

Broad Spectrum Protease Inhibitor Cocktail Western Blot Related Reagent

Broad Spectrum Protease Inhibitor Cocktail

CATALOG #
AAA45621

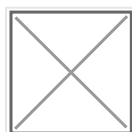
PRODUCT SYNONYMS

Broad Spectrum Protease Inhibitor Cocktail; Broad Spectrum Protease Inhibitor Cocktail western blot related reagent

PRODUCT SPECIFICATIONS

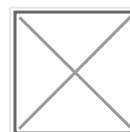
Concentration	100-fold dilution in lysis buffer 10 u L of the Protease Inhibitor Cocktail solution is enough to inhibit degradation of proteins in 1mL (varies by lot)
Assay Principle	Broad Spectrum Protease Inhibitor Cocktail (100X) is a Western blot related ready-to-use concentrated stock solution reagent containing a blend of seven protease inhibitors that is to be added to cell lysis buffer to protect the integrity and functionality of native cellular proteins against degradation by multiple classes of endogenous proteases during protein extraction and sample preparation procedures. The product is supplied as a 100X concentrated stock solution in a liquid format for improved accuracy, solubility, and ease of use in comparison to traditional tablets.
Physical State	Colorless, transparent, liquid
Compatibility with Reagents	Fully compatible with cell lysis buffers and Broad Spectrum Phosphatase Inhibitor Cocktail
Compatibility with Assays	Not MS-compatible: contain AEBSF; Not compatible with immobilized metal chelate affinity chromatography and 2D gel electrophoresis: contain EDTA
Reagent Type	Western Blotting related reagent; Inhibitors
Usage	Protect native cellular proteins from destructive degradation by endogenous proteases following cell lysis Preserve native cellular proteins intact and functional Screen extracts for proteolytic activity Study proteolysis in the regulation of cellular processes
Target Specificity	Serine proteases, cysteine proteases, aspartic acid proteases, metalloproteases, aminopeptidases
Target Samples	Cell lysis extracts
List of components	Broad Spectrum Protease Inhibitor Cocktail: Containing AEBSF, aprotinin, bestatin, E-64, leupeptin and pepstatin A stabilized in dimethylsulfoxide (DMSO), 1mL (100X), Broad Spectrum Protease Inhibitor Cocktail (EDTA solution): 1mL (100X) EDTA solution for optional metalloprotease inhibition ()
Preparation and Storage	Upon receipt store at -20°C. It is stable for one year. Product is shipped on ice.

IMAGES



Application Data

Protease activity for extracted protein from mouse tissue while using different protease inhibitor cocktails



Application Data

ADDITIONAL INFORMATION

Related Product Information for Broad Spectrum Protease Inhibitor Cocktail western blot related reagent	Broad Spectrum Protease Inhibitor Cocktail is a complex of various protease inhibitors, which has been tested for inhibiting proteases and esterase broadly. Crude cell extracts contain a number of endogenous enzymes, such as proteases and phosphatases, which are capable of digesting the proteins present in the extract. An optimized method to improve the yield of intact and functional native proteins is to add inhibitors of these enzymes known to be present in the source material. This broad spectrum protease inhibitor cocktail is a complex of various protease inhibitors, which has been tested for inhibiting proteases and esterase broadly. Protease inhibitors are critical reagents for the preservation of protein integrity during purification and analysis procedures by knocking out specific proteases to avoid peptide bond hydrolysis and subsequent protein destruction. They are biological or chemical compounds that function by reversibly or irreversibly binding to the protease. Most known proteases belong to one of four evolutionarily distinct enzyme families based on the functional groups involved in the peptide bond cleavage. No single chemical is effective for all types of proteases. A mixture or "cocktail" of several different inhibitor compounds is commonly used that consistently inhibit a multitude of protease classes to ensure that protein extracts do not degrade before analysis for target proteins of interest. Not using protease inhibitors leads to the loss of a large number of valuable proteins in a lysate sample, adversely affecting downstream applications by biologically meaningless representation of protein activities and gaining false negative immunostaining results for targets of interest.
Product Categories/Family for Broad Spectrum Protease Inhibitor Cocktail western blot related reagent	Western Blotting Related Reagent

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/western-blot-related-reagent/broad-spectrum-protease-inhibitor-cocktail/45621>