

MagicPure[®] RNA Beads

Cat. No. EC501

Storage: at 2-8°C for one year. Avoid freezing.

Description

MagicPure[®] RNA beads can easily extract RNA from mastermix of reaction such as rRNA depletion, DNase I digestion, in vitro transcription, labeled RNA and synthetic RNA. The resulting RNA product is suitable for RNA library construction, RT-PCR, qRT-PCR, chip analysis, Northern blot RNAi, or other downstream applications.

Kit Contents

Component	EC501-01	EC501-02	EC501-03
Magnetic RNA Beads	1 ml	5 ml	60 ml
RNase-free Water	1 ml	5 ml	60 ml

Procedures

Reagents supplied by users: freshly prepared 80% ethanol (made with RNase-free Water)

Operate at room temperature.

1.8× beads are recommended for the purification.

1. Take out the beads from 2-8°C refrigerator and equilibrate at room temperature for 30 minutes before use.

2. Add RNA sample into a 1.5 ml RNase-free tube.

3. Re-suspend RNA beads by vortexing. Add appropriate volume of beads to the sample according to the sample volume.

Volume of beads to add = volume of sample × 1.8

Example: 90 µl (beads to add) = 50 µl × 1.8

4. Mix by pipetting up and down. Incubate at room temperature for 5 minutes.

Note: Insufficient mixing will affect the results significantly.

5. Place the tube on an appropriate magnetic stand to separate beads from the supernatant at room temperature. When the solution is clear (about 5 minutes), discard the supernatant.

Note: Spin down briefly before put on magnetic stand if there is liquid on the wall. Make sure that RNA beads are settled to the magnet completely and not to be disturbed when discarding the supernatant. Discarding beads will result in reduced yield.

6. With the tube still on the magnetic stand, add 200 µl of freshly prepared 80% ethanol (made with RNase-free Water) and incubate at room temperature for 30 seconds without pipetting up and down. Carefully remove and discard the supernatant.

Note: Use freshly-prepared 80% ethanol; otherwise it may affect the result.

7. Repeat step 6 one time.

8. Air dry the beads for up to 5 minutes while the tube is on the magnetic stand with the lid open.

Note: Residual ethanol may influence the downstream reaction. Do not over dry or heat the beads, which may result in reduced yield.

9. Remove the tube from the magnetic stand and elute RNA with ≥ 20 µl of RNase-free Water. Mix by pipetting up and down or vortexing. Then incubate at room temperature for 2 minutes.

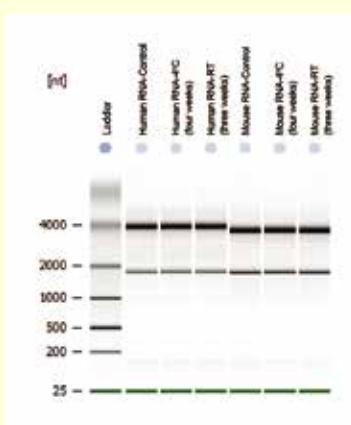
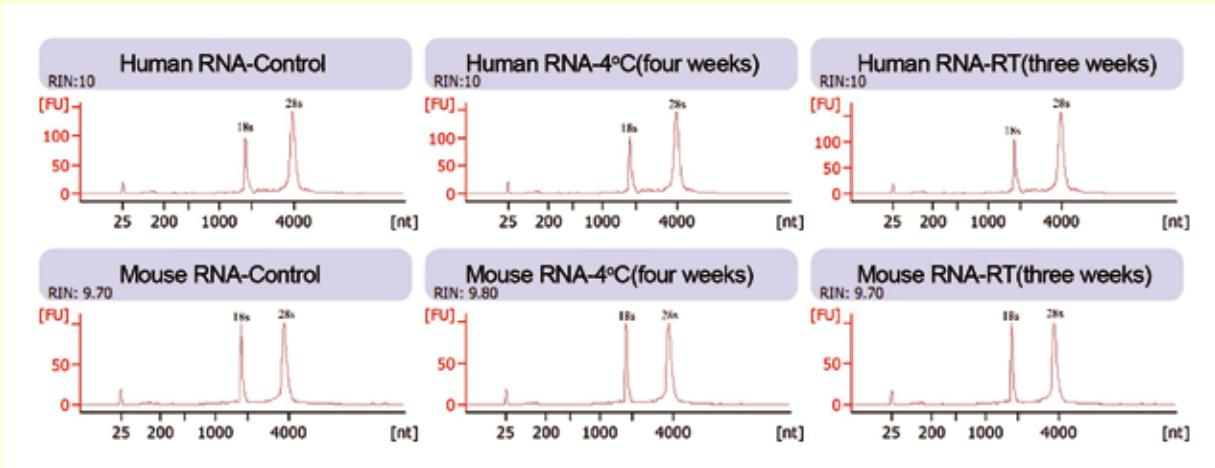
10. Put the tube back to the magnetic stand. Incubate for 2 minutes (or until the solution is clear).

Note: Spin down briefly before put on magnetic stand if there is liquid on the wall. Prolong incubation to 5 minutes if necessary to make sure that RNA beads are settled to the magnet completely.

11. Transfer the supernatant to a new RNase-free tube. The RNA product can be stored at -80°C.

RNA samples	Human		Mouse	Wheat	Bacch	Rice
Gene	GAPDH	VEFGA	GAPDH	Act1	PR10a	SPP1
Ct value before purification	14.04	24.52	20.30	26.11	23.68	30.51
Ct value after purification	14.28	24.74	20.37	26.15	23.77	30.61

The Ct value of RNA samples before and after purified by *MagicPure®* RNA Beads



Purification results and Beads stability were checked by the Agilent Bioanalyzer 2100.
Control: RNA sample without Purification

2-8°C (four weeks): RNA samples purified by *MagicPure®* RNA Beads which have been stored at 2-8°C for four weeks

RT (three weeks): RNA samples purified by *MagicPure®* RNA Beads which have been stored at room temperature for three weeks

Notes

- Equilibrate the beads to room temperature before use.
- Beads should be mixed thoroughly before use
- 80% ethanol should be freshly prepared.
- The RNA product has poor stability; please proceed with subsequent experiments as soon as possible, otherwise, store at -80°C.
- When transferring RNA product, we recommend leaving 2-3 µl of supernatant to avoid the beads being disturbed during the process of RNA product transfer.
- Avoid freezing the beads.

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