



Cyrusbioscience

Phosphatase Inhibitor Cocktail III

Product No.: 2055

Introduction

Crude cell extracts contain numbers of endogenous enzymes, such as proteases and phosphatases, which are capable of quickly degrading the proteins of interest present in the extract. As a result, this biochemical process can drastically reduce the yield of any protein during any isolation step and endanger all further downstream experiments. The best way to improve the yield of intact proteins is to add inhibitors of these enzymes known to be present in the source material. All cells contain a different mixture of enzyme but the following generalizations can be made: Serine proteases are widely distributed in most type of cells / Bacterial extracts typically contain serine and metalloproteases / Extracts from animal tissues contain mainly serine, cysteine and metalloproteases. Some also contain aspartic proteases / Plant extracts contain large amounts of serine and cysteine proteases. Since cells contain different type of enzymes, our specially formulated cocktails of well selected, different inhibitors supplied in a ready-to-use form, will provide complete protection for your proteins of interest for subsequent experiments like Western blot, reporter gene analysis, immunoprecipitations, epitope tagging, specific protein activity assay or during further purification steps.

Product Description

White Lyophilized Solid. A cocktail of four phosphatase inhibitors which has been optimized for the inhibition of both serine/threonine and protein tyrosine phosphatases.

Recommended Usage

Recommended for use with tissue and cell extracts including extracts containing detergents.

Reconstitute each vial with 1 ml H₂O to obtain a 1 ml stock solution. Each vial contains the following components:

Inhibitor	Concentration	Target Phosphatases
Sodium Fluoride	250 mM	Acid Phosphatases
Sodium Orthovanadate	50 mM	Protein Tyrosine Phosphatase, Alkaline Phosphatase
Sodium Pyrophosphate	50 mM	PP1 and PP2A
β-Glycerophosphate	50 mM	Ser/Thr Phosphatases

Storage / Stability

Freezer (-20 °C). Hygroscopic. Following reconstitution, aliquot and freeze (-20 °C).

Stock solutions are stable for up to 1 month at -20 °C.