Datasheet for ABIN5706373
RIPA Lysis Buffer

Overview

Quantity: 15 mL
Application: Immunoprecipitation (IP), Western Blotting (WB)

Product Details

Purification: This product was aseptically filtered through a Millipore 0.22 micron filter into clean, pre-sterilized containers. The product was tested on tryptase soy agar for 24 hours, 48 hours and 72 hours and was found to be negative for bacteria.

Sterility: Aseptic filtered

Application Details

Application Notes: Application Note: This product is 10X concentrated stock solution. Dilute to 1X prior to use. 1X RIPA Lysis Buffer is intended for the extraction of cellular proteins for the efficient lysis of cells and solubilization of protein, while minimizing protein degradation and maintaining protein immunoreactivity and biological activity. We recommend using 1.0 mL of RIPA Lysis Buffer to lyse 0.5 to 5 x 10^7 adherent mammalian cells. This buffer contains ionic detergents and may not be suitable for kinase enzymes, if these enzymes are easily denatured. Do not add phosphatase inhibitors when preparing lysates for phosphatase assays. 1X RIPA lysis buffer consists of 50 mM Tris HCl, 150 mM NaCl, 1.0 % (v/v) NP-40, 0.5 % (w/v) Sodium Deoxycholate, 1.0 mM EDTA, 0.1 % (w/v) SDS and 0.01 % (w/v) sodium azide at a pH of 7.4. This buffer was meticulously prepared using ultra pure reagents dissolved in highly polished pharmaceutical grade deionized water. Protease and phosphatase inhibitors are recommended but not included in product composition. Recommended final concentrations of protease inhibitors: 1.0 mM Phenylmethylsulfonyl fluoride (PMSF) 10 μM Leupeptin 0.1 μM Aprotinin 1.0 μM Pepstatin
Recommended final concentrations of phosphatase inhibitors: 1.0 mM Na3VO4 1.0 mM NaF
Application Details

Western Blot Dilution: User Optimized
Immunoprecipitation Dilution: User Optimized

Comment: Synonyms: 10X RIPA Lysis Buffer, RIPA (Radio-Immunoprecipitation Assay) Lysis Buffer
Background: RIPA (Radio-Immunoprecipitation Assay) Lysis Buffer enables rapid, efficient cell lysis and solubilization of proteins from both adherent and suspension cultured mammalian cells. It has long been a widely used lysis and wash buffer for small-scale affinity pull-down applications, such as immunoprecipitation, since most antibodies and protein antigens are not adversely affected by the components of this buffer. In addition, RIPA Lysis Buffer minimizes non-specific protein-binding interactions to keep background low, while allowing most specific interactions to occur, enabling studies of relevant protein-protein interactions. The following RIPA Lysis Buffer components have the following effects: Tris-HCl is a buffering agent prevents protein denaturation, NaCl is a salt that prevents non-specific protein aggregation, NP-40 is a non-ionic detergent to extract proteins, Na-deoxycholate and SDS are ionic detergents to extract proteins, and sodium azide is a bacteriostatic agent added to retard bacterial growth. RIPA Lysis Buffer is supplied as a ready-to-use solution that requires no preparation. We suggest that the user add protease and phosphatase inhibitors not included with this product prior to use.

Restrictions: For Research Use only

Handling

Format: Liquid
Concentration: 10 X
Buffer: Buffer: See application note.
Stabilizer: None
Preservative: Sodium azide
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage: RT
Expiry Date: 6 months