



G-Biosciences ♦ 1-800-628-7730 ♦ 1-314-991-6034 ♦ technical@GBiosciences.com

A Geno Technology, Inc. (USA) brand name

Protease-Phosphatase Arrest™

For Complete Inhibition of
Protease & Phosphatase Activities

(Cat. # 786-870, 786-871, 786-872, and 786-889)



think proteins! think G-Biosciences www.GBiosciences.com

INTRODUCTION

Due to the optimized concentration of the various inhibitors, the Protease-Phosphatase Arrest™ shows excellent inhibition of protease and phosphatase activities and is therefore suitable for the protection of proteins during purification from animal tissues, plant tissues, yeast and bacteria. Protease-Phosphatase Arrest™ contains both irreversible and reversible protease inhibitors to inhibit serine, cysteine and other proteases along with 5 phosphatase inhibitors that target all the phosphatase categories: serine/threonine (Ser/Thr) specific, tyrosine specific and dual specificity phosphatases.

Since some proteins require divalent cations like Ca^{2+} , Mg^{2+} or Mn^{2+} for their biological activity, the presence of EDTA may be detrimental to the protein activity. Furthermore, if the protein of interest is purified using immobilized metal chelate affinity chromatography; EDTA must be removed from the buffer before the chromatography. Therefore, we supply an optional EDTA solution and may be added in the extraction buffer or lysate if needed.

ITEM(S) SUPPLIED

Description	786-870	786-871	786-872	786-889
ProteaseArrest™ [100X]	1ml	2ml	5ml	24 x 100µl
0.5M EDTA [100X]	2ml	2ml	5ml	2ml
PhosphataseArrest™ [100X]	1ml	2ml	5ml	24 x 100µl

STORAGE CONDITIONS

Shipped at ambient temperature, upon arrival, store it refrigerated at 4°C, and is stable for 1 year. Avoid freeze/thawing of the product vials.

PROTOCOL

Allow the ProteaseArrest™ and PhosphataseArrest™ vials to warm to room temperature and briefly vortex or tap the vial to mix it completely before removing it for use.

Add 10µl of ProteaseArrest™ [100X] and 10µl PhosphataseArrest™ [100X] per ml directly in an appropriate volume of extraction buffer or extract to achieve 1X final concentration.

NOTE: For higher potency of proteases and phosphatases inhibition, add ProteaseArrest™ [100X] and PhosphataseArrest™ [100X] 20-30µl/ml of

extraction buffer or extract to give 2-3X final concentration.

OPTIONAL:

1. For the inhibition of metalloproteases (if the buffer does not contain EDTA), add 0.5M EDTA, 10µl/ml directly in an appropriate volume of extraction buffer or extract to achieve 1X final concentration.

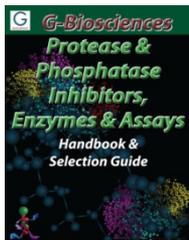
2. A Nuclease cocktail [G-Biosciences FOCUS Nuclease™ (Cat. # 786-039F)] may also be added in the same reaction mixture.

TROUBLESHOOTING

Issue	Possible Cause	Recommended Solution
Poor inhibition of protease and/or phosphatase activity	The sample contains higher level of protease and/or phosphatase activities	As mentioned in the NOTE section, add more volume of Protease & PhosphataseArrest™ to achieve 2-3X final concentration of inhibitors

RELATED PRODUCTS

Download our Protease & Phosphatase Inhibitors, Enzyme & Assays Handbook.



<http://info.gbiosciences.com/tease-phosphatase-inhibitors-enzymes-assay-handbook>

For other related products, visit our website at www.GBiosciences.com or contact us.

Last saved: 4/1/2015 IA



www.GBiosciences.com