

Proteoloc™ Protease Inhibitor Cocktail USE AND STORAGE INSTRUCTIONS

INTRODUCTION

Protease inhibitors protect proteins from undesirable cleavage by endogenous proteases liberated during extraction. Proteoloc Protease Inhibitor Cocktail protects protein extracts from aminopeptidases, metalloproteases, and serine, cysteine, and aspartic acid proteases. Proteoloc Protease Inhibitor Cocktail is supplied as a 100X stock solution of protease inhibitors dissolved in DMSO and a 100X stock solution of EDTA dissolved in water, pH 8.0.

USAGE GUIDELINES

- Proteoloc Protease Inhibitor Cocktail is a general-purpose reagent suitable for protease inhibition during protein extraction from mammalian tissues and cells, yeast and fungal cells, and bacteria.
- Protein Discovery recommends the use of Proteoloc Protease Inhibitor Cocktail during the extraction phase of protein sample preparation prior to fractionation using the Gelfree® Fractionation System.
- Proteoloc Protease Inhibitor Cocktail contains the chelating agent EDTA for improved protection against metalloproteases. It should therefore not be added to samples intended for subsequent analysis by techniques that are incompatible with EDTA, such as isoelectric focusing and metal affinity column separations. For these applications, use Proteoloc Protease Inhibitor Cocktail EDTA-free.
- For Research Use Only.

COMPOSITION

Proteoloc Protease Inhibitor Cocktail contains the following protease inhibitors:

- AEBSF: Irreversible serine protease inhibitor. Inhibits chymotrypsin, kallikrein, plasmin, thrombin, and trypsin.
- Aprotinin: Reversible serine protease inhibitor. Inhibits chymotrypsin, kallikrein, plasmin, trypsinogen, and urokinase.
- Bestatin: Metalloprotease inhibitor selective for aminopeptidases. Inhibits activity of leucine aminopeptidase, aminopeptidase B, and triamino peptidase.
- EDTA: Inhibits metalloproteases by chelating divalent metal ions (provided in a separate vial).
- E-64: Irreversible inhibitor of cystine proteases. Inhibits calpain, papain, and cathepsin B.
- Leupeptin: Reversible inhibitor of serine and cystine proteases. Inhibits calpain, papain, trypsin, and cathepsin B.
- Pepstatin A: Reversible aspartic acid protease inhibitor. Inhibits pepsin, rennin, cathepsin D, chymosin, and protease B.

STORAGE AND STABILITY

Store Proteoloc Protease Inhibitor Cocktail at 4 °C.
Product shelf life is eight months.

RECOMMENDED PROCEDURE

PROTOCOL

Allow product to thaw at room temperature. Agitate or vortex container to ensure uniform solution. Proteoloc Protease Inhibitor Cocktail is provided as a 100X stock solution of protease inhibitors and a 100X stock solution of EDTA. Dilute product into desired lysis buffer to obtain a 1X concentration (5 mM). For example, dilute 100 µL Proteoloc Protease Inhibitor Cocktail and 100 µL EDTA into 10 mL UPX Universal Protein Extraction Kit buffer. Proceed in accord with extraction kit or lysis buffer protocol.

REORDERING INFORMATION

To order Proteoloc Protease Inhibitor Cocktail, visit www.protein discovery.com to request a quote, or contact Protein Discovery, Inc. by phone, fax, or e-mail.

(T) 865.521.7400 / (TF) 866.670.9038 / (F) 865.521.3548
sales@protein discovery.com

DESCRIPTION

Proteoloc Protease Inhibitor Cocktail

DESCRIPTION	PART NUMBER
Proteoloc Protease Inhibitor Cocktail, 100 µLx24 single-use vials each of inhibitor cocktail and EDTA solution	44201
Proteoloc Protease Inhibitor Cocktail, 1 mL vial protease inhibitors & 1 mL vial EDTA	44202
Proteoloc Protease Inhibitor Cocktail, 5 mL vial protease inhibitors & 5 mL vial EDTA	44203
Proteoloc Protease Inhibitor Cocktail, 10 mL vial protease inhibitors & 10 mL vial EDTA	44204

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