

Phosphatase Inhibitor Cocktail, EDTA-free, mini tablets, 25 ml

Pack Variation & Catalogue Number

Product Number	Product Name	Specification
BL636A	Phosphatase Inhibitor Cocktail (Mini Tablet, 25 mL)	1 tablet

Product Description

After cell lysis, crude protein extracts contain large amounts of endogenous protein phosphatases, which can catalyze the dephosphorylation of phosphorylated proteins in various ways. To prevent the dephosphorylation of target proteins during protein purification, phosphatase inhibitors must be added to suppress enzymatic activity. This Phosphatase Inhibitor Cocktail is composed of six different phosphatase inhibitors. Each inhibitor can specifically target one or several types of phosphatases. The optimized formulation effectively inhibits nearly all major phosphatase activities, including serine/threonine phosphatases, tyrosine phosphatases, acid phosphatases, and alkaline phosphatases. This inhibitor mixture is suitable for protein extraction from a wide range of tissues and cells. It can be directly added to protein lysis buffers to effectively inhibit dephosphorylation, thereby preserving the phosphorylation state of proteins. Ideal for applications such as Western blotting, immunoprecipitation, and protein kinase activity assays.

Product Features

1. Convenience — Simply remove a quick-dissolving tablet from the package and add it to the buffer.
2. Comprehensive protection — Protects phosphorylated proteins from dephosphorylation by a broad range of phosphatases.
3. Stability — Lysis buffers or stock solutions containing the inhibitor can be stored at 2–8°C for 1 month or –20°C for 6 months.
4. Safety — Non-toxic and risk-free inhibitor formulation.

Active Components

Phosphatase Inhibitor	Target Phosphatase
Cyclosporin A	PP2B, PP2C
Sodium Fluoride	Acid phosphatase
β-Glycerophosphoric Acid Disodium Salt	Serine/Threonine phosphatase
Sodium Orthovanadate	Tyrosine phosphatase, Alkaline phosphatase
Disodium Molybdate Dihydrate	Acid phosphatase
Sodium Pyrophosphate Decahydrate	PP1, PP2A

Instructions for Use

1. Add one tablet directly to 25 mL of lysis buffer, or dissolve in distilled water, PBS, or another buffer to prepare a concentrated stock solution.
2. Dissolve for 1 minute and mix thoroughly (Note: a slight cloudiness after complete dissolution is normal).

Notes / Precautions

1. This product has broad-spectrum phosphatase inhibitory activity but does not inhibit proteases. To protect proteins from proteolytic degradation, use together with Protease Inhibitor Cocktail (Cat. No. BL630A).
2. Tablets may discolor if left at room temperature for extended periods.
3. One tablet prepares 25 mL of 1X solution; for samples with high phosphatase activity, increase concentration to 2X or 3X.
4. Avoid contact with skin or mucous membranes.
5. For research use only. Not for clinical diagnosis, therapeutic, food, or drug use.
6. Always wear a lab coat and disposable gloves when handling

Storage Conditions

Store at 4-8 °C for up to 12 months

For in vitro research use only. Not for diagnostic or therapeutic use. This product is not a medical device.