Bacterial RNA Extraction Kit (Magnetic Bead Method)

Cat No.: R2021

Package: 50T/100T

Storage: 2-8℃ (Note: Lysozyme in accessory form, -20℃; magnetic beads, 4℃, do not cold)

Component	50T	100T	Storage
Lysate	20mL	40mL	RT
Wash Buffer	10mL	10mL×2	RT
Elution Buffer	6mL	12mL	RT
Lysozyme	3mL	3mL×2	-20℃
Lysozyme Buffer	10mL	20mL	RT
Magnetic Bead	1mL×1	1mL×2	2-8℃，Do not freeze storage
EP Tube	50	100	RT
Instruction	1	1	-

Product description:

Magnetic beads method of bacterial RNA cassette, make the bacteria in the lysate (excluding Trizol, chloroform and other toxic reagents) after complete lysis, under the action of binding liquid, make the RNA and magnetic beads specifically identify and efficient combination, after rinsing, elution, under the action of external magnetic field force can separate RNA from the sample, without adding DNaseI enzyme can get clean RNA band. The extracted genomic RNA has a high A260/A280 ratio between 2.0 and 2.1, and is basically free of DNA and protein contamination. It can be applied to all kinds of molecular biology downstream experiments, suitable for Gram-negative bacteria.

Advantages:

Bacterial RNA extraction by magnetic bead method has incomparable advantages by traditional column method. Compared with the column method, the experimental time is greatly reduced, and the RNA can be extracted in 15-20 minutes. It has the advantages of simple operation, short time, safe and non-toxic, can complete automatic extraction and so on.

Operation steps (for reference only):

Please add absolute ethanol to the rinse solution before use, and refer to the label on the bottle body. (30mL of absolute ethanol in each bottle)

1、 1mL of fresh bacterial solution grown overnight with LB was added to a 1.5mL EP tube, centrifuged at 12000rpm for 1 min, and the supernatant was aspirated as far as possible.

2、 Add 200μL of lysozyme buffer, 50μL of lysozyme solution, and mix well at room temperature for 5min.

3、 Add 350μL of lysate, blow and mix with the pipette, and let at room temperature for 2min.

4、 Add 600μL of anhydrous ethanol and mix well with a pipette.

5、 20μL magnetic beads were added, mixed and let at room temperature for 5min. Place the EP tube in the magnetic frame for magnetic separation. After the magnetic beads are completely adsorbed in the magnetic frame, remove the supernatant, and remove the liquid as far as possible along the tube wall. Pay attention not to absorb the magnetic beads.

6、 Add 600μL of rinse (check for ethanol before use) and mix with a vortex oscillator. Place the centrifuge tube in the magnetic frame. After the magnetic beads are completely adsorbed to the

magnetic frame, remove the supernatant, and remove the liquid as far as possible along the tube wall. Pay attention not to absorb the magnetic beads.

7、 Repeat step 6.

8、 Open the lid of the centrifuge tube and dry it at room temperature for 1min to note that the drying time should not be too long, so that the RNA on the magnetic beads is not easy to elute.

9、 Add 40-100μL of the eluent, mix well, stand at room temperature for 5min, and place the centrifuge tube in the magnetic frame. After the magnetic beads are completely adsorbed in the magnetic frame, pump the solution along the wall into a new centrifuge tube (enzyme-free sterile EP tube for RNA). Be careful not to absorb the magnetic beads, the resulting solution is the purified RNA sample and stored in-20℃.

Note:

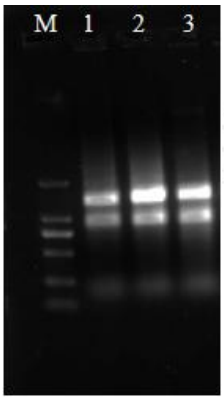
1、 The magnetic beads before use with a scroll oscillator.

2、 The magnetic beads were stored in a 4℃ refrigerator.

3、 Do not freeze the magnetic beads and leave them in a dry state.

4、 Samples should avoid repeated freezing and thawing, otherwise causing a decrease in extraction volume.

Experimental Result:



Lane	ng/μL	A260/A280
1	1959.1	2.08
2	2214.7	2.09
3	2312.8	2.11

Lane 1：BL21，Lane 2：DH5α，Lane 3：TOP10

M：DL2000

Experimental Result ： Amount of eluting fluid 40μL，Loading quantity of sample 1μL，Loading quantity of DL2000 1μL, Agarose at 1%, 6V / cm and electrophoresis for 30min.

Related products:

D1010 6× DNA Loading Buffer
T1060 50×TAE
M1060 D2000 DNA Ladder
G5580 10000×SolarBlue Nucleic Acid Dye
DM1100 Plasmid Small Extraction Kit (Magnetic Bead Method)
DM1300 DNA Product Purification Kit (Magnetic Bead Method)
DM1200 DNA Agarose Gel Recovery Kit (Magnetic Bead Met