Bacteria RNA Extraction Kit

Cat No.: R1210
Package: 50T/ 100T
Storage: Dry storage at room temperature (15℃-25℃), valid for 1 year.

Component	50T	100T
Lysate	15mL	30mL
Binding Buffer	11mL	22mL
Wash Buffer 1	15ml	30ml
Wash Buffer 2	6mL	12mL
Elution Buffer	5mL	10mL
Adsorption Column	50	100
Collection Tube	50	100

Note: Before use, please add isopropyl alcohol to the binding solution, add absolute ethanol to the rinse solution, and refer to the label on the bottle body. (50T/ 100T binding solution requires 24mL/ 48mL of isopropyl alcohol, 50T/ 100T bleach 1 requires 10mL/ 20mL of absolute ethanol per bottle, and 50T/ 100T bleach 2 requires 24mL/ 48mL of isopropyl alcohol per bottle)

Product Description:

The kit modified the classical guanidine isothiocyanate extraction of RNA. The modified lysate rapidly lysed cells, releasing RNA and inactivating RNase. The RNA was selectively adsorbed to the silicon matrix membrane in the centrifugal column at high ionizing salt, and impurities such as protein were further removed through a series of bleaching and centrifugation, and the RNA was eluted from the silicon matrix membrane by RNase-Free ddH_2O. The operation is quick and convenient, without toxic reagents such as phenol and chloroform.

Operation steps (for reference only):

Self-provided reagent: absolute ethanol, isoprol alcohol

1. Take 1mL of overnight bacterial culture (OD value not greater than 2.0), centrifuge at 4℃ 12000rpm for 2min, and remove the supernatant as far as possible.
2. Add 300μL of lysate to the centrifuge tube, beat and mix well, and place it in a 95℃ water bath for 5min.
3. Centrifuge at 4℃ 12000rpm for 5min and absorb the supernatant into another new EP tube (try to avoid the white transparent material at the bottom of the tube).
4. Add 700μL of binding solution to the centrifuge tube (check if isopropyl alcohol has been added before use) and mix well upside.
5. Note: At this time, white flocculent precipitation may appear, which is a normal phenomenon and does not affect the extraction of RNA.
6. Add 600ul of mixture (including sediment) to the adsorption column and stand for 1min. After centrifugation at 4℃ 12000rpm for 1min, the waste solution in the collecting tube was dumped and the adsorption column was put back into the collecting tube.

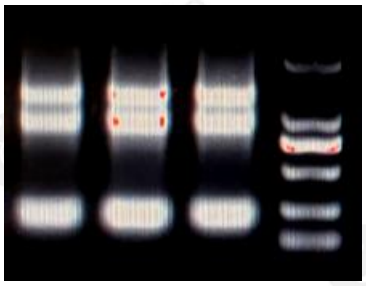
Note: Repeat step 5 with the remaining mixture

7. Add 500μL of rinse solution 1 to the adsorption column (check for absolute ethanol before use), centrifuge 4℃ 12000rpm for 1min, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube.
8. Add 600μL of rinse solution 2 to the adsorption column (check for absolute ethanol before use), centrifuge 4℃ 12000rpm for 1min, discard the waste liquid and put the adsorption column into the collection tube.
9. The solution was centrifuged at 4℃ 12000rpm for 2min to leaving the adsorption column open at room temperature for several minutes with the aim to remove the residual rinse solution from the adsorption column.
10. The adsorption column was placed in a clean centrifuge tube, and 30-100μL eluate was dropped to the center of the adsorption membrane, left at room temperature for 2min, and centrifuged at 4℃ 12000rpm for 2min. The RNA was deposited at-80℃.

Note:

1. All relevant consumables should be RNase-free products, which should be performed with masks and gloves to avoid the contamination of RNA enzymes in the environment.
2. And RNA OD values between 2.0 and 2.2.
3. Add the lysate and fasten the lid as soon as possible to minimize contact with the air.

Experimental Data:



	ng/uL	A260/A280
1	435.2	2.12
2	579.6	2.14
3	454.9	2.15

Note: 1mL DH5α overnight and eluted with 50μL RNase-free ddH2O.

Related Products:

R1600 DEPC
R1050 5×RNA Loading Buffer
M1010 10×MOPS Buffer
R1220 Whole blood RNA kit was extracted by column method
R1230 Plant RNA kit extraction by column method
R1240 Tissue RNA kit was extracted by column method
R1250 Cell RNA kit was extracted by column method