

Protease and Phosphatase Inhibitor Cocktail (EDTA-Free, 10× in ddH₂O)

1 Contents

Component	HY-K0013-1mL	HY-K0013-10mL	HY-K0013-50mL
Protease and Phosphatase Inhibitor Cocktail (EDTA-Free, 10× in ddH ₂ O)	1 mL	1 mL × 10	1 mL × 50

2 Introduction

MCE Protease and Phosphatase Inhibitor Cocktail (EDTA-Free, 10× in ddH₂O) protects protein from degradation by endogenous proteases released during protein extraction and purification.

This cocktail is AEBSF free and mass spectroscopy compatible – water soluble. The protease inhibitors target serine proteases, aminopeptidase B, leucine aminopeptidase, cysteine proteases, metalloproteases. The phosphatase inhibitors target serine/threonine phosphatases, acid phosphatases, protein tyrosine.

Ingredient	Target	10×	Inhibitor Type
Aprotinin	Serine proteases	0.08 mM	Reversible
Bestatin	Aminopeptidases	5 mM	Reversible
E-64	Cysteine proteases	1.5 mM	Irreversible
Leupeptin hemisulfate	Serine and Cysteine proteases	2 mM	Reversible
β-Glycerophosphate	Serine and Threonine phosphatases	10 mM	Reversible
Sodium fluoride	Serine and Threonine phosphatases	50 mM	Reversible
Sodium orthovanadate	Tyrosine phosphatases	1 mM	Reversible
Sodium pyrophosphate decahydrate	Serine and Threonine phosphatases	10 mM	Irreversible

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 1:10 (v/v) dilution to 1 solution samples, mix thoroughly. It is recommended to prepare solutions of this product fresh when needed.
3. If necessary, 0.5 mM EDTA can be prepared and added to the mix by the ratio of 1:10 (v/v).

4 Storage

-20°C, 24 months.

5 Precautions

1. This product can be properly stored after packaging.
2. 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.
3. This product is for R&D use only, not for drug, household, or other uses.
4. For your safety and health, please wear a lab coat and disposable gloves to operate.