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Product Information

Protein Phosphatase 2A_C from bovine kidney

Product Number **P 1618**
Storage Temperature -70°C

Synonyms: PP2A_C

Product Description

Protein Phosphatase 2A₂ is a divalent cation-dependent protein serine/threonine phosphatase. PP2A_C is the 36 kDa catalytic subunit of PP2A. This enzyme is involved in regulating numerous cellular processes including cell cycle, growth, and differentiation. It also has a role in oncogenic transformation and as a growth suppressor.

The product is supplied as a solution of 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 ^{32}P -labeled phosphorylase per minute at 30°C at pH 7.0.

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 $2-8^{\circ}\text{C}$.

References

1. Amick, G.D., et al., Protein Phosphatase 2A is a specific protamine-kinase-inactivating phosphatase. *Biochem. J.*, **287**(Pt. 3), 1019-1022 (1992).
2. Guo, H., and Damuni, Z., Autophosphorylation-Activated Protein Kinase Phosphorylates and Inactivates Protein Phosphatase 2A. *Proc. Natl. Acad. Sci. USA*, **90**(6), 2500-2504 (1993).
3. Srivastave, J., et al., Dephosphorylation of PKC δ by protein phosphatase 2A and its inhibition by nucleotides. *FEBS Letter*, **516**, 265-269 (2002).
4. Bagu, J., et al., A Molecular Basis for Different Interactions of Marine Toxins with Protein Phosphatase-1. *J. Biol. Chem.*, **272**, 5087-5097 (1997).
5. Lechward, K., et al, Protein phosphatase 2A: variety of forms and diversity of functions. *Acta Biochim. Pol.*, **48**(4), 921-933 (2001).

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