Protein Phosphatase 1c from rabbit skeletal muscle

Product Number: P 1493
Storage Temperature: -70 °C

Synonyms: PP1c

Product Description
Protein Phosphatase 1 is a growth factor stimulated, divalent cation-independent serine/threonine protein phosphatase involved in regulating numerous cellular processes such as glycogen metabolism, mitosis, and meiosis.

This product is the catalytic subunit (C) of protein phosphatase 1 (type 1 protein phosphatase), which is highly conserved in eukaryotes and has been found to play a key role in eukaryotic cell cycle and proliferation activities. The PP1C subunit shares approximately 40% sequence homology with several other highly expressed phosphatases and is expressed at micromolar concentrations in the cytoplasm. PP1C is inhibited by a number of toxins including mycrocyclins, calyculins (clavosine A and B), nodularins, and okadaic acid. Studies suggest that the PP1C is phosphorylated at Thr320 by cdc2 kinase, also resulting in inhibition.

The product is supplied as a solution in 50 mM Tris-HCl, pH 7.0, containing 14 mM 2-mercaptoethanol, 1 mM benzamidine, 0.1 mM PMSF, 1 mM EDTA, and 50% glycerol.

Specific Activity: approximately 2,000 units per mg protein (approximately 2 units per vial)

Unit Definition: One unit will release 1 nanomole of inorganic phosphate from 32P-labeled phosphorylase per minute at pH 7.0 at 30 °C.

Purity: minimum 90% (SDS-PAGE)

Precautions and Disclaimer
This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability
The product ships in dry ice and storage at –70 °C is recommended. Avoid freeze-thaw cycles. Store working aliquots at –70 °C. The product is stable for 24 to 48 hours at 2-8 °C.

References