

Store at 4°C

#5870

# Phosphatase Inhibitor Cocktail (100X)

1 ml



**Cell Signaling**  
TECHNOLOGY®

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

**Description:** This Phosphatase Inhibitor Cocktail (100X) is a colorless to light yellow liquid composed of a proprietary mix of sodium fluoride, sodium pyrophosphate,  $\beta$ -glycerophosphate, and sodium orthovanadate used to promote broad spectrum protection against endogenous serine/threonine and tyrosine phosphatases.

**Background:** Dynamic protein phosphorylation is a key cellular signaling mechanism by which a broad spectrum of cellular processes is regulated. In order to study the phosphorylation status of specific target proteins the phosphorylated residue of interest must remain intact. When cells are lysed to make whole cell extracts, a loss of normal cellular signaling regulation occurs, and phosphatases within the cell extract are free to dephosphorylate proteins in an uncontrolled manner. The addition of phosphatase inhibitors to the cell lysis buffer aids in the preservation of phosphorylated residues at the time of cell disruption.

## Directions for Use:

1. Briefly vortex the Phosphatase Inhibitor Cocktail (100X) before use.
2. Just prior to lysing cells:
  - a. Western Blot or Immunoprecipitation Cell Lysis, dilute the cocktail 1:100 in desired lysis buffer to obtain a 1X working concentration.
  - b. PTMScan® Cell Lysis, dilute the cocktail 1:50 in urea lysis buffer to obtain a 2X working concentration. This higher concentration is required due to the concentrated nature of the lysate.

**Storage:** Store the undiluted 100X cocktail at 4°C. Do not freeze.

**For application specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

**Please visit [cellsignal.com](http://cellsignal.com) for a complete listing of recommended companion products.**

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**Applications:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry FC-FP—Flow cytometry-Fixed/Permeabilized FC-L—Flow cytometry-Live E-P—ELISA-Peptide  
**Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse  
**All**—all species expected. Species enclosed in parentheses are predicted to react based on 100% homology.