

Spin HiPure Fast Plant RNA Mini Kit

Cat No.: R2070

Size: 50T

Storage: At RT for 12 months, RNase-free DNase should be stored at 4°C.

Product Description

This kit adopts unique lysis system, need not to use toxic reagent such as beta-mercaptoethanol, phenol, trichloromethane, suitable for RNA extraction of all kinds of plant tissue materials(such as leaves, stems, seedling). It can extract RNA with more than 200nt molecular weight effectively and easy to operate. Plant RNA extracted from this kit has the characteristics of high purity, less protein, less genomic DNA and less impurities contamination. It can be directly used in downstream experiments such as RT-PCR, Northern blot, Real Time PCR and construction of cDNA library.

Component of Product

Component	Amount	Note
Lysis Buffer	30ml	
Washing Buffer 1 (WB1)	40ml	
Washing Buffer 2 (WB2)	12ml	Add absolute ethanol according to the bottle label before using.
RNase-free DNase (2000 U)	1(bottle)	Stored at 4°C
Membrane Reaction Solution	4ml	
RNase-free ddH ₂ O (tube)	1ml	
RNase-free ddH ₂ O (bottle)	15ml	
RNase-free Injector	1(pcs)	
Filter Column	50pcs	
Adsorption Column	50pcs	Sealed in dry environment
2ml Collection Tube	2*50pcs	
1.5ml RNase-free Centrifuge Tube	50pcs	

Experiment Preparation

1. Preparation of RNase-free DNase mother liquid: extract 550ul RNase-free ddH₂O by using 1ml RNase-free injector, add it in glass bottle with RNase-free DNase (2000U) powder, mix gently, store it at -20°C after subpackage(it can be stored for 9 months).

Note: RNase-free DNase can be stored for 6 weeks once its taken -20°C to 4°C. Do not freeze it again.

2. Add absolute ethanol in Washing Buffer 2 (WB2) according to the bottle label before using, and mark it.

Protocol

1. Add 450ul lysis buffer to 1.5ml RNase-free Centrifuge Tube.
2. Add the sample powder(50-100mg) after grinding with liquid nitrogen to 1.5ml RNase-free Centrifuge Tube which contains 450ul lysis buffer, vortex violently and mix thoroughly until there is no significant precipitation in lysis buffer.
Note: It's useful for plant tissue lysis after incubating at 60°C for 1-3min, but do not heat the starch-rich sample to prevent inflating.
3. Put filter column into collection tube, then transfer all reagents from step 2 to the filter column, centrifuge at 12000rpm for 5min, transfer filtrate from collection tube to a new 1.5ml RNase-free centrifuge tube carefully. Try to avoid touching the precipitate of cell debris in collection tube.
Note: Because the lysis buffer is viscous, transfer solution to the filter column with the tips cut off the end.
4. Add a half volume of the filtrate absolute ethanol, reverse and mix thoroughly(it may appear precipitate), transfer the solution and precipitate to adsorption column(adsorption column is placed in collection tube), centrifuge at 12000rpm for 30 seconds, remove the waste solution in the collection tube, put adsorption column into collection tube.
5. Add 350ul washing buffer 1(WB 1) to adsorption column, centrifuge at 12000rpm for 30 seconds, remove the waste solution in the collection tube, put adsorption column into collection tube.
6. Preparation of RNase-free DNase working solution: add 10ul RNase-free DNase mother liquid into a new RNase-free centrifuge tube, add 70ul membrane reaction solution, mix it gently.
Note: RNase-free DNase can be stored for 6 weeks once its taken -20°C to 4°C. Avoid freeze/thaw cycles.
7. Add 80ul RNase-free DNase working solution to the middle of the adsorption column, place it at room temperature for 15 min.
8. Add 350ul washing buffer 1(WB 1) to adsorption column, centrifuge at 12000rpm for 30 seconds, remove the waste solution in the collection tube, put adsorption column into collection tube.
9. Add 500ul washing buffer 2(WB 2) to adsorption column (please check if absolute ethanol has been added), centrifuge at 12000rpm for 30 seconds, remove the waste solution in the collection tube, put adsorption column into collection tube.
10. Operate the step 9 again.
11. Put adsorption column into collection tube, centrifuge at 12000rpm for 3min, this step is important, the residual ethanol(ingredient in washing buffer 2)will affect the RNA.
12. Put adsorption column into a new 1.5ml RNase-free centrifuge tube, add 50-100ul RNase-free ddH₂O, place at room temperature for 1-2 min, centrifuge at 12000 rpm for 1 min to get RNA solution. RNA solution should be used immediately or stored at -80°C after subpackage.

Note

1. This product is intended for scientific research use only. Do not use it for medical, clinical diagnosis, treatment, food and cosmetic. Do not store it in ordinary residential area.
2. For your safety and health, please wear the experiment clothes, mask and disposable gloves.

Related Product

R2040	Spin HiPure Small RNA Kit
R2010	Spin HiPure Animal RNA Mini Kit
R2060	Spin HiPure Plant RNA Mini Kit(Polysaccharide & Polyphenol-rich)
R2070	Spin HiPure Fast Plant RNA Mini Kit