


Product datasheet

Anti-CAMK1D antibody ab118318

[4 Images](#)

Overview

Product name	Anti-CAMK1D antibody
Description	Mouse monoclonal to CAMK1D
Host species	Mouse
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human Predicted to work with: Mouse 
Immunogen	Recombinant fragment: MARENGESSS SWKKQAEDIK KIFEFKETLG TGAFSEVVLA EEKATGKLFA VKCIPKKALK GKESSEIENEI AVLRLKIKHEN IVALEDIYES PNHLY, corresponding to amino acids 1 - 96 of Human CAMK1D, with a proprietary tag (AAH35745). Run BLAST with ExPASy Run BLAST with NCBI
Positive control	CAMK1D transfected 293T cell line lysate, Human placenta tissue

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Constituent: 99% PBS
Purity	Protein A purified
Clonality	Monoclonal
Isotype	IgG2b
Light chain type	kappa

Applications

Our [Abpromise guarantee](#) covers the use of **ab118318** 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		Use a concentration of 1 - 5 µg/ml. Predicted molecular weight: 43 kDa.
IHC-P		Use a concentration of 3 µg/ml.

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.

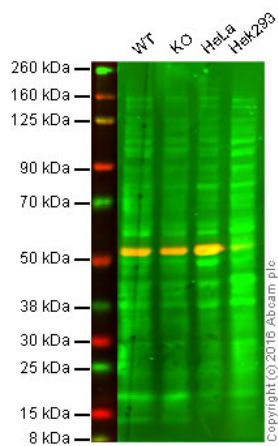
Domain

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 (ab118318)

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

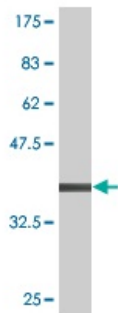
Lane 2: CAMK1D knockout HAP1 cell lysate (40 µg)

Lane 3: HeLa cell lysate (40 µg)

Lane 4: HEK293 cell lysate (40 µg)

Lanes 1 - 4: Merged (red and green) signal. Green - ab118318 observed at 43kDa. Red - loading control, ab176560, observed at 52kDa.

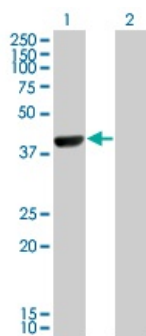
ab118318 was shown not to react with CAMK1D when CAMK1D knockout samples were used. Wild-type and CAMK1D knockout samples were subjected to SDS-PAGE. Ab118318 and ab176560 (loading control to alpha Tubulin) were diluted at 1 µg/ml and 1:10,000 dilution respectively and incubated overnight at 4C. Blots 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 (ab118318)

Anti-CAMK1D antibody (ab118318) at 1 µg/ml + Recombinant CAMK1D protein (the immunogen) with a proprietary tag at 0.2 µg

Predicted band size: 43 kDa



Western blot - Anti-CAMK1D antibody (ab118318)

All lanes : Anti-CAMK1D antibody

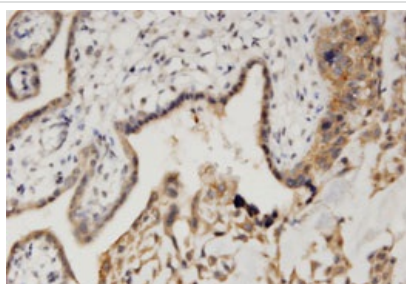
(ab118318) at 1 µg/ml

Lane 1 : CAMK1D-transfected 293T cell lysate

Lane 2 : Non-transfected 293T cell lysate

Lysates/proteins at 50 µg per lane.

Predicted band size: 43 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAMK1D antibody (ab118318)

ab118318, at 3 µg/ml, staining CAMK1D in formalin-fixed paraffin-embedded Human placenta tissue by Immunohistochemistry.

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