

# **Phosphorylated Protein Extraction Kit**

**Cat:** BC3730 **Size:** 50T/100T

Validity: At least 1 year.

## **Kit Components:**

Kit Components	50T	100T	Storage
Lysate	50mL	100mL	2-8°C
Phosphatase inhibitors(100×)	0.5mL	1mL	
Protease inhibitor(100×)	0.5mL	1mL	-20°C
PMSF(100×)	0.5mL	1mL	

### **Introduction:**

This kit is used to extract cytoplasmic protein from mammalian tissues and cells. The lysate in the kit contains protease inhibitors and phosphatase inhibitors, which have a strong effect and can obtain total protein. It can be used for basic research experiments such as western blot experiments. This product is only used for scientific research.

#### **Protocols(only for reference):**

Add  $10\mu L$  each of phosphatase inhibitor, protease inhibitor and PMSF to 1mL cold lysate; Mix well and place on ice for later use;

- 1. Extraction of tissue total protein
- 1) Weigh 0.1g fresh tissue and place it at the inlet buffer of the glass homogenizer. Cut the tissue blocks as much as possible with ophthalmic scissors, then add 0.5-1mL newly configured lysate and grind until there are no obvious tissue blocks. This process should pay attention to the operation on the ice;
- 2) Transfer the tissue homogenate into 1.5mL EP tube and centrifuge at 4°C at 12000g for 30min;
- 3) Absorb the supernatant into the new tube;
- 4) And carry out protein quantification or denaturation for protein experiments.

(The extracted protein is recommended to be stored at -80°C, ready to use, to avoid repeated freezing and thawing, to avoid long-term storage.)

- 2. Extraction of total cell protein
- 1) The amount of lysate:  $10^7$  cells need lysate 1mL;
- 2) Adherent cells: discard the medium, wash twice with cold PBS, discard PBS, and then add the calculated cell lysate; Scrape the cells off with a cell scraper on the ice, transfer the scraped cell lysate into the EP tube, reverse cleavage for 20-30min.
- 3) Suspension cells: Centrifuge cells at 4°C, 400g, wash the cells twice with cold PBS, add the lysate again according to the number of cells, swirl for 10s, place on ice for cleavage for 10min, repeat 3-4 times;



- 4) After the lysis, centrifuge the cell lysate at 4°C, 12000g for 30min;
- 5) Transfer the supernatant into a new EP tube; Protein quantification or denaturation was performed for protein experiment.

(The extracted protein is recommended to be stored at -80  $^{\circ}$ C, ready to use, to avoid repeated freezing and thawing, to avoid long-term storage.)

#### **Notes:**

- 1. During the experiment, all reagents need to be pre-cooled or melted to ensure the low temperature environment during the operation.
- 2. PSMF (toxic) can be added as soon as possible because PMSF degrades rapidly in aqueous solution.