

Recombinant Human Calcium/Calmodulin-Dependent Protein Kinase I

Cat. No. CAMK1-47H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fulllength human CAMK1.
Species	Human
Source	E.coli
Description	CAMK1 is an enzyme that in humans is encoded by the CAMK1 gene. CAMK1 is expressed in many tissues and is a component of a calmodulin-dependent protein kinase cascade. Calcium/calmodulin directly activates CAMK1 by binding to the enzyme and indirectly promotes the phosphorylation and synergistic activation of the enzyme by CAMK1.
Form	Sterile filtered liquid in 20 mM HEPES-KOH, pH 7.0 + 50 mM NaCl + 1 mM EDTA + 1 mM DTT.
Concentration	1 mg/ml
Purity	> 90% as determined by SDS-PAGE analysis.
Endotoxin Level	< 0.1 ng/g of CALM1
Biological Activity	Assayed for calcium binding and activation of MLCK.
Applications	ELISA; Inhibition Assays; Western Blot; The optimal concentration should be

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determined by the user for each specific application.

Storage

Stable for 1 year in working aliquots at -20°C to -80°C. Avoid repeated freeze-thaw cycles.

Official Symbol

CAMK1

GENE INFORMATION

Gene Name

[CAMK1](#)calcium/calmodulin-dependent protein kinase I [Homo sapiens]

Synonyms

CAMK1;calcium/calmodulin-dependent protein kinase I; CAMKI; CaMKI; MGC120317;MGC120318; calcium/calmodulin-dependent protein kinase type 1; caM-KI;CaM-KI; caMKI-alpha; CaMKI-alpha; CaM kinase I; OTTHUMP00000158527; caMkinase I alpha; EC 2.7.11.17

Gene ID

[8536](#)

mRNA Refseq

[NM_003656](#)

Protein Refseq

[NP_003647](#)

MIM

[604998](#)

UniProt ID

[Q14012](#)

Chromosome Location

3p25.3

Pathway

Calcium Regulation in the Cardiac Cell

Function

ATP binding;calmodulin binding; calmodulin-dependent protein kinase activity;

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nucleotidebinding; protein binding

**PDB rendering
based on 1a06.**

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