RIPA Lysis Buffer (weak)

Basic Information

Cat.NO	Size	Form	Storage	Transportation	Shelf
RC0162	100ml	liquid	2-8˚C	Ice pack	12 months

Product Introduction

RIPA Lysis Buffer is a conventional rapid lysis buffer for cells and tissues. RIPA (Radio Immunoprecipitation Assay) Lysis Buffer has many formulations, which are mainly divided into strong, medium, and weak types according to their lysis efficiency. Protein samples extracted from tissues and cells using weak RIPA Lysis Buffer can be used for Western Blot, IP, Co-IP and ELISA. The main components of this product include:50 mM Tris-HCl (pH 7.4), 150 mM NaCl, 1 mM EDTA-2Na, 0.25% sodium deoxycholate, and 1% NP-40. This product is suitable for animal or plant tissue and cell samples, and can also be used for fungal or bacterial samples.

Instructions for use

Protease inhibitors must be provided by the customer. RIPA lysis buffer (weak) requires the addition of protease inhibitors just before use; different protease inhibitors should be added depending on the sample to prevent protein degradation.

For tissue samples:

1. Wash the tissue block with pre-cooled PBS to remove blood stains, cut it into small pieces and place it in a homogenizer.
2. Add 10 times the tissue volume of RIPA lysis buffer (weak) and homogenize at low

temperature.

Note: The amount of RIPA lysis buffer (weak) used can be added at a ratio of approximately 50 mg tissue to 1 mL of lysis buffer. If the tissue protein content is low, the amount of lysis buffer can be reduced to increase the protein concentration in the crude extract solution.

3. Transfer the homogenate to a 1.5 mL centrifuge tube and vortex. Incubate on ice for 30 min, repeatedly pipetting every 10 min to ensure complete lysis of the tissue cells;
4. Centrifuge at 12000 g for 5 min, collect the supernatant, which is the total protein solution.

For adherent cell samples:

1. Wash the cells 2-3 times with PBS, and thoroughly aspirate any remaining solution on the last wash.
2. Pipette RIPA lysis buffer (weak) into the cell culture plate or flask at a ratio of 250 μL of lysis buffer per well in a 6-well plate. Shake the plate or flask repeatedly to ensure that the lysis buffer is in full contact with the cells for 3-5 minutes.
3. Use a cell scraper to scrape off the cells and collect them into centrifuge tubes.
4. On ice, lyse for 30 min.
5. Centrifuge at 12000 g for 5 min, collect the supernatant, which is the total protein solution.

For suspended cell samples:

1. Collect cells by centrifugation.
2. Mix the cell suspension with RIPA lysis buffer (weak) at a ratio of 250 μL of lysis buffer per well in a 6-well plate and shake.
3. Incubate on ice for 30 minutes, and repeatedly pipette the cells several times every 10 minutes to ensure complete cell lysis.
4. Centrifuge at 12000 g for 5 min, collect the supernatant, which is the total protein solution.

For bacterial or fungal samples:

1. Take 1 mL of bacterial suspension, centrifuge to remove the supernatant, wash once with PBS to thoroughly remove liquid. Vortex to disperse the bacteria as much as possible.
2. Add 100-200 μL of RIPA lysis buffer (weak), and gently vortex to thoroughly mix the bacteria with the lysis buffer .
3. Incubate on ice for 10 minutes, during which time the liquid is repeatedly pipetted several times every 2 minutes to ensure complete lysis of the bacteria.
4. Centrifuge at 12000 g for 5 min, collect the supernatant, which is the total protein solution.

Precautions

1. Tissue or cell lysis may result in a viscous consistency. Use a pipette to repeatedly pipette or vortex until it becomes liquid. If it remains viscous, add an appropriate amount of lysis buffer.
2. This reagent does not contain protease inhibitors; you must prepare your own protease inhibitors and add them just before use.
3. Please wear a lab coat and disposable gloves when operating.
4. This product is for research purposes only and is not intended for clinical diagnosis or treatment.