

For Research Use Only. Not for Use in Diagnostic Procedures.

Description: When diluted in lysis buffer to a final concentration of 1X the Protease Inhibitor Cocktail prevents protein degradation by endogenous proteases present in whole cell extract. The 100X Protease Inhibitor Cocktail is a clear, colorless liquid.

1X Protease Inhibitor Cocktail:

1mM AEBSF 800nM Aprotinin 50µM Bestatin 15µM E-64 20µM Leupeptin 10µM Pepstatin A

Background: In order to study specific target proteins of interest protease-mediated degradation during the generation of protein lysates is to be avoided. A loss of normal cellular control occurs during cell lysis, and endogenous proteases within the cell extract are free to degrade proteins in an uncontrolled manner. The addition of protease inhibitors to the cell lysis buffer aids in the preservation of target proteins in the cell extract.

Directions for Use: 1. Briefly vortex the Protease Inhibitor Cocktail (100X) before use.

2. Just prior to lysing cells, dilute the cocktail 1:100 in desired lysis buffer to obtain a 1X working concentration.

Solutions and Reagents: The Protease Inhibitor Cocktail (100X) is composed of a proprietary mix of AEBSF, Aprotinin, Bestatin, E64, Leupeptin, and Pepstatin A to promote broad spectrum protection against endogenous proteases. The cocktail does not contain EDTA (a metalloprotease inhibitor) which can be incompatible with some downstream applications (i.e. protein assays, 2D electrophoresis, etc.). If EDTA is desired as a protease inhibitor it can be added to the cell lysis buffer at a final working concentration of 5 mM.

Storage: Store the undiluted 100X cocktail at 4°C. *Do not freeze.*

For application specific protocols please see the web page for this product at www.cellsignal.com.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry FC-FP—Flow cytometry-Fixed/Permeabilized FC-L—Flow cytometry-Live E-P—ELISA-Peptide Species Cross-Reactivity: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse AII—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.