

CAMKK2 Antibody (N-term G67)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7117d**Specification**

CAMKK2 Antibody (N-term G67) - Product Information

Application	WB, IHC-P,E
Primary Accession	O96RR4
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	64746
Antigen Region	52-82

CAMKK2 Antibody (N-term G67) - Additional Information**Gene ID** 10645**Other Names**

Calcium/calmodulin-dependent protein kinase kinase 2, CaM-KK 2, CaM-kinase kinase 2, CaMKK 2, Calcium/calmodulin-dependent protein kinase kinase beta, CaM-KK beta, CaM-kinase kinase beta, CaMKK beta, CAMKK2, CAMKKB, KIAA0787

Target/Specificity

This CAMKK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 52-82 amino acids from the N-terminal region of human CAMKK2.

Dilution

WB~~1:1000
IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CAMKK2 Antibody (N-term G67) is for research use only and not for use in diagnostic or therapeutic procedures.

CAMKK2 Antibody (N-term G67) - Protein Information**Name** CAMKK2

Synonyms CAMKKB, KIAA0787

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 promoter neurite branching.

Cellular Location

Nucleus. Cytoplasm. Cell projection, neuron projection. Note=Predominantly nuclear in unstimulated cells, relocalizes into cytoplasm and neurites after forskolin induction.

Tissue Location

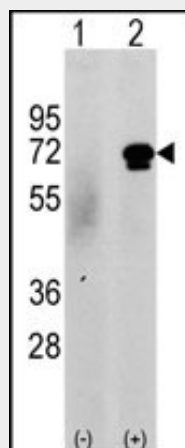
Ubiquitously expressed with higher levels in the brain. Intermediate levels are detected in spleen, prostate, thyroid and leukocytes. The lowest level is in lung

CAMKK2 Antibody (N-term G67) - Protocols

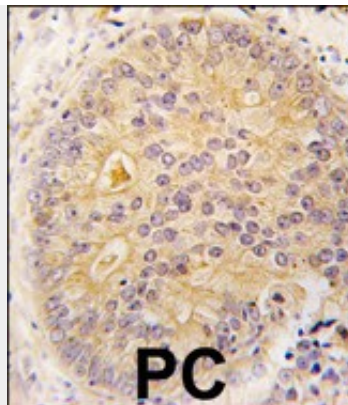
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CAMKK2 Antibody (N-term G67) - Images



Western blot analysis of CAMKK2 (arrow) using rabbit polyclonal CAMKK2 Antibody (N-term G67) (Cat.#AP7117d). 293 cell lysates (2 ug/lane) either nontransfected (c) or transiently transfected with the CAMKK2 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human prostata carcinoma tissue reacted with CAMKK2 antibody (N-term) (Cat.#AP7117d), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CAMKK2 Antibody (N-term G67) - Background

CAMKK2 belongs to the Serine/Threonine protein kinase family, and to the Ca(2+)/calmodulin-dependent protein kinase subfamily. This protein plays a role in the calcium/calmodulin-dependent (CaM) kinase cascade by phosphorylating the downstream kinases CaMK1 and CaMK4. 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. CAMKK2 appears to be involved in hippocampal activation of CREB1.

CAMKK2 Antibody (N-term G67) - References

Hsu, L.S., et al., J. Biol. Chem. 276(33):31113-31123 (2001).
Hsu, L.S., et al., J. Biomed. Sci. 5(2):141-149 (1998).
Anderson, K.A., et al., J. Biol. Chem. 273(48):31880-31889 (1998).
Ishikawa, Y., et al., FEBS Lett. 550 (1-3), 57-63 (2003)