

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

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7204a

## **Specification**

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

**Application** IHC-P, WB,E **Primary Accession 08IU85** Other Accession NP 705718 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 302-333

### CAMK1D (CAMK1 delta)Antibody (C-term) - 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, CAMKID, CAMKID

#### Target/Specificity

This CAMK1D (CAMK1 delta) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 302-333 amino acids from the C-terminal region of human CAMK1D (CAMK1 delta).

## **Dilution**

IHC-P~~1:50~100 WB~~1:1000

E~~Use at an assay dependent concentration.

## **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

CAMK1D (CAMK1 delta)Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## CAMK1D (CAMK1 delta)Antibody (C-term) - 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**

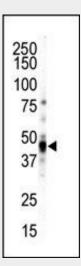
Widely expressed. Highly and mostly expressed in polymorphonuclear leukocytes (neutrophilic and eosinophilic granulocytes) while little or no expression is observed in monocytes and lymphocytes.

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

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

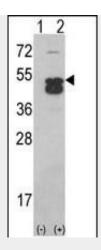
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

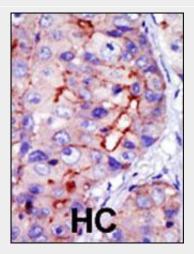


Western blot analysis of anti-CAMK1-like C-term Pab (Cat. #AP7204a) in NCIH460 cell lysate. CAMK1-like (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

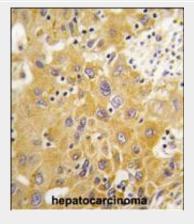




Western blot analysis of CAMK1D (arrow) using CAMK1D (CAMK1 delta)Antibody (C-term) (Cat. #AP7204a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CAMK1D gene (Lane 2).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with CAMK1-like Antibody (C-term) (Cat.#AP7204a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

CAMK1D (CAMK1 delta)Antibody (C-term) - Background





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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 (CAMK1 delta)Antibody (C-term) - References

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