

Anti-CaMKK beta Antibody

Rabbit polyclonal antibody to CaMKK beta Catalog # AP60789

Product Information

Application WB, IHC
Primary Accession Q96RR4
Other Accession 08C078

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 64746

Additional Information

Gene ID 10645

Other Names 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

Target/Specificity Recognizes endogenous levels of CaMKK beta protein.

Dilution WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC

(1/100 - 1/200)

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

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

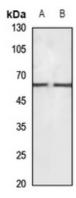
detected in spleen, prostate, thyroid and leukocytes. The lowest level is in

lung

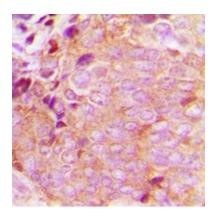
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CaMKK beta. The exact sequence is proprietary.

Images



Western blot analysis of CaMKK beta expression in mouse brain (A), rat brain (B) whole cell lysates.



Immunohistochemical analysis of CaMKK beta staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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