

Gold Lysis Buffer (Protein Extraction Buffer)

CAT NO.: APL-GLB500

DESCRIPTION

Gold Lysis Buffer is one of the most reliable buffers used to lyse cultured mammalian cells from both plated cells and cells pelleted from suspension cultures.

CONTENT

	APL-GLB500 (500 mL)
TritonX-100	1 %
Tris	30 mM
Sodium Chloride	137 mM
Glycerol	15 %
EDTA	5 mM
pH	7.4

STORAGE

Stored at RT. Once opened and recapped, place container in a low humidity environment at the same storage temperature. Protect from moisture and light by keeping container tightly closed.

APPLICATION

This buffer enables protein extraction from cytoplasmic, membrane and nuclear proteins and is compatible with many applications, including reporter assays, protein assays, immunoassays and protein purification.

PROCEDURE

Note: If desired, add protease and phosphatase inhibitors to the Gold Lysis Buffer immediately before use.

1. Carefully remove (decant) culture medium from adherent cells.

Suspension cells: Collect cells by centrifugation at $2500 \times g$ for 5 minutes. Discard the supernatant.

2. Wash cells twice with cold PBS.

Suspension cells: Wash cells twice in cold PBS. Collect cells by centrifugation at $2500 \times g$ for 5 minutes.

3. Add cold Gold Lysis Buffer to the cells. Use 1 mL of buffer per 75 cm² flask containing 5×10^6 HeLa or A431 cells. Keep on ice for 5 minutes, swirling the plate occasionally for uniform spreading.

Suspension cells: Add Gold Lysis Buffer to the cell pellet. Use 1 mL of Gold Lysis Buffer for 40 mg ($\sim 5 \times 10^6$ of HeLa cells) of wet cell pellet. Pipette the mixture up and down to suspend the pellet.

4. Gather the lysate to one side using a cell scraper, collect the lysate and transfer to a microcentrifuge tube. Centrifuge samples at $\sim 14,000 \times g$ for 15 minutes to collect the cell debris.

NOTE: To increase yields, sonicate the pellet for 30 seconds with 50% pulse.

5. Transfer supernatant to a new tube for further analysis.

PRODUCT USE LIMITATION

Research use only.