

## mRNA Kit

Catalogue No.:abx298030

Abbexa's 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 (0.01-10 µg, RIN value  $\geq$  8). The isolated mRNA can be used in RT-PCR, qRT-PCR, next generation sequencing, and other applications. This kit is compatible with magnetic-rod high-throughput nucleic acid extractors.

## Kit components:

Component	24 rxns	96 rxns
mRNA Beads	1.3 ml	5 ml
Binding Buffer	1.3 ml	5 ml
Clean Buffer	1.3 ml	5 ml
Wash Buffer	10 ml	40 ml
RNase-free Water	1.3 ml	5 ml

Target: mRNA Kit

Storage: Store between 2-8 °C for up to 1 year.

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.



Directions for	1. Take mRNA Beads out from 2-8 °C and equilibrate to room temperature for 30 minutes. Mix well	
use:	by vortexing.	
	2. Prepare RNA sample: dilute the total RNA to 50 µl with RNase-free Water in a PCR tube.	

3. Pipette 50  $\mu l$  of mRNA Beads into the RNA sample. Mix well by pipetting up and down.

4. Heat the PCR tube first at 65 °C for 5 minutes and then at 25 °C for 5 minutes.

5. Cool the PCR tube to 4  $\,^\circ\text{C}$  to allow the binding of mRNA to the magnetic beads.

6. If small bead precipitates are observed at the tube bottom during the reaction, mix well by vortexing.

7. Place the PCR tube on a magnetic stand for 5 minutes. Carefully discard the supernatant.

8. Remove the PCR tube from the magnetic stand. Add 200  $\mu$ l of Wash Buffer and mix well by pipetting. Place on the magnetic stand for 5 minutes and carefully discard the supernatant.

9. Remove the PCR tube from the magnetic stand. Add 50 µl of Clean Buffer and resuspend the beads by pipetting.

10. Heat the tube at 80 °C for 2 minutes and then cool the PCR tube at 25 °C.

11. Add 50 µl of Binding Buffer and mix well by pipetting. Allow to stand at room temperature for 5 minutes.

12. Place the PCR tube on the magnetic stand for 5 minutes. Discard the supernatant carefully.

13. Remove the PCR tube from the magnetic stand. Add 200  $\mu$ l of Binding Buffer and mix well by pipetting. Place on the magnetic stand for 5 minutes and discard the supernatant carefully.

14. Remove the PCR tube from the magnetic stand. Add 18.5 μl of RNase-free Water and mix well by pipetting.

15. Heat at 80 °C for 2 minutes and place the PCR tube on the magnetic stand for 5 minutes. After the solution turns clear, pipette 17 µl of supernatant to a fresh RNase-free PCR tube. Note: If the isolated mRNA will be used for NGS library preparation, fragmentation buffer can optionally be added (according to the fragmentation requirements) in the mRNA elution procedure. After high-temperature fragmentation, immediately place on the magnetic stand. After the solution turns clear, pipette the supernatant to an RNase-free PCR tube, which should be used immediately for library preparation or stored at -80 °C.

16. Store the isolated mRNA at -80 °C.

Notes:

- Use RNase-free PCR tubes

- The total RNA sample should be highly intact (RIN value > 8), otherwise the mRNA information will be partially lost.

- In order to obtain optimal experimental results, it is recommended to use the isolated mRNA immediately in follow-up experiments.