【Product Name】RNA Clean Beads

【Product specifications】5ml, 50ml, 500ml

【Intended Use】

The RNA Clean Beads use paramagnetic bead technology for high-throughput purification of RNA or cDNA from in vitro applications such as transcription, antisense RNA (aRNA) amplification and RNA and cDNA probe synthesis. The resulting purified product can be used in the following applications: PCR and RT-PCR, probes for microarray or macroarray, RNase protection assays, transfection for RNAi experiments and cDNA synthesis and labeling.

【Principle】

RNA Clean utilizes an optimized buffer to selectively bind RNA or cDNA to paramagnetic beads. Excess oligonucleotides, nucleotides, salts, and enzymes can be removed using a simple washing procedure.

【Main Composition】

Cat.No.	BRP-5	BRP-50	BRP-500
RNA Clean Beads	5 ml	50 ml	500 ml

【Storage conditions and Validity】

RNA Clean Beads should be Store at 4°C upon arrival, for up to 18 months. For best results shake the reagent well until all of the beads are completely in suspension and aliquot RNA Clean Beads into RNase free containers. Do not pour remaining reagent back into the storage container. Mix RNAClean Beads well before use. The reagent should appear homogenous and consistent in color.

DO NOT FREEZE.

【Preparation before Use】

- 75% ethanol
- 0.5ml 96-well plate
- 8-channel pipette gun
- magnetic plate
- [For Auto]96-channel pipetting workstation

【Protocol】

- 96 well operation process

1. The 96-well RNA product was placed on the table surface and the volume of the product was measured. If the RNA product is >50μl, it needs to be transferred to 0.3-0.5ml 96-well plate. If the RNA product is less than 50μl, the PCR product does not need to be transferred and can be directly operated in the PCR reaction plate.
2. Take out the CR Solution and oscillate to make the magnetic beads fully.
3. Add CR Solution and anhydrous ethanol to the cDNA product according to the table below.

RNA Volume (μL)	CR Solution (μL)	Ethanol
20μL	20μL	80μL
50μL	50μL	200μL
100μL	100μL	400μL

4. Stir and mix with pipette gun for 15 times, or shake and mix with IKA MS3 vortexeter at 600-1000rpm for 3 minutes, and let stand at room temperature for 10 minutes
5. Transfer the 96-well plate to the 96-well magnetic rack and let it stand for 10 minutes to enrich the magnetic beads. Carefully discard the supernatant.
6. Add 300μl 75% ethyl alcohol to each hole, shake and mix at 600-1000rpm on the IKA MS3 vortex for 1 minute, transfer the 96-well plate to the 96-well magnetic rack, and let it stand for 2 minutes to enrich magnetic beads. Carefully discard the supernatant.
7. Add 300μl 75% ethyl alcohol to each hole, shake and mix at 600-1000rpm on the IKA MS3 vortex for 1 minute, transfer the 96-well plate to the 96-well magnetic rack, and let it stand for 2 minutes to enrich magnetic beads. Carefully discard the supernatant.

8. Drain the residue thoroughly. Air dry for 10 minutes.
9. Remove the 96-well plate from the magnetic rack. Add 20μl DEPC treated water or 2.5mm Tris(pH7.0-8.0) to each well. Suction for 15 times, or on the IKA MS3 vortex machine, oscillation at 1000-1500rpm for 3 minutes to fully resuspend the magnetic bead. Let stand at room temperature for 5 minutes.
10. Transfer to the magnetic rack and let stand for 3-5 minutes to enrich magnetic beads.
11. The RNA was transferred to a new 96-well plate.

- Single tube operation (magnetic rack)

1. The RNA product was placed on a table surface and the volume of the product was measured.
2. Transfer to 1.5ml centrifuge tube.
3. Take out the CR Solution and oscillate to make the magnetic beads sufficiently heavy.
4. Add CR Solution and anhydrous ethanol to the cDNA product according to the table below.

RNA Volume (μL)	CR Solution (μL)	Ethanol
20μL	20μL	80μL
50μL	50μL	200μL
100μL	100μL	400μL

5. Swirl well for 20 seconds and leave at room temperature for 10 minutes, mixing upside down several times.
6. Transfer to the magnetic rack and let sit for 5-10 minutes to enrich the magnetic beads. Carefully discard the supernatant.
7. Add 500μl 75% ethanol and swirl for 15 seconds. Transfer to the magnetic rack and let stand for 2 to 3 minutes to enrich the magnetic beads. Carefully discard the supernatant.
8. Add 500μl 75% ethanol and swirl for 15 seconds. Transfer to the magnetic rack and let stand for 2 to 3 minutes to enrich the magnetic beads. Carefully discard the supernatant.
9. Centrifuge briefly and suck up the residue. Air drying ~3 minutes.
10. Add 20-50 μl DEPC treated water, swirl and mix for 15 seconds, and let stand at room temperature for 5 minutes.
11. Transfer to the magnetic rack and let stand for 3-5 minutes to enrich magnetic beads.
12. Transfer the RNA to a new centrifuge tube.

- Single tube operation (centrifugation)

1. The RNA product was placed on a table surface and the volume of the product was measured. Transfer to 1.5ml centrifuge tube.
2. The CR Solution was removed, the magnetic beads were fully suspended by oscillation, and the CR Solution and anhydrous ethanol were added to the cDNA product according to the following table.

RNA Volume (μL)	CR Solution (μL)	Ethanol
20μL	20μL	80μL
50μL	50μL	200μL
100μL	100μL	400μL

3. Swirl well for 20 seconds and leave at room temperature for 10 minutes, mixing upside down several times. Centrifuge at 13,000 x g for 1 minute and carefully suck or pour away the supernatant.
4. Add 500μl 75% ethanol and swirl for 15 seconds. Centrifuge at 13,000 x g for 1 minute, carefully suction or pour on.
5. Centrifuge briefly and suck up the residue. Air drying ~3 minutes.
6. Add 10-30 μl DEPC treated water, swirl and mix for 15 seconds, and let stand at room temperature for 3 minutes.
7. Centrifuge at 13,000 x g for 1 minute.
8. Transfer the RNA to a new centrifuge tube.