

Body Protein Extraction Kit

Article number: EX2353

Specification: 50T/100T

Store: 2-8°C (Store at 2-8°C before using protease inhibitor without lid, store at -20°C after using lid)

Product contents:

Kit composition	50T	100T	Save
Solution A	55mL	110mL	2-8°C
Solution B	28mL	55mL	2-8°C
Solution C	9mL	18mL	2-8°C
Chloroplast protein extract D	12mL	24mL	2-8°C
Protease inhibitor mixture	100μL	100μL×2	-20°C
Instructions	1 set	1 set	

Product description:

Chloroplast is the unique energy conversion organelle of plant cells, photosynthesis is carried out in chloroplast, because of this important function, so chloroplast has been an important research object in cell biology, genetics and molecular biology. This kit is suitable for the extraction of chloroplasts from different fresh plant samples. When it is used for the extraction of frozen samples, most of the chloroplasts are destroyed in the frozen storage process, and the chloroplast recovery is low. This kit can also extract chloroplast proteins from various plant samples, and the extraction process is simple, and high quality chloroplast proteins can be extracted.

Operation steps:

1. Weigh about 200 mg of fresh plant sample leaves, wash and dry them, remove the leaves and thick veins, cut as much as possible with surgical scissors and put them into a centrifugal tube.
2. Add 1mL solution A into the centrifuge tube, fully homogenize with a homogenizer/glass homogenizer, and filter the homogenate through a 100μm cell screen. (If there is no cell sieve can expand the amount of plant sample and solution A, filter with 8 layers of gauze or centrifuge at 4°C, 100×g for 1min, discard the large tissue block and precipitation, take the solution part, because some plant samples after grinding the viscosity is large, the solution part is less, you can do a few more tubes to combine the solution part)

Note: When adding solution A to the sample, add 100μL solution C to every 1mL solution A.

3. Centrifuge the solution part at 4°C, 200×g for 2min, discard the precipitation, and collect the supernatant.

4. Centrifuge the supernatant at 4°C and 3500×g for 20min, discard the supernatant and collect the precipitation.

5. The precipitation was suspended with 500μL solution B, centrifuged at 4°C, 3500×g, for 20min, the supernatant was discarded, and the precipitation was collected.

Note: When adding solution B to the sample, add 100μL solution C for every 1mL solution B.

6. Add 50-200μL chloroplast protein extraction solution D to the precipitation, mix well, and leave for 30min at 4°C.

Note: 200μL chloroplast protein extract D was mixed with 2μL protease inhibitor mixture before use.

The chloroplast protein samples were obtained by centrifugation for 10min at 7.4°C, 10000-14000×g.

Precautions:

1. Chloroplasts are highly sensitive to temperature, so the whole operation must be carried out on ice or in a cold chamber, the utensils and solutions used need to be pre-cooled at 4°C, and the centrifugation must be carried out at 4°C.
2. Screw cap micro reagent tube reagent before opening the lid, please centrifuge the lid and the

liquid on the inner wall to the bottom of the tube to avoid reagent loss when opening the lid.

3. Protease inhibitor mixture and PMSF need to be mixed when using, if the kit can not be used up in a short time, protease inhibitor mixture and PMSF can not be added to the extraction solution at one time.

4. This kit is for scientific research use only and is not intended for diagnosis or treatment.

Related products:

R0020 Normal RIPA Lysate (tissue/cell)

PR1910 Rainbow 180 Broad Spectrum Protein Marker (11-180KD)

PC0020 BCA protein concentration determination kit

P1020 1 x PBS Buffer (pH7.2-7.4)

P10405 5 x Protein Loading buffer (including DTT)