Cyrusbioscience

Phosphatase Inhibitor Cocktail I

Product No.: 2053

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

Liquid. In 1 ml DMSO. A specially formulated cocktail of three phosphatase inhibitors that will inhibit alkaline phosphatases as well as serine/threonine protein phosphatases such as PP1 and PP2A.

Recommended Usage

Recommended for use with tissue and cell extracts including extracts containing detergents. Recommended usage is a 100-fold dilution. Each vial contains the following components:

Inhibitor	Concentration	Target Phosphatases
(-)-pBromotetramisole oxalate	2.5 mM	Alkaline phosphatases
Cantharidin	500 µM	Protein phosphatase 2A (PP-2A)
Microcystin LR	500 nM	Protein phosphatases 1 and 2A (PP-1 and PP-2A)

Storage / Stability

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