



## DATASHEET

### Protease & Phosphatase Inhibitor Cocktail solution (EDTA free)

#### Product overview

<b>Name</b>	Protease & Phosphatase Inhibitor Cocktail solution (EDTA free)
<b>Cat No</b>	HB9105
<b>Biological action</b>	Inhibitor
<b>Description</b>	Protease & Phosphatase Inhibitor Cocktail solution (EDTA free)

#### Biological Data

##### Biological description

##### Overview

This protease and phosphatase inhibitor cocktail contains a mixture of both protease and phosphatase inhibitors.

This cocktail is EDTA free.

Protease and phosphatase inhibitor cocktails protect proteins from degradation by endogenous proteases and phosphatases released during protein extraction and purification.

##### Components and action

The following components are included in this cocktail. The protease inhibitors target aminopeptidases, cysteine and serine proteases and the phosphatase inhibitors target serine/threonine and protein tyrosine phosphatases:

Protease inhibitors:

- Aprotinin (Aprotinin (bovine, recombinant, Nicotiana sp.): serine protease inhibitor (80μM)
- Bestatin: aminopeptidase B and leucine aminopeptidase inhibitor (5mM)
- E-64: cysteine protease inhibitor (1.5mM)
- Phosphatase inhibitors: serine/cysteine protease inhibitor (2mM)
- β-Glycerophosphate: serine/threonine phosphatase inhibitor (10mM)
- Sodium fluoride: acid phosphatase and serine/threonine phosphatase inhibitor (50mM)
- Sodium orthovanadate: protein tyrosine phosphatase/ alkaline phosphatase inhibitor (1mM)
- Sodium pyrophosphate decahydrate: serine/threonine phosphatase inhibitor (10mM)

##### Formulation & usage recommendation

The cocktail is supplied as 1 vial of cocktail in water (1 ml)

This should be sufficient for 100ml of sample. It is generally effective at a 1X final concentration but may require optimization if a sample contains particularly high levels of proteases.

This cocktail interferes with immobilized metal-chelate affinity chromatography (IMAC) and 2D gel electrophoresis. Either dialyze or desalt sample to effectively remove inhibitors from sample extracts before performing such procedures.

##### Application notes

1. Equilibrate the bottle to room temperature.
2. Vortex the bottle to ensure a homogeneous suspension.
3. Immediately before use, add 10μL of the Protease Inhibitor Cocktail per milliliter of sample directly to the lysis buffer or extract to produce a 1X final concentration.

## Solubility & Handling

Storage instructions	-20 °C
Solubility overview	Soluble in Water, DMSO (supplied in 1ml DMSO)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

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## Chemical Data

Appearance	Clear liquid
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