

CAMK1D (CAMK1 delta)Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7204a

Specification

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

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, WB,E <u>O8IU85</u> <u>NP_705718</u> Human Rabbit Polyclonal Rabbit IgG 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, CaMKID, CaMKID, CaMKI-like protein kinase, CKLiK, CAMK1D, 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.

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

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



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).