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CAMK1D (CAMK1 delta)Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7204a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8IU85
Other Accession	NP_705718
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB2518
Calculated MW	42914
Antigen Region	302-333

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	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	WB~~1:1000 IHC-P~~1:100~500 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.

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.

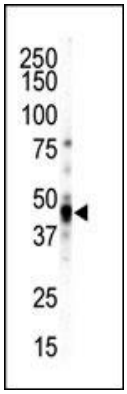
Background

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.

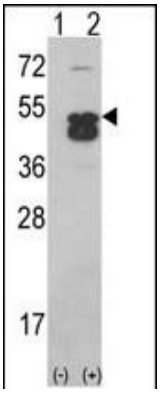
References

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

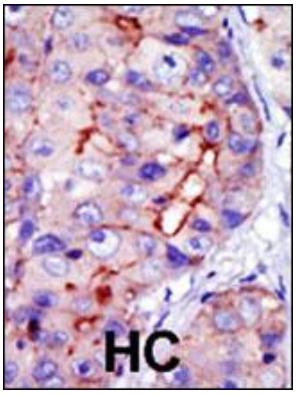
Images



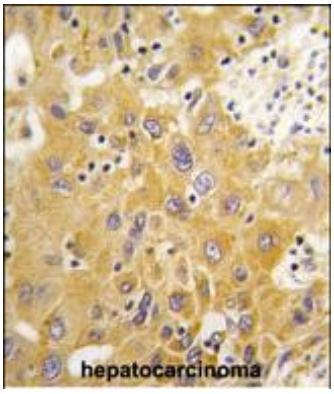
Western blot analysis of anti-CAMK1-like C-term Pab (Cat. #AP7204a) in NCIH460 cell lysate. CAMK1-like (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.