PKCi Protein, Human

Cat. No.:	HY-P701966
Synonyms:	HINT1; Adenosine 5'-monophosphoramidase HINT1; Desumoylating isopeptidase HINT1; Histidine triad nucleotide-binding protein 1; Protein kinase C inhibitor 1; Protein kinase C-interacting protein 1; PKCI-1
Species:	Human
Source:	E. coli
Accession:	P49773 (M1-G126)
Gene ID:	3094
Molecular Weight:	

PROPERTIES

Appearance	Solution.
Formulation	Supplied as a 0.22 μm filtered solution of 50 mM Tris-HCl, pH7.5, 200 mM NaCl, 20% glycerol.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	Please use rapid thawing with running water to thaw the protein.
Storage & Stability	Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.
Shipping	Shipping with dry ice.

DESCRIPTION

Background	PKCi protein displays versatile enzymatic activities, functioning as an adenosine 5'-monophosphoramidase capable of hydrolyzing purine nucleotide phosphoramidates, such as adenosine 5'-monophosphoramidate (AMP-NH2), to generate AMP and NH2. It also exhibits hydrolytic activity towards adenosine 5'-monophosphomorpholidate (AMP-morpholidate), guanosine 5'-monophosphomorpholidate (GMP-morpholidate), lysyl-AMP, Met-AMP, His-AMP, Asp-AMP, lysyl-GMP, and AMP-N-alanine methyl ester. Moreover, PKCi participates in the conversion of adenosine 5'-O-phosphorothioate and guanosine 5'-O-phosphorothioate to the corresponding nucleoside 5'-O-phosphates, releasing hydrogen sulfide in the process. Beyond its enzymatic functions, PKCi serves as a scaffolding protein, modulating transcriptional activation by the LEF1/TCF1-CTNNB1 complex and the MITF-CTNNB1 complex. Additionally, it influences p53/TP53 levels, p53/TP53-mediated apoptosis, and regulates the proteasomal degradation of target proteins through the SCF (SKP2-CUL1-F-box protein) E3 ubiquitin-protein ligase complex. Furthermore, PKCi exhibits SUMO-specific isopeptidase activity, deconjugating SUMO1 from RGS17 and RANGAP1. This multifaceted functionality underscores the diverse roles of PKCi in various cellular processes.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA