Tissue RNA extraction kit by column method

Cat No.: R1240

Package: 50T/100T

Storage: Store at room temperature for 1 year. (Dnase enzyme is shipped in accessory form and stored at -20℃).

Product formation

Kit composition	50T	100T	Save
Lysate	30mL	60mL	RT
Scrubbing solution	15mL	30mL	RT
Dnase enzyme	2.5mL	5mL	-20℃
Bleach wash solution	12mL	12mL×2	RT
Elution Buffer	5mL	10mL	RT
Adsorption column (including collection tube)	50	100	RT
Specification	1 part	1 part	-

Note: Please add anhydrous ethanol to the washing solution and bleaching solution before use. Please refer to the label on the bottle to add the volume (15mL/30mL anhydrous ethanol should be added to 50T/100T washing solution separately, and 48mL anhydrous ethanol should be added to each bottle of bleaching solution separately).

Product Introduction:

This kit has improved the classical method of extracting RNA by guanidine isothiocyanate. The modified lysate can rapidly lysate cells, release RNA and inactivate RNase at the same time. The RNA was selectively adsorbed on the silicon matrix membrane in the centrifuge column in the state of high disordered salt, and then the protein and other impurities were further removed by a series of rinsing and centrifugation steps, and finally the RNA was eluted from the silicon matrix membrane with RNase-Free ddH2O. This kit is quick and easy to operate, and it is safe to operate without the use of toxic reagents such as phenol and chloroform.

Operating steps

1、 Weigh about 25mg of tissue, add 600μL lysate to each tube, break with two small steel balls, and place in an ice bath for 5min after breaking.

2、 Add the broken mixture of step 1 into the adsorption column, centrifuge at 13000rpm at 4℃ for 3min, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube.

3、 Add 600μL washing liquid into the adsorption column (please check whether anhydrous ethanol has been added before use), centrifuge at 13000rpm at 4℃ for 2min, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube.

4、 Add 50μL Dnase enzyme to the adsorption column (directly add to the bottom of the white column) and let it stand for 10~15min.

5、 Add 600μL bleach solution to the adsorption column (check whether anhydrous ethanol has been added before use), centrifuge at 13000rpm at 4℃ for 2min, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube.

6、 Repeat Step 5.

7、 Vacuum at 13000rpm at 4℃ for 2 minutes, and leave the adsorption column open at room temperature for 3 minutes to remove excess ethanol.

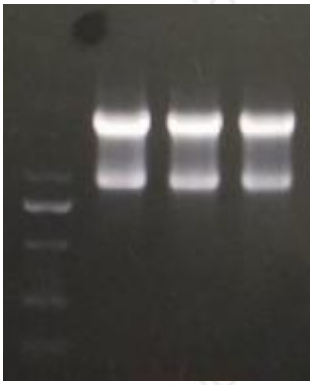
8、 The adsorption column was placed on a clean centrifuge tube, 30-100μL eluent was added to the adsorption

column, and the RNA solution was obtained by centrifugation at 13000rpm at room temperature for 2min, 4℃, and 1min. The RNA was stored at -80℃.

Note

1、 All related utensils consumables should be RNase-free products, the operation process should be careful, wear a mask, gloves to avoid RNA enzyme contamination of the environment sample.
2、 The volume of the eluent should not be less than 30μL, too little volume will affect the extraction efficiency, RNA products should be stored at -80℃ to prevent RNA degradation
3、 RNA concentration and purity detection: The extracted RNA fragments can be detected by agarose gel electrophoresis and ultraviolet spectrophotometer. The OD260/OD280 ratio should be 2.0-2.2.

Experimental data



	Concentration（ng/μL）	A260/A280
1	551.1	2.07
2	616.1	2.07
3	688.5	2.07

Note: 25mg mouse liver tissue samples were eluted with 50μL RNase-free ddH_2O.

Related products

R1600	*DEPC treating water*
R1050	*5×RNA Loading Buffer*
M1010	*10×MOPS buffer solution*
R1220	*Whole blood RNA extraction kit with column method*
R1230	*Column extraction kit for plant RNA*
R1250	*Cell RNA extraction kit with column method*

Note: For more information about this product, please refer to Solarbio website.