VAHTS mRNA-seq v2 for Illumina® (Vazyme, Cat.No. #NR601), VAHTS Stranded mRNA-seq for Illumina® (Vazyme, Cat.No. #NR602), and VAHTS Total RNA-seq (H/M/R) for Illumina® (Vazyme, Cat.No. #NR603). Please refer to the protocols of these kits when using the **VAHTS RNA Clean Beads** for library preparation.