INSTRUCTIONS

Thermo
S C I E N T I F I C

Halt Protease Inhibitor Cocktail, EDTA-Free

87785   78437   78439

Number	Description
87785	**Halt Protease Inhibitor Cocktail, EDTA-Free** (100X), 1mL
78437	**Halt Protease Inhibitor Cocktail, EDTA-Free** (100X), 5mL, sufficient to treat 500mL of sample
78439	**Halt Protease Inhibitor Cocktail, EDTA-Free** (100X), 10mL, sufficient to treat 1L of sample

Storage: Upon receipt store at 4°C. Product shipped on ice pack.

Introduction

The Thermo Scientific™ Halt™ Protease Inhibitor Cocktail, EDTA-Free protects protein from degradation by endogenous proteases released during protein extraction and purification. This ready-to-use cocktail contains several potent inhibitors (Table 1) in DMSO against the major classes of proteases including aspartic acid, cysteine and serine.

Table 1. Protease inhibitors included in the cocktail.

Inhibitor	1X Concentration
AEBSF	1mM
Aprotinin	800nM
Bestatin	50µM
E64	15µM
Leupeptin	20µM
Pepstatin A	10µM

Important Product Information

• Halt Protease Inhibitor Cocktail, EDTA-Free is a broad spectrum protease inhibitor and does not contain phosphatase inhibitors. Each protease inhibitor in the cocktail is listed in Table 1 at the 1X working concentration.

• This protease inhibitor cocktail is supplied at a 100X concentration in DMSO and is generally effective when used at a 1X final concentration; however, if a sample contains particularly high levels of proteases, the effective cocktail concentration might require optimization.

• This cocktail might freeze during storage, which does not affect its function or performance. If frozen, equilibrate the bottle to room temperature until the cocktail becomes a liquid.

Procedure

Note: Wear proper personal protective equipment when working with this DMSO-containing protease inhibitor cocktail.

1. Equilibrate the bottle to room temperature.

2. Vortex the bottle to ensure a homogeneous suspension.

3. Immediately before use, add 10µL of Halt Protease Inhibitor Cocktail per milliliter of sample directly to the lysis buffer or extract to produce a 1X final concentration.

Troubleshooting

Problem	Possible Cause	Solution
Poor inhibition of protease activity	Sample contains high levels of proteases	Add sufficient cocktail to produce a 2X or 3X final concentration
Cocktail does not provide sufficient protection against a particular protease family	Inhibitor for a specific family is not a component of the cocktail	Add individual inhibitors to the samples for the specific protease
	A specific inhibitor is not at the needed concentration	Use the cocktail at a higher concentration

Related Thermo Scientific Products

78425   **Halt Protease Inhibitor Single-Use Cocktail, EDTA-free (100X),** 100μL × 24 microtubes

88661   **Pierce™ Protease Inhibitor Tablets, EDTA-free,** 30 tablets

88660   **Pierce Protease Inhibitor Tablets,** 30 tablets

78440   **Halt Protease and Phosphatase Inhibitor Cocktail (100X)**, 1mL

78441   **Halt Protease and Phosphatase Inhibitor Cocktail, EDTA-free (100X),** 1mL

78444   **Halt Protease and Phosphatase Inhibitor Cocktail (100X)**, 5 × 1mL

78445   **Halt Protease and Phosphatase Inhibitor Cocktail (100X)**, **EDTA-free,** 5 × 1mL

78428   **Halt Phosphatase Inhibitor Single-Use Cocktail (100X)**, 100μL × 24 microtubes

88664   **Pierce Protease and Phosphatase Inhibitor Tablets, EDTA-free,** 20 tablets

66380   **Slide-A-Lyzer™ Dialysis Cassettes 10K MWCO, 0.5-3 mL**

89882   **Zeba™ Spin Desalting Columns, 0.5mL**, 25 columns

23225   **Pierce BCA Protein Assay Kit**

23236   **Coomassie Plus (Bradford) Assay Kit**

78248   **B-PER™ Bacterial Protein Extraction Reagent,** 500mL

78990   **Y-PER™ Yeast Protein Extraction Reagent,** 500mL

78833   **NE-PER™ Nuclear and Cytoplasmic Extraction Kit**

78501   **M-PER™ Mammalian Protein Extraction Reagent,** 250mL

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2