

CAMK1 Protein, Human, Recombinant (His)

General Information

Synonyms:	CaM Kinase I Alpha;CaMKI- α ;CaM Kinase I;CAMK1;Calcium/Calmodulin-Dependent Protein Kinase Type 1;CaM Kinase I α ;CaM-KI;CaMKI-Alpha
Protein Construction:	Met1-Leu370
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q14012
Molecular Weight:	42 KDa (reducing condition)
AA Sequence:	Met1-Leu370

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	Greater than 90% as determined by reducing SDS-PAGE. (QC verified)
Endotoxin:	< 0.1 ng/ μ g (1 EU/ μ g) as determined by LAL test.
Formulation:	Lyophilized from a solution filtered through a 0.22 μ m filter, containing 20 mM PB, 150 mM NaCl, pH 7.4.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μ g/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Calcium/Calmodulin-Dependent Protein Kinase Type 1 (CAMK1) belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family, and CaMK subfamily. CAMK1 contains one protein kinase domain and widely expressed. CAMK1 is phosphorylated by CaMKK1 and CaMKK2 on Thr-177. CAMK1 regulates transcription activators activity, cell cycle, hormone production, cell differentiation, actin filament organization, and neurite

outgrowth. CAMK1 plays a role in K⁺ and ANG2-mediated regulation of the aldosterone synthase (CYP11B2) to produce aldosterone in the adrenal cortex.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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