# **Elabscience**®

### Lysis Buffer

Cat. No.: E-IR-IP004

Cat	Product	50 mL	100 mL	Storage
E-IR-IP004	Lysis Buffer	50 mL	100 mL	4°C

Size: 50 mL/ 100 mL

#### Introduction

This product is a gentler lysis buffer that can be used to lyse cell under non-denaturing conditions to prepare protein samples. Cell samples lysed in this lysis buffer can be used for WB, IP, CoIP, and ELISA.

#### Instructions

Note: All steps must be performed on ice as much as possible to avoid degradation of the target protein.

Preparation of cell lysate

1. Collecting cells

Blow the suspended cells and semi-adherent cells off the cell culture flask and transfer them into a centrifuge tube, centrifuge at 1000 rpm for 5 min, and discard the supernatant. Gently scrape the adherent cells off the bottle wall with a cell scraper,transfer them into a centrifuge tube together with the culture medium,centrifuge at 1000 rpm for 5 min, and discard the supernatant.

2. Re-suspend the cells with  $1 \times PBS$  pre-cooled at 4°C, centrifugeat 1000 rpm for 3 min, and discard the supernatant. Repeat.

3. Add the corresponding volume of lysis buffer according to the number of cells, and place on the ice for 10-20 min after repeated blowing.

Note: Generally, 1 mL of cell lysis buffer can process about  $0.5 \times 10^7 - 1 \times 10^7$  cells. To avoid degradation of that target protein, you may add protease inhibitors or phosphatase inhibitors.

4. Treat cell lysate with ultrasonic crusher (under ice bath conditions) until cell lysate is clear and no longer viscous. After cooling in ice water, centrifuge at 12000 rpm for 10 min at 4°C. Take out the supernatant and freeze at -80 °C.

Note: If an ultrasonic breaker is not available, a pipette tip or syringe with a beveled tip can be used to pipette repeatedly until the cell lysate is transparent and no longer viscous.

5. If the target protein is secreted and expressed, the above treatment is not required, and the supernatant of the medium is directly collected, and the subsequent steps can be carried out after concentration. If the target protein content is high, it is recommended to dilute to the recommended concentration in subsequent experiments.

### Storage

Store at 4°C for 12 months.

### Cautions

- 1. This product is limited to the scientific research use of professionals and should not be used for clinical diagnosis or treatment.
- 2. This product is a formula that has been repeatedly optimized for a long time and has been verified by a large number of experiments. This product can only be used with the accompanying kits (EA-IP-K006, EA-IP-K007, EA-IP-K007M, EA-IP-K009, EA-IP-K010), and cannot be used alone. Reagents provided by other manufacturers may affect protein purification or subsequent experimental results.

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- 3. The conditions recommended in this manual are universal, and users can optimize the experimental conditions and select the most suitable experimental protocol according to the properties of different target proteins.
- 4. For your safety and health, please wear lab coats and disposable gloves to operate, and follow the laboratory reagent operation specifications.

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