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.
Source	Human Cells
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.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Storage	Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. 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.
Amino Acid Sequence	MLGAVEGPRWKQAEDIRDIYDFRDVLGTGAFSEVILAEDKRTQKLVAIKCIAKEALEGKEGSMENEIAVLHKI KHPNIVALDDIYESGGHLYLIMQLVSGGELFDRIVEKGFYTERDASRLIFQVLDAVKYLHDLGIVHRDLKPENL LYYSLDEDSKIMISDFGLSKMEDPGSVLSTACGTPGYVAPEVLAQKPYSKAVDCWSIGVIAYILLCGYPPFYD ENDAKLFEQILKAEYEFDSPYWDDISDSAKDFIRHLMEKDPEKRFTCEQALQHPWIAGDTALDKNIHQSVSE 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.
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