

Product datasheet

Anti-CAMK1D antibody [2C6] ab118022

[5 Images](#)

Overview

Product name	Anti-CAMK1D antibody [2C6]
Description	Mouse monoclonal [2C6] to CAMK1D
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length Human CAMK1D produced in HEK293T cells (NP_065130).
Positive control	HEK293T cell lysate transfected with pCMV6-ENTRY CAMK1D cDNA; Human breast adenocarcinoma and thyroid tissues; COS7 cells transiently transfected by pCMV6-ENTRY CAMK1D.
General notes	Dilute in PBS (pH7.3) before use. Stable for 12 months from date of receipt.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 48% PBS, 50% Glycerol, 1% BSA
Purity	Protein G purified
Purification notes	ab118022 was purified from Mouse ascites fluids by affinity chromatography.
Clonality	Monoclonal
Clone number	2C6
Isotype	IgG1

Applications

Our [Abpromise guarantee](#) covers the use of **ab118022** in the following tested applications.

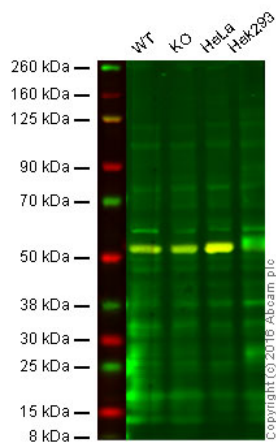
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000. Predicted molecular weight: 43 kDa.
IHC-P		1/50.
ICC/IF		1/100.

Target

Function	Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade. May regulate calcium-mediated granulocyte function. May play a role in apoptosis of erythroleukemia cells. Activates MAP kinase MAPK3 (By similarity). In vitro, phosphorylates transcription factor CREM isoform Beta and probably CREB1.
Tissue specificity	Broadly expressed. Highly and mostly expressed in polymorphonuclear leukocytes (neutrophilic and eosinophilic granulocytes) while little or no expression is observed in monocytes and lymphocytes.
Sequence similarities	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.
Domain	The autoinhibitory domain overlaps with the calmodulin binding region and interacts in the inactive folded state with the catalytic domain as a pseudosubstrate.
Cellular localization	Cytoplasm. Nucleus. Predominantly cytoplasmic (Probable). Also nuclear upon activation.

Images



Western blot - Anti-CAMK1D antibody [2C6]
(ab118022)

Lane 1: Wild-type HAP1 cell lysate (40 µg)

Lane 2: CAMK1D knockout HAP1 cell lysate (40 µg)

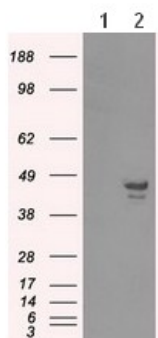
Lane 3: HeLa cell lysate (40 µg)

Lane 4: HEK293 cell lysate (40 µg)

Lanes 1 - 4: Merged signal (red and green).

Green - ab118022 observed at 43 kDa. Red - loading control, ab176560, observed at 52 kDa.

ab118022 was shown not to react with CAMK1D when CAMK1D knockout samples were used. Wild-type and CAMK1D knockout samples were subjected to SDS-PAGE. Ab118022 and ab176560 (loading control to alpha Tubulin) were diluted at 1/2000 and 1:10,000 dilution respectively and incubated overnight at 4C. Blots were developed with IRDye® 800CW Goat anti-Mouse IgG (H + L) and IRDye® 680 Goat anti-Rabbit IgG (H + L) secondary antibodies at 1:10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CAMK1D antibody [2C6]
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All lanes : Anti-CAMK1D antibody [2C6]
(ab118022) at 1/2000 dilution

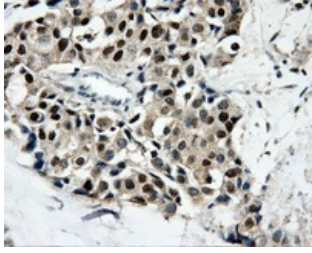
Lane 1 : HEK293T cell lysate transfected with pCMV6-ENTRY control

Lane 2 : HEK293T cell lysate transfected with pCMV6-ENTRY CAMK1D cDNA

Lysates/proteins at 5 µg per lane.

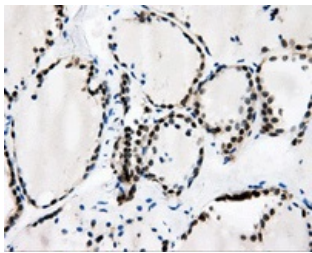
Predicted band size: 43 kDa

HEK293T cell lysates were generated from transient transfection of the cDNA clone (RC201419)



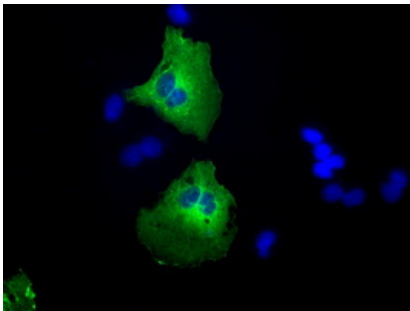
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAMK1D antibody [2C6] (ab118022)

ab118022, at 1/50 dilution, staining CAMK1D in paraffin-embedded Human breast adenocarcinoma tissue by Immunohistochemistry.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAMK1D antibody [2C6] (ab118022)

ab118022, at 1/50 dilution, staining CAMK1D in paraffin-embedded Human thyroid tissue by Immunohistochemistry.



Immunocytochemistry/ Immunofluorescence - Anti-CAMK1D antibody [2C6] (ab118022)

ab118022, at 1/100 dilution, staining CAMK1D in COS7 cells transiently transfected by pCMV6-ENTRY CAMK1D by Immunofluorescence.

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