

Protein Phosphatase Inhibitor (All-in-one,100x)

Cat: P1260

Specification: 1mL /10mL

Storage: Store at 2-8°C for up to two years. If the solution turns gray during storage, it does not affect its usability. If there are small amounts of insoluble matter in the product, gently heat it in a water bath (below 55°C) to facilitate dissolution. It is normal if insoluble matter remains after thorough dissolution. Simply mix well before use.

Introduction

During tissue and cell lysis, a large amount of endogenous protein phosphatases are released, catalyzing the dephosphorylation of phosphorylated proteins in various ways. This All-in-One Protein Phosphatase Inhibitor Mixture (100×) contains six independent protein phosphatase inhibitors, each of which specifically inhibits one or several types of protein phosphatase activity. The optimized composition of this mixture enables it to strongly inhibit almost all important protein phosphatase activities, including protein serine/threonine phosphatases (PP1, PP2A, PP2B, PP2C), protein tyrosine phosphatases (PTPs), alkaline phosphatases, acid phosphatases, etc. This mixture is a 100-fold concentrated aqueous solution that can be directly added to the lysis products of any tissue type and cell, effectively inhibiting the dephosphorylation of phosphorylated proteins and thereby maintaining the phosphorylation state of proteins. It is suitable for Western Blot, immunoprecipitation to detect phosphorylated proteins, protein kinase activity assays, and other applications.

Product Composition:

This mixture is a 100-fold concentrated aqueous solution containing six independent protein phosphatase inhibitors. It potently inhibits the activity of almost all important protein phosphatases, including protein serine/threonine phosphatases (PP1, PP2A, PP2B, PP2C), protein tyrosine phosphatases (PTPs), alkaline phosphatases, acid phosphatases, and more.

Scope of Application:

It is used to inhibit the dephosphorylation of phosphorylated proteins, thereby maintaining the phosphorylation state of proteins. It is suitable for Western Blot and immunoprecipitation assays to detect phosphorylated proteins, protein kinase activity measurements, and other applications.

Usage Instructions (for reference only):

1. Remove the All-in-One Protein Phosphatase Inhibitor Mixture (100×) and vortex to resuspend the mixture.
2. Add the mixture to the tissue or cell lysate in a 1:100 ratio and mix well.

Related Products& Product Number:

P1015 SDS-PAGE loading buffer, 4×(with DTT)

<i>P1300</i>	<i>Coomassie Brilliant Blue Fast Staining solution</i>
<i>P1200</i>	<i>SDS-PAGE Gel Kit</i>
<i>R0010</i>	<i>RIPA buffer(high)</i>
<i>R0030</i>	<i>Native lysis Buffer</i>
<i>PC0020</i>	<i>BCA Protein Assay Kit</i>

References

- [1] Yunpeng Zhang,Yixiao Xing,Linglu Jia,et al. An In Vitro Comparative Study of Multisource Derived Human Mesenchymal Stem Cells for Bone Tissue Engineering. *Stem Cells and Development*. December 2018. (IF 4.700)
- [2] Yi Guo,Wei Cui,Yuqing Pei,et al. Platelets promote invasion and induce epithelial to mesenchymal transition in ovarian cancer cells by TGF- β signaling pathway. *Gynecologic Oncology*. June 2019;153(3): 639-650. (IF 4.393)

Note: For more documents using this product, please refer to the www.solarbio.com.