

Recombinant Human CAMK1

Catalog No: C937

Description Recombinant Human Calcium/Calmodulin-Dependent Protein Kinase Type I is produced by our Mammalian

expression system and the target gene encoding Met1-Leu370 is expressed with a 6His tag at the C-

terminus.

Human Cells Source

Alternative name

Calcium/Calmodulin-Dependent Protein Kinase Type 1; CaM Kinase I; CaM-KI; CaM Kinase I Alpha;

CaMKI-Alpha; CAMK1

Accession No. Q14012

Formulation Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl, pH7.4.

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

The product is shipped at ambient temperature. **Shipping**

Upon receipt, store it immediately at the temperature listed below.

Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. **Storage**

> Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

MLGAVEGPRWKQAEDIRDIYDFRDVLGTGAFSEVILAEDKRTQKLVAIKCIAKEALEGKEGSMENEIAVLHKI KHPNIVALDDIYESGGHLYLIMQLVSGGELFDRIVEKGFYTERDASRLIFQVLDAVKYLHDLGIVHRDLKPENL LYYSLDEDSKIMISDFGLSKMEDPGSVLSTACGTPGYVAPEVLAQKPYSKAVDCWSIGVIAYILLCGYPPFYD ENDAKLFEQILKAEYEFDSPYWDDISDSAKDFIRHLMEKDPEKRFTCEQALQHPWIAGDTALDKNIHQSVSE

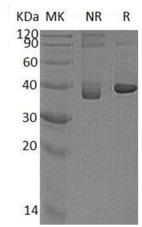
Amino Acid Sequence

QIKKNFAKSKWKQAFNATAVVRHMRKLQLGTSQEGQGQTASHGELLTPVAGGPAAGCCCRDCCVEPGTE

LSPTLPHQLVDHHHHHH

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.



SDS-Page

