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CaMKK2 Polyclonal Antibody

Catalog # AP68807

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q96RR4
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64746

Additional Information

Gene ID	10645
Other Names	CAMKK2; CAMKKB; KIAA0787; 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
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

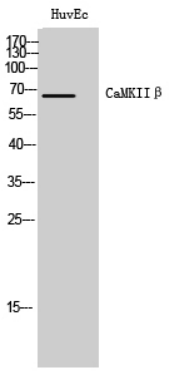
Name	CAMKK2
Synonyms	CAMKKB, KIAA0787
Function	Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade involved in a number of cellular processes. Isoform 1, isoform 2 and isoform 3 phosphorylate CAMK1 and CAMK4. Isoform 3 phosphorylates CAMK1D. Isoform 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

Background

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.

Images



Western Blot analysis of HuvEc cells using CaMKIIβ Polyclonal Antibody

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.