

CaMKPase Protein

Full-length recombinant protein expressed in E. coli cells

Catalog # P06-34G

Lot # C319-3

Product Description

Recombinant full-length human CaMKPase was expressed in E. coli cells using an N-terminal GST tag. The gene accession number is [NM_014634](#).

Gene Aliases

PPM1F, FEM-2, hFEM-2, KIAA0015, POPX2

Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

Storage and Stability

Store product at -70°C . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Scientific Background

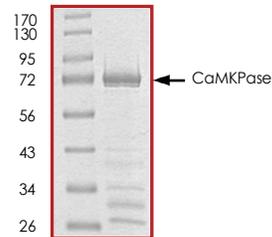
CaMKPase is a member of the PP2C family of Ser/Thr protein phosphatases that dephosphorylate and regulate the multifunctional Ca^{2+} /calmodulin-dependent protein kinases (CaMKs) (1). The multifunctional CaMKs mediate cellular responses induced by increases in second messenger Ca^{2+} and have been implicated in the control of synaptic transmission, gene transcription, cell growth and contraction of cardiac and smooth muscles (2). Overexpression of CaMKPase has been shown to mediate caspase-dependent apoptosis. CaMKPase can also interact with the Rho guanine nucleotide exchange factors (PIX) thereby blocking the effects of p21-activated kinase 1 (PAK1).

References

1. Isamu, K. et al: Phosphorylation and activation of Ca^{2+} /calmodulin-dependent protein kinase phosphatase by Ca^{2+} /calmodulin-dependent protein kinase II. FEBS Letters, 1999; 456: 249-252.
2. Ishida, A. et al: Stimulation of Ca^{2+} /calmodulin-dependent protein kinase phosphatase by polycations. Archives of Biochemistry and Biophysics, 2002; 408:229-238.

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Purity



The purity of CaMKPase was determined to be **>80%** by densitometry. Approx. MW **74kDa**.

CaMKPase Protein

Full-length recombinant protein expressed in E. coli cells

Catalog Number	P06-34G
Specific Lot Number	C319-3
Purity	>80%
Concentration	0.2 µg/µl
Stability	1 yr At -70°C from date of shipment
Storage & Shipping	Store product at -70°C . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.