

Datasheet for ABIN7562761  
**CAMK4 Protein (AA 1-469) (His tag)**



[Go to Product page](#)

## Overview

Quantity:	1 mg
Target:	CAMK4
Protein Characteristics:	AA 1-469
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CAMK4 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

## Product Details

Purpose:	Custom-made recombinat Camk4 Protein expressed in mammalien cells.
Sequence:	MLKVTVPSCP SSPCSSVTAS TENLVDPYWI DGSNRDPLGD FFEVESELGR GATSIVYRCK QKGTQKPYAL KVLKKTVDKK IVRTEIGVLL RLSHPNIIKL KEIFETPTI SLVLELVTGG ELFDRIVEKG YYSERDARDA VKQILEAVAY LHENGIVHRD LKPENLLYAT PPDAPLKIA DFGLSKIVEH QVLMKTVCGT PGYCAPEILR GCAYGPEVDM WSVGIIITYIL LCGFEPFYDE RGDQFMFRRRI LNCEYYFISP WWDEVSLNAK DLVKKLIVLD PKKRLTTFQA LQHPWVTGKA ANFVHMDTAQ KKLQEFNARR KLKAAVKAVV ASSRLGSASS SHTSIQENHK ASSDPPSTQD AKDSTDLLGK KMQEEDQEED QVEAEASADE MRKLQSEEVE KDAGVKEEET SSMVPQDPED ELETDDPEMK RDSEELKLSV EEEMDPMTEE EAPDAGLGVP QQDAIQPEY <b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b>

## Product Details

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### Characteristics:

### Key Benefits:

- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

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### Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

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### Grade:

custom-made

## Target Details

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### Target:

CAMK4

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### Alternative Name:

Camk4 ([CAMK4 Products](#))

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### Background:

Calcium/calmodulin-dependent protein kinase type IV (CaMK IV) (EC 2.7.11.17) (CaM kinase-GR),FUNCTION: Calcium/calmodulin-dependent protein kinase that operates in the calcium-triggered CaMKK-CaMK4 signaling cascade and regulates, mainly by phosphorylation, the activity of several transcription activators, such as CREB1, MEF2D, JUN and RORA, which play pivotal roles in immune response, inflammation, and memory consolidation. In the thymus, regulates the CD4(+)/CD8(+) double positive thymocytes selection threshold during T-cell ontogeny. In CD4 memory T-cells, is required to link T-cell antigen receptor (TCR) signaling to the production of IL2, IFNG and IL4 (through the regulation of CREB and MEF2). Regulates the differentiation and survival phases of osteoclasts and dendritic cells (DCs). Mediates DCs survival by linking TLR4 and the regulation of temporal expression of BCL2. Phosphorylates the transcription activator CREB1 on 'Ser-133' in hippocampal neuron nuclei and contribute to memory consolidation and long term potentiation (LTP) in the hippocampus. Can activate the MAP kinases MAPK1/ERK2, MAPK8/JNK1 and MAPK14/p38 and stimulate transcription

## Target Details

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through the phosphorylation of ELK1 and ATF2. Can also phosphorylate in vitro CREBBP, PRM2, MEF2A and STMN1/OP18 (By similarity). May be involved in spermatogenesis. {ECO:0000250, ECO:0000269|PubMed:10932193, ECO:0000269|PubMed:11572782, ECO:0000269|PubMed:18829949, ECO:0000269|PubMed:8195196, ECO:0000269|PubMed:9727976}.

Molecular Weight: 52.6 kDa

UniProt: [P08414](#)

Pathways: [EGFR Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Production of Molecular Mediator of Immune Response](#), [G-protein mediated Events](#), [Interaction of EGFR with phospholipase C-gamma](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

## Handling

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Format: Liquid

Buffer: The buffer composition is at the discretion of the manufacturer.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months