

### **Anti-CaMKK beta Antibody**

Rabbit polyclonal antibody to CaMKK beta Catalog # AP60789

### **Specification**

### **Anti-CaMKK beta Antibody - Product Information**

Application WB
Primary Accession Q96RR4
Other Accession Q8C078

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 64746

# **Anti-CaMKK beta Antibody - 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), IH (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

### **Anti-CaMKK beta Antibody - 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**

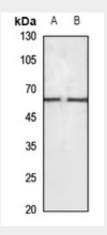
Ubiquitously expressed with higher levels in the brain. Intermediate levels are detected in spleen, prostate, thyroid and leukocytes. The lowest level is in lung

# **Anti-CaMKK beta Antibody - Protocols**

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

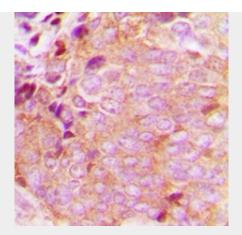
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-CaMKK beta Antibody - 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.

# **Anti-CaMKK beta Antibody - Background**

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