

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP7204a

## **Specification**

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Product Information

Primary Accession <u>O8IU85</u> Other Accession <u>NP 705718</u>

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Additional Information

#### **Gene ID 57118**

#### **Other Names**

Calcium/calmodulin-dependent protein kinase type 1D, CaM kinase I delta, CaM kinase ID, CaM-KI delta, CaMKI delta, CaMKID, CaMKI-like protein kinase, CKLiK, CAMK1D, CAMKID

#### **Target/Specificity**

The synthetic peptide sequence is selected from aa 317~333 of human CAMK1-like.

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

# CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Protein Information

#### Name CAMK1D

## **Synonyms CAMKID**

### **Function**

Calcium/calmodulin-dependent protein kinase that operates in the calcium-triggered CaMKK-CaMK1 signaling cascade and, upon calcium influx, activates CREB-dependent gene transcription, regulates calcium- mediated granulocyte function and respiratory burst and promotes basal dendritic growth of hippocampal neurons. In neutrophil cells, required for cytokine-induced proliferative responses and activation of the respiratory burst. Activates the transcription factor CREB1 in hippocampal neuron nuclei. May play a role in apoptosis of erythroleukemia cells. In vitro, phosphorylates transcription factor CREM isoform Beta.

### **Cellular Location**

Cytoplasm. Nucleus. Note=Predominantly cytoplasmic. Nuclear localization increases upon activation by KCl treatment in hippocampal neurons



#### **Tissue Location**

Widely expressed. Highly and mostly expressed in polymorphonuclear leukocytes (neutrophilic and eosinophilic granulocytes) while little or no expression is observed in monocytes and lymphocytes.

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Protocols

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

### • Blocking Peptides

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Images

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains.

## CAMK1D (CAMK1 delta)Antibody (C-term) Blocking peptide - References

Blume-Jensen P, et al. Nature 2001. 411: 355.Cantrell D, J. Cell Sci. 2001. 114: 1439.Jhiang S Oncogene 2000. 19: 5590.Manning G, et al. Science 2002. 298: 1912.Moller, D, et al. Am. J. Physiol. 1994. 266: C351-C359.Robertson, S. et al. Trends Genet. 2000. 16: 368.Robinson D, et al. Oncogene 2000. 19: 5548.Van der Ven, P, et al. Hum. Molec. Genet. 1993. 2: 1889.Vanhaesebroeck, B, et al. Biochem. J. 2000. 346: 561.Van Weering D, et al. Recent Results Cancer Res. 1998. 154: 271.