

# **CAMK1D Antibody (Center) Blocking Peptide** Synthetic peptide

Catalog # BP7204c

# Specification

# CAMK1D Antibody (Center) Blocking Peptide - Product Information

Primary Accession Other Accession

### <u>Q8IU85</u> <u>NP\_705718</u>

# CAMK1D Antibody (Center) 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, CaMKID, CaMKID, CaMKI-like protein kinase, CKLiK, CAMK1D, CAMKID

### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/products/AP7204c>AP7204c</a> was selected from the Center region of human CAMK1D. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

#### 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 Antibody (Center) 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 Antibody (Center) Blocking Peptide - Protocols

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

### <u>Blocking Peptides</u>

### CAMK1D Antibody (Center) Blocking Peptide - Images

## CAMK1D Antibody (Center) Blocking Peptide - Background

CAMK1-like protein kinase belongs to a proposed calcium-triggered signaling cascade. This protein is expressed in polymorphonuclear leukocytes (PMNs) and may be part of the chemokine signal transduction pathway that regulates granulocyte function. CAMK1-like protein kinase may play a role in apoptosis of erythroleukemia cells. It activates MAP kinase MAPK3, and in vitro, phosphorylates transcription factor CREM isoform Beta and probably CREB1.

# CAMK1D Antibody (Center) Blocking Peptide - References

Verploegen, S., et al., Blood 96(9):3215-3223 (2000). Ishikawa, Y., et al., FEBS Lett. 550 (1-3), 57-63 (2003).