Protein Phosphatase 2A Inhibitor Protein, 2-β human, recombinant expressed in E. coli

Product Number P 2368
Storage Temperature –70 °C

Synonyms: IβPP2A, I2PP2A

Product Description
Human Protein Phosphatase 2A Inhibitor Protein, 2-β (IβPP2A) is a recombinant, human protein expressed in E. coli. It is a potent, heat-stable PP2A inhibitor with a molecular mass of approximately 41 kDa.

This protein inhibits all forms of PP2A with a ki of approximately 0.1 nM with myelin basic protein, histone H1, and other substrates, but not with casein. PP2A is inhibited by this protein in a manner noncompetitive with the substrate and it is considered specific for PP2A. IβPP2A has been determined to be the equivalent of the acute undifferentiated leukemia-associated SET protein (also termed PHAP-II and TAF-1α). Additionally, IβPP2A has been shown to act as an activator of c-Jun and AP-1 directed gene expression. IβPP2A is primarily located in the nucleus of most mammalian cell types. IβPP2A differs from IαPP2A by a distinct difference in the nucleotide sequence exhibited in the N-terminal region of the protein.

PP2A is a major mammalian protein serine/threonine phosphatase involved in the regulation of diverse cellular processes. This regulation is effected through control of signaling pathways by a mechanism of phosphorylation/dephosphorylation with a variety of protein kinases. Importantly, PP2A is believed to play a role in the regulation of NF-κB signaling, which has been shown to promote cell survival and escape from apoptosis.

This product is supplied as a solution of 50 M Tris-HCl, pH 7.0, containing 14 mM 2-mercaptoethanol, 1 mM benzamidine, 0.1 mM PMSF, 1 mM EDTA, 0.1% BRIJ® 35, and 10% glycerol.

Purity: minimum 90% (SDS-PAGE)

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

Storage/Stability
The product ships on dry ice and it is recommended to store the product at –70 °C. After thawing, store stock solutions as aliquots at –70 °C. Avoid repeated freeze-thaw cycles.

References


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