

## ARG43039 anti-CAMKK2 / CaMKK beta antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes CAMKK2 / CaMKK beta
Tested Reactivity	Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CAMKK2 / CaMKK beta
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 180-194 of Human CAMKK2 / CaMKK beta. (KLAYNENDNTYYAMK)
Conjugation	Un-conjugated
Alternate Names	Calcium/calmodulin-dependent protein kinase kinase 2; CAMKKB; CaM-KK 2; CaM-kinase kinase 2; EC 2.7.11.17; CaM-KK beta; CAMKK; CaMKK 2; Calcium/calmodulin-dependent protein kinase kinase beta; CaM-kinase kinase beta; CaMKK beta

### Application Instructions

Application table	Application	Dilution
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Thimerosal, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Thimerosal and 0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

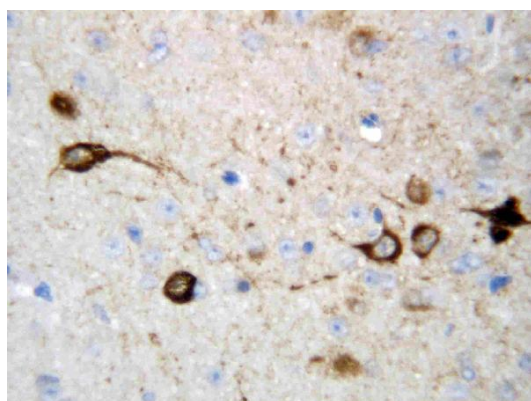
Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol	CAMKK2
Gene Full Name	calcium/calmodulin-dependent protein kinase kinase 2, beta
Background	The product of this gene belongs to the Serine/Threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. The major isoform of this gene plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. Protein products of this gene also phosphorylate AMP-activated protein kinase (AMPK). This gene has its strongest expression in the brain and influences signalling cascades involved with learning and memory, neuronal differentiation and migration, neurite outgrowth, and synapse formation. Alternative splicing results in multiple transcript variants encoding distinct isoforms. The identified isoforms differ in their ability to undergo autophosphorylation and to phosphorylate downstream kinases. [provided by RefSeq, Jul 2012]
Function	Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Isoform 1, isoform 2 and isoform 3 phosphorylate CAMK1 and CAMK4. Isoform 3 phosphorylates CAMK1D. Isoform 4, isoform 5 and isoform 6 lacking part of the calmodulin-binding domain are inactive. Efficiently phosphorylates 5'-AMP-activated protein kinase (AMPK) trimer, including that consisting of PRKAA1, PRKAB1 and PRKAG1. This phosphorylation is stimulated in response to Ca(2+) signals (By similarity). Seems to be involved in hippocampal activation of CREB1 (By similarity). May play a role in neurite growth. Isoform 3 may promote neurite elongation, while isoform 1 may promote neurite branching. [UniProt]
Calculated Mw	65 kDa
PTM	Autophosphorylated and phosphorylated by PKA. Each isoform may show a different pattern of phosphorylation. [UniProt]
Cellular Localization	Nucleus. Cytoplasm. Cell projection. Note=Predominantly nuclear in unstimulated cells (By similarity). Found in the cytoplasm and neurites after forskolin induction. [UniProt]

## Images



ARG43039 anti-CAMKK2 / CaMKK beta antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat brain tissue stained with ARG43039 anti-CAMKK2 / CaMKK beta antibody.

ARG43039 anti-CAMKK2 / CaMKK beta antibody WB image

Western blot: Rat brain (first two lanes) and Mouse brain (last two lanes) lysates stained with ARG43039 anti-CAMKK2 / CaMKK beta antibody.

