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**Product No. 22352**

# Cell Lysis Buffer

## Features

- Ready-to-use solution.
- Among the most reliable buffers used for lysing cultured mammalian cells.
- The preservatives used in Cell Lysis Buffer do not affect the antigen–antibody interaction or protein extraction.

## Composition

50 mmol/L Tris-HCl Buffer (pH 7.6), 150 mmol/L NaCl, 1% CHAPS, 0.5% sodium deoxycholate, 0.1% SDS, preservative

## Protocol

A) For suspension cells

1. Remove the medium from cultured cells and wash them twice with cold D-PBS (−).
2. Remove D-PBS (−), add Cell Lysis Buffer to the cell pellet, and vortex (add Cell Lysis Buffer at 0.5–5.0 × $10^7$ cells/1 mL Cell Lysis Buffer).
3. Fragment the DNA by passing the lysed suspension through a needle (21 gauge) attached to a syringe (this step can be skipped, but the protein yield may be increased through DNA fragmentation).
4. Incubate the samples for 15 min on ice (to increase the yield, extend the incubation period).
5. Centrifuge at 10,000 x*g* and 4°C for 10 min.
6. Transfer the supernatant containing the total protein extracts to a new tube for further analysis.

B) For adherent cells

1. Remove the medium from cultured cells and wash them twice with cold D-PBS (−).
2. Add Cell Lysis Buffer to a culture dish and stir slowly for 5 min (add Cell Lysis Buffer at 0.5–5.0 × $10^7$ cells/1 mL Cell Lysis Buffer).
3. Fully scrape the cells using a cell scraper.
4. Transfer the lysate and pellet to a new tube.
5. Wash the culture dish with 400 µL of Cell Lysis Buffer and pool the solution in a collection tube.
6. Fragment the DNA by passing the lysed suspension through a needle (21 gauge) attached to a syringe (this step can be skipped, but the protein yield may be increased by DNA fragmentation).
7. Incubate the samples for 15 min on ice (to increase the yield, extend the incubation period).
8. Centrifuge at 10,000 ×*g* and 4°C for 10 min.
9. Transfer the supernatant containing the total protein extracts to a new tube for further analysis.

C) For tissue

1. Chop the tissue into pieces using a scalpel.
2. Add 3 mL of Cell Lysis Buffer to 1 g of tissue on ice.
3. Homogenize the tissue on ice.
4. Incubate the samples for 0.5–1.0 h on ice.
5. Centrifuge at 10,000 ×*g* and 4°C for 10 min.
6. Transfer the supernatant containing the total protein extracts to new tube for further analysis.

## Attention

- If highly viscous substances appear during protein extraction, either increase the amount of Cell Lysis Buffer or pass the lysed suspension through a needle (21 gauge) attached to a syringe 5–10 times.
- Add Protease Inhibitor Cocktail or Phosphatase Inhibitor Cocktail to Cell Lysis Buffer as necessary.

## Storage

Storage temperature is stated on the product label.

## Expiration

Expiration date is stated on the product label.

## Packing

100 mL (Product No. 22352-04)



For research use only,
not intended for diagnostic or clinical use.

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