MagBeads FastRNA Kit

Ready-to-Use for MPure-96™ System

Cat. No.: 117034400 (96 PREPS)

Quick-Start Manual

Revision 2.0 June 2023

Notes before starting:

- Add 2.4 mL Protease Dissolve Buffer into Proteinase K and store at -20°C after it dissolves.
- Dilute Buffer MCB with isopropanol (ratio of Buffer MCB: Isopropanol = 3 : 7) and store at room temperature.
- (Optional) 2-mercaptoethanol can be added to an aliquot of RTL Lysis Buffer before use. Add 20 µl 2-mercaptoethanol per 1 mL RTL Lysis Buffer. This mixture can be stored at room temperature for 2 weeks.

Automation Assay Procedure

Sample Preparation

- Cell: Harvest cells no more than 1 x 10^7 cells. For pelleted cells, loosen the cell pellet thoroughly by flicking the tube and add the appropriate volume of 500 µL Buffer RTL. For direct lysis of cells grown in a monolayer, add 500 µL Buffer RLT to the cell-culture dish. Pass the lysate at least 5 times through a blunt 20-gauge needle fitted to an RNase-Free Syringe.
- Animal Tissue : Do not use more than 20 mg Animal Tissue. Disruption and homogenization of sample, then add 600 µL Buffer RTL. After lysate and centrifuge at 14,000 x g for 3 mins at room temperature.
- Plant Tissue: Disrupt plant sample using liquid nitrogen. Transfer up to 50 mg of powder to 1.5 mL microcentrifuge tube and add 600 µL Buffer RTL. Vortex and centrifuge at 14,000 x g for 3 mins at room temperature.
- Yeast Cell: Collect 5 x 10^6 yeast cells, then add 300 mg 0.4-0.6 g Glass Beads and 600 µL RTL Lysis Buffer. Vortex at maximum speed for 10 mins. Centrifuge at 10,000 x g for 3 mins at room temperature.
- Bacterial Cell: Collect 1 x 10^8 bacterial cells, then add 300 mg 0.1-0.26 g Glass Beads and 600 µL RTL Lysis Buffer. Vortex at maximum speed for 10 mins. Centrifuge at 10,000 x g for 3 mins at room temperature.

Extraction

1. Transfer 500 µL of supernatant and 20 µL of Proteinase K carefully to sample plate containing Buffer MCB before place it at position 1 of Mpure-96™ aNAP System; Place the other reagent plates in the instrument according to the following table and run the instrument with program named "MagBead_RNA":

Step	Position	Process	Time (s)			Spin (rpm)	Temp (°C)
			Mix	Vapor	Collect		
1	2	MagBeads Preparation	0	0	30	0	RT
2	1	Bind	600	0	120	3000	RT
3	2	Wash 1	60	120	120	3000	RT
4	2	Dry	0	120	0	0	RT
5	3	DNase I digestion	900	0	150	3000	RT
6	3	Addition of Buffer MCB	300	0	150	3000	RT
7	4	Wash 2	180	0	150	3000	RT
8	5	Wash 3	180	0	150	3000	RT
9	5	Dry	0	600	0	0	RT
10	6	Elute	300	0	300	3000	55

2. Carefully add 450 µL Buffer MCB to the sample plate during dispense step and place it back to the instrument to continue the rest of the protocol.
3. Transfer clear purified RNA to a clean 96-well microplate (not provided). The eluent is now ready for downstream applications. Store purified RNA at -80°C for extended periods.

Note: If there are still Magnetic Beads remaining in eluent, please centrifuge at 14,000 x g for 3-5 mins and take the supernatant again.

Related DNA Extraction Instruments Order Information

Product	Package	Cat. No.
MPure-96™ aNAP System	1ea	07EMC044

Scan for detailed instruction manual

MP Biomedicals

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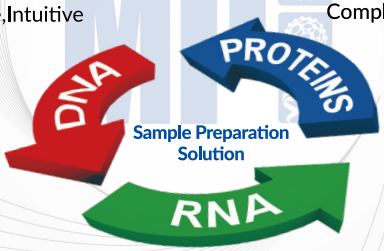

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