MagicPure® mRNA Kit

Please read the manual carefully before use.
Cat. No. EC511
Version No. Version 2.0
Storage: at 2-8 ℃ for one year

Description

MagicPure® mRNA Kit uses oligo(dT)-conjugated magnetic beads to specifically bind to poly(A) tailed mRNA. It is suitable for isolating mRNA from purified highly intact total RNA (0.1-10 μg, RIN value≥8). The isolated mRNA can be used in RT-PCR, qRT-PCR, next generation sequencing, or other applications. This kit is compatible with magnetic-rod high-throughput nucleic acid extractor.

Highlights

- High-yield and high-purity isolated mRNA
- Simple workflow

Sample Requirements

0.1-10 μg of purified highly intact total RNA (RIN value≥8)

Kit Contents

Component	EC511-01-V2 (24 rxns)	EC511-02-V2 (96 rxns)
RNase-free Water	1.3 ml	5 ml
Binding Buffer 33 (BB33)	1.3 ml	5 ml
Clean Buffer 33 (CB33)	1.3 ml	5 ml
Wash Buffer 33 (WB33)	10 ml	40 ml
mRNA Beads	1.3 ml	5 ml

Procedures

1. Take mRNA Beads out from 2-8°C and equilibrate to room temperature. Mix well by vortexing.
2. Prepare RNA sample: dilute the total RNA to 50 μl with RNase-free Water in a PCR tube.
3. Pipette 50 μl of mRNA Beads to the RNA sample. Mix well by pipetting up and down.
4. Heat the PCR tube for 5 minutes at 65°C. Cool to 4°C and place at room temperature for 5 minutes.
   Note: Make sure that the beads have been mixed thoroughly prior to reaction. During the reaction, if there is a small amount of bead precipitates at the tube bottom, mix well by vortexing.
5. Place the PCR tube on a magnetic stand for 5 minutes. Discard the supernatant carefully and completely.
6. Remove the PCR tube from the magnetic stand. Add 200 μl of WB33 and mix well by pipetting. Place on the magnetic stand for 5 minutes and discard the supernatant carefully and completely.
7. Remove the PCR tube from the magnetic stand. Add 50 μl of CB33 and resuspend the beads by pipetting.
8. Heat the tube for 2 minutes at 80°C and cool to 25°C.
9. Add 50 μl of BB33 and mix well by pipetting. Incubate at room temperature for 5 minutes.
10. Place the PCR tube on the magnetic stand for 5 minutes. Discard the supernatant carefully and completely.
11. Remove the PCR tube from the magnetic stand. Add 200 μl of WB33 and mix well by pipetting. Place on the magnetic stand for 5 minutes and discard the supernatant carefully and completely.
12. Remove the PCR tube from the magnetic stand. Add 12 μl of RNase-free Water and mix well by pipetting. Heat for 2 minutes at 80°C and place the PCR tube on the magnetic stand. After the solution turns clear, pipette 10 μl of supernatant to an RNase-free PCR tube.
13. Store the isolated mRNA at -80°C.

Notes

- Please use RNase-free PCR tubes;
- The total RNA sample should be highly intact (RIN value>8). Otherwise the mRNA information will be partially lost.
- If the isolated mRNA will be used for NGS library preparation, it is optional to add a certain volume of fragmentation buffer (according to the fragmentation requirements) in the mRNA elution procedure of Step 12. After high-temperature fragmentation, immediately place on the magnetic stand. After the solution turns clear, pipette a certain volume of supernatant to an RNase-free PCR tube, which should be used immediately for library preparation or stored at -80°C.