

## Plant Ribosome Extraction Kit - non-enzymatic method

**Item No. :** EX2721

**Specification:** 50T/100T

**Validity:** 2-8°C storage, valid for one year.

### Product content:

Name	50T	100T	Storage conditions
Component A: Plant ribosome extract A	100mL	200mL	Store at 2-8°C
Component B: Plant ribosome extract B	25mL	50mL	Store at 2-8°C
Component C: Plant ribosome preservation solution C	20mL	40mL	Store at 2-8°C

### Note:

1. The extract is stored at -20°C when not used for a long time.
2. Please use the reagent as soon as possible after unpacking!

### Product Introduction:

Plant ribosome extraction kit with a simple and rapid method can quickly extract plant ribosome. This kit extracted the true karyotype ribosome.

This kit is suitable for extracting ribosomes from fresh plant leaf samples, and the ribosome recovery rate is low when it is used for extracting frozen samples.

The ribosome extracted by this extraction kit has biological activity and can be used in various downstream applications such as ribosome function research and ribosome protein extraction.

This kit adopts non-enzymatic rapid extraction method, which can quickly extract ribosome within one hour, but the recovery rate is slightly lower than that of enzymatic ribosome extraction kit. The recovery rate of ribosome extracted by enzymatic method will be increased, but it takes a long time. Please select the kit according to your different needs.

### Bring your own reagents and instruments:

Centrifuge, oscillator, homogenizer, vortex mixer, pipette, refrigerator, ice box, PBS buffer, centrifuge tube, suction head, disposable gloves

### How to use:

#### First, use precautions:

1. Before the formal experiment, please select several samples to do pre-experiment, in order to optimize the experimental conditions and achieve the best experimental results
2. Centrifuge the reagent in the screw cap microreagent tube briefly before opening the cap, and centrifuge the liquid on the cap and inside wall to the bottom of the tube to avoid reagent loss when opening the cap.
3. All reagents in the process of the experiment must be pre-cooled; All utensils must be pre-cooled in a -20°C refrigerator. The sample must be kept at a low temperature during the whole process.

#### 2. Ribosome extraction from plant tissue:

1. Take 500mg-1g fresh plant sample leaves, wash and dry them, and remove the leaves and thick veins. Use surgical scissors to cut up as much as possible.

- 2 Add 2mL of reagent A and fully homogenize with a homogenizer/homogenizer/tissue crusher.
- 3 Strain the homogenate through a 100µm cell screen.
4. Centrifuge the filtrate at 500×g for 5 minutes, discard the precipitation, and collect the supernatant.
5. Centrifuge the supernatant at 1000×g for 10 minutes, discard the precipitation and collect the supernatant.
6. Add 0.5mL extract solution B to the supernatant and mix thoroughly.
7. Set the oscillator to oscillate for 20 minutes.
8. Centrifuge at 2000×g for 5 min. Discard the precipitation and collect the supernatant.
- 9 Centrifuge the supernatant at 5000×g for 5 minutes. Discard the precipitation and collect the supernatant.
10. Centrifuge the supernatant at 10000×g for 10 minutes. Discard the precipitation and collect the supernatant.
11. Centrifuge the supernatant at 100000×g at 4°C for 60min. Discard the supernatant and collect the precipitation.
12. Discard supernatant, precipitation is ribosome.
13. Resuspend the ribosome with 400µL ribosome preservation solution C or other corresponding buffer solution, put it in the refrigerator or directly use it for downstream experiment.

**Points for attention:**

1. This kit is intended for scientific research only and is not intended for diagnosis or treatment.
2. It is best to use disposable suction heads, tubes, bottles, or glassware, and reusable glassware must be washed and thoroughly removed of residual cleaners before use.
3. All samples and exposed glassware should be disposed of in accordance with the prescribed procedure after the experiment is completed.
4. Avoid skin or mucous membranes coming into contact with the reagent.
5. If the reagent accidentally comes into contact with skin or eyes, it should be rinsed with water immediately.