Cell RNA extraction kit with column method

Cat No.: R1250

Package: 50T/100T

Storage: Dry storage at room temperature (15℃-25℃), valid for 1 year. 2℃-8℃ storage time is longer.

Kit composition	50T	100T	Storage temperature
Lysate A	25mL	50mL	RT
Solution B	2.5mL	5mL	RT
Binding Buffer C	11mL	22mL	RT
RNA Elution Buffer	24.5mL	49mL	RT
Bleach solution 1	15mL	30mL	RT
Bleach solution 2	6mL	12mL	RT
Elution Buffer	5mL	10mL	RT
Adsorption column	100	200	RT
2ml collecting pipe	100	200	RT
Specification	1 part	1 part	

Note: Before use, please add isopropyl alcohol to the bonding solution and anhydrous ethanol to the bleach solution. Please refer to the label on the bottle to add the volume. (Attention: Before use, please add isopropanol to the binding solution and anhydrous ethanol to the rinsing solution. The volume of addition should refer to the label on the bottle (24mL/48mL isopropanol should be added separately for 50T/100T binding solution, 0.5mL/1mL anhydrous ethanol should be added separately for RNA elution solution, 48mL anhydrous ethanol should be added separately for each bottle of rinsing solution, 10mL/20mL anhydrous ethanol should be added separately for rinsing solution 1, and 24mL/48mL anhydrous ethanol should be added separately for rinsing solution 2).

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 ddH_2O. 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、 Take 1*$10^{6\sim7}$ cells, add 500μL lysate A into each tube, add 50μL solution B into the tube, blow and mix well with a pipette, and place them for 5min.

2、 Add 700μL of binding liquid C into the centrifuge tube (please check whether isopropyl alcohol has been added before use) and mix thoroughly upside down.

3、 Add 600μL mixture into the adsorption column and let it stand for 1min. Centrifuge at 12000rpm at 4 ° C for 1min, dump the waste liquid in the collection tube, and put the adsorption column back into the collection tube (the collection tube is left for step 5).

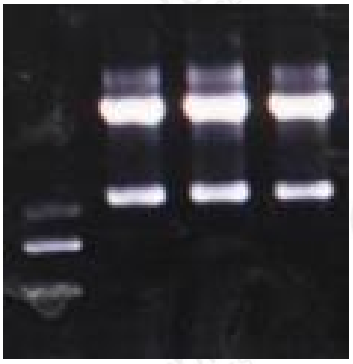
Note: Due to the large volume, it is necessary to fill the column twice, and then repeat step 3 for the remaining mixture

4、 Put the adsorption column on a new clean 2mL collection tube, add 500μL RNA eluent into the adsorption column, centrifuge at 12000rpm at 4℃ for 2min, collect the filtrate, and throw away the adsorption column.
5、 Add 700μL of binding liquid into the filtrate, mix it well with a pipette and add it into a new adsorption column (using the collection pipe in Step 3), centrifuge at 12000rpm for 2min at 4℃, and discard the filtrate.
Note: Due to the large volume, it is necessary to fill the column twice, and then repeat step 5 with the remaining mixture
6、 Add 600μL bleach solution 1 (please confirm whether anhydrous ethanol has been added before use) into the centrifuge tube, let it stand for 1min, centrifuge at 12000rpm at 4℃ for 1min, and discard the filtrate.
7、 Add 600μL bleach solution 2 into the centrifugal tube (please confirm whether anhydrous ethanol has been added before use), centrifuge at 12000rpm for 1min at 4℃, and discard the filtrate.
8、 Centrifuge at 12000rpm for 2min at 4℃, and leave the adsorption column open at room temperature for 3min to remove excess ethanol.
9、 The adsorption column was placed on a clean centrifuge tube, and 30-100μL eluent was added to the adsorption column. The adsorption column was placed at room temperature for 2min, centrifuged at 12000rpm for 2min, and the RNA solution was obtained. 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 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.

Data：



	Concentration（ng/ul）	A260/A280
1	181.2	2.08
2	209.4	2.09
3	171.7	2.07

Note: 10^6 cell 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*
R1240	*Tissue RNA extraction kit by column method*

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