

Camkk2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5038

Specification

Camkk2 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW Isotype Antigen Source WB,E <u>O96RR4</u> <u>O8C078</u>, <u>O88831</u> Human, Mouse, Rat Rabbit Polyclonal H=65;M=65;Rat=64 KDa Rabbit IgG MOUSE

Camkk2 Antibody (N-term) - Additional Information

Gene ID 10645

Antigen Region 43-71

Other Names Camkk2; Kiaa0787; Calcium/calmodulin-dependent protein kinase kinase 2; Calcium/calmodulin-dependent protein kinase kinase beta

Dilution WB~~1:1000

Target/Specificity

This Camkk2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 43-71 amino acids from the N-terminal region of mouse Camkk2.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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) is for research use only and not for use in diagnostic or therapeutic procedures.

Camkk2 Antibody (N-term) - 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) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Camkk2 Antibody (N-term) - Images





Western blot analysis of lysates from human brain,rat cerebellum tissue and U-87 MG cell line (from left to right),using Camkk2 Antibody (N-term)(Cat. #AW5038). AW5038 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.

Camkk2 Antibody (N-term) - Background

Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Phosphorylates CAMK1, CAMK4 and CAMK1D (By similarity). Seems to be involved in hippocampal activation of CREB1.

Camkk2 Antibody (N-term) - References

Jin, X.L., et al. Biol. Reprod. 82(2):459-468(2010) Kokubo, M., et al. J. Neurosci. 29(28):8901-8913(2009) Anderson, K.A., et al. Cell Metab. 7(5):377-388(2008) Park, C.S., et al. Neuroscience 151(1):43-55(2008) Hoyer-Hansen, M., et al. Mol. Cell 25(2):193-205(2007)