

# Recombinant Human Calcium/Calmodulin-Dependent Protein Kinase I

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

## SPECIFICATION

<b>Product Overview</b>	Recombinant fulllength human CAMK1.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>Description</b>	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.
<b>Form</b>	Sterile filtered liquid in 20 mM HEPES-KOH, pH 7.0 + 50 mM NaCl + 1 mM EDTA + 1 mM DTT.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	> 90% as determined by SDS-PAGE analysis.
<b>Endotoxin Level</b>	< 0.1 ng/g of CALM1
<b>Biological Activity</b>	Assayed for calcium binding and activation of MLCK.
<b>Applications</b>	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; caMKI; 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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