

# Halt™ Phosphatase Inhibitor Cocktail

78420 78426 78427

1754.5

Number	Description
78420	<b>Halt Phosphatase Inhibitor Cocktail</b> (100X), 1mL, sufficient reagent for up to 100mL of extract
78426	<b>Halt Phosphatase Inhibitor Cocktail</b> (100X), 5 × 1mL, sufficient reagent for up to 500mL of extract
78427	<b>Halt Phosphatase Inhibitor Cocktail</b> (100X), 10mL, sufficient reagent for up to 1L of extract

**Storage:** Upon receipt store product at 4°C. Product is shipped with an ice pack. Do not freeze product.

## Introduction

The Thermo Scientific Halt Phosphatase Inhibitor Cocktail protects phosphoproteins from serine/threonine phosphatases as well as protein tyrosine phosphatases (PTPs). The cocktail contains a mixture of four inhibitors of broad specificity, including sodium fluoride, sodium orthovanadate, sodium pyrophosphate and  $\beta$ -glycerophosphate. Conveniently packaged in a 100X format, the cocktail is stable at 4°C and is suitable for use with any cell or tissue extract. The cocktail preserves protein phosphorylation in immunoprecipitation and kinase assays. Furthermore, the cocktail is compatible with popular protein assays such as the Thermo Scientific Pierce BCA Protein Assay Kit (Product No. 23225) and Coomassie Plus (The Better Bradford) Assay Kit (Product No. 23236).

## Important Product Information

- The Halt Phosphatase Inhibitor Cocktail does not contain protease inhibitors. If necessary, use a broad-spectrum protease inhibitor, such as the Halt Protease Inhibitor Cocktail (Product No. 87785, 87786), in addition to the phosphatase inhibitor cocktail. Alternatively, use the combined Halt Protease and Phosphatase Inhibitor Cocktails (e.g., Product No. 78440 or 78441).
- The Halt Phosphatase Inhibitor Cocktail interferes with 2D gel electrophoresis. The cocktail also interferes with some types of immobilized metal chelate affinity chromatography methods but is compatible with Thermo Scientific Pierce Phosphoprotein Enrichment Kit (Product No. 90003). Either dialyze or desalt (see the Related Thermo Scientific Products Section) sample to effectively remove inhibitors from cell extracts before performing incompatible procedures.
- The Halt Phosphatase Inhibitor Cocktail is supplied as a 100X concentrate that is effective when used at a final concentration of 1X; however, samples that contain particularly high levels of phosphatase activity may require a final concentration of 2-3X.
- The Halt Phosphatase Inhibitor Cocktail is compatible with our cell lysis reagents (see the Related Thermo Scientific Products Section).

## Procedure for using Halt Phosphatase Inhibitor Cocktail

1. Briefly vortex the vial of Halt Phosphatase Inhibitor Cocktail to ensure a homogeneous suspension of the components.
2. Immediately before use, add 10 $\mu$ L of Halt Phosphatase Inhibitor Cocktail per milliliter of sample directly to the cell lysis buffer or extract to produce a 1X final concentration. Alternatively, use a final concentration of 2-3X (20-30 $\mu$ L/mL) in samples containing a high level of phosphatase activity.

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**Related Thermo Scientific Products**

78428	<b>Halt Phosphatase Inhibitor Single-Use Cocktail (100X), 24 × 100µL</b>
88662	<b>Pierce® Phosphatase Inhibitor Tablets, 20 tablets</b>
87785	<b>Halt Protease Inhibitor Cocktail, EDTA-Free (100X), 1mL</b>
87786	<b>Halt Protease Inhibitor Cocktail Kit, 1mL</b>
88660	<b>Pierce Protease Inhibitor Tablets, 30 tablets</b>
88661	<b>Pierce Protease Inhibitor Tablets, EDTA-free, 30 tablets</b>
78440	<b>Halt Protease and Phosphatase Inhibitor Cocktail (100X), 1mL</b>
78441	<b>Halt Protease and Phosphatase Inhibitor Cocktail, EDTA-Free (100X), 1mL</b>
88663	<b>Pierce Protease and Phosphatase Inhibitor Tablets, 20 tablets</b>
88664	<b>Pierce Protease and Phosphatase Inhibitor Tablets, EDTA-free, 20 tablets</b>
89882	<b>Zeba™ Spin Desalting Columns, 7K MWCO, 0.5mL, 25 columns</b>
69574	<b>Slide-A-Lyzer® MINI Dialysis Units, 10K MWCO, 10 units</b>
78501	<b>M-PER® Mammalian Protein Extraction Reagent, 250mL</b>
78260	<b>B-PER® II Bacterial Protein Extraction Reagent, 250mL</b>
78510	<b>T-PER® Tissue Protein Extraction Reagent, 500mL</b>
78999	<b>Y-PER® Plus Dialyzable Yeast Protein Extraction Reagent, 500mL</b>
78833	<b>NE-PER® Nuclear and Cytoplasmic Extraction Reagent</b>
89826	<b>Mem-PER® Eukaryotic Membrane Protein Extraction Reagent</b>
78840	<b>Subcellular Protein Fractionation Kit for Cultured Cells</b>
87790	<b>Subcellular Protein Fractionation Kit for Tissues</b>
87792	<b>N-PER® Neuronal Protein Extraction Reagent, 100mL</b>
87793	<b>Syn-PER® Synaptic Protein Extraction Reagent, 100mL</b>
23225	<b>Pierce BCA Protein Assay Kit</b>
22660	<b>Pierce 660nm Protein Assay Reagent, 750mL</b>

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

**No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s).**

There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Current product instructions are available at [www.thermoscientific.com/pierce](http://www.thermoscientific.com/pierce). For a faxed copy, call 800-874-3723 or contact your local distributor.

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