

# Protease Inhibitor Cocktail, Bacteria (EDTA-Free, 100× in DMSO)

## 1 Contents

Component	HY-K0012-1mL	HY-K0012-5mL
Protease Inhibitor Cocktail, Bacteria (EDTA-Free, 100× in DMSO)	1 mL	1 mL × 5

## 2 Introduction

MCE Protease Inhibitor Cocktail, Bacteria (EDTA-Free, 100× in DMSO) protects proteins from degradation by endogenous proteases released during protein extraction and purification.

This cocktail is supplied as a ready-to-use solution in DMSO. The individual components of this protease inhibitor cocktail have specific inhibitory properties. AEBSF inhibits serine proteases, including trypsin, chymotrypsin, plasmin, kallikrein, and thrombin. Bestatin inhibits aminopeptidases, such as leucine aminopeptidase and alanyl aminopeptidase. E-64 acts against cysteine proteases, such as calpain, papain, cathepsin B, and cathepsin L. Pepstatin A inhibits aspartic proteases, such as pepsin (human or porcine), renin, cathepsin D, chymosin (bovine rennin), and protease B (*Aspergillus niger*).

Ingredient	Target	100× Conc.	Inhibitor Type
AEBSF	Serine proteases	23 mM	Irreversible
Bestatin	Aminopeptidases	2 mM	Reversible
E-64	Cysteine proteases	0.3 mM	Irreversible
Pepstatin A	Aspartic proteases	0.3 mM	Reversible

## 3 General Protocol

1. This product can be applied in Western Blot analysis, Co-IP, pull-down, IF, IHC, kinase assay and etc.
2. Thaw at room temperature, add at 1:100 (v/v) dilution to 1 solution

samples, mix thoroughly. It is recommended to prepare solutions of this product fresh when needed.

3. If necessary, 0.1 M EDTA can be prepared and added to the mix by the ratio of 1:100 (v/v).

## 4 Storage

-20°C, 12 months.

## 5 Precautions

1. DMSO solution thaws slowly in low temperature, it is recommended to warm up at 25°C.
2. This product can be properly stored after packaging.
3. EDTA inhibits metalloproteases by chelating the divalent cations necessary for their activity. By this same mechanism, the activities of other proteins might be affected by EDTA, therefore, empirically determine if EDTA is beneficial in particular experiments.
4. This product is for R&D use only, not for drug, household, or other uses.
5. For your safety and health, please wear a lab coat and disposable gloves to operate.