

## Product datasheet

# Anti-CAMK1D antibody [EPR3536(2)] ab172618

**KO** **VALIDATED** Recombinant **RabMAb**

[4 References](#) [4 Images](#)

### Overview

<b>Product name</b>	Anti-CAMK1D antibody [EPR3536(2)]
<b>Description</b>	Rabbit monoclonal [EPR3536(2)] to CAMK1D
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF <b>Unsuitable for:</b> Flow Cyt, IHC-P or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Human fetal forebrain, 293T and HeLa lysates; 293T cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR3536(2)  
**Isotype**                                IgG

## Applications

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**The Abpromise guarantee**        Our [Abpromise guarantee](#) covers the use of ab172618 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		1/10000 - 1/50000. Detects a band of approximately 40 kDa (predicted molecular weight: 43 kDa).
ICC/IF		1/50 - 1/100.

**Application notes**                    Is unsuitable for Flow Cyt, IHC-P or IP.

## Target

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**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.

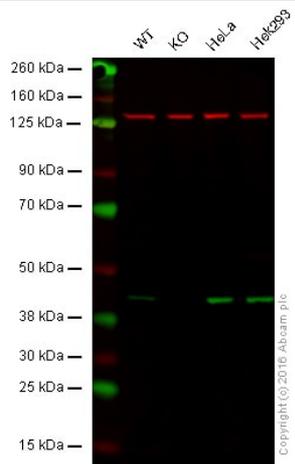
**Sequence similarities**                Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.

**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

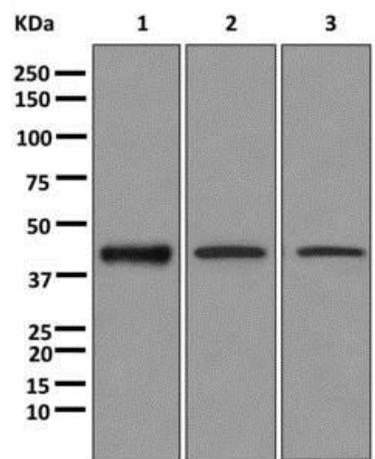
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Western blot - Anti-CAMK1D antibody [EPR3536(2)] (ab172618)

**Lane 1:** Wild-type HAP1 cell lysate (20 µg)  
**Lane 2:** CAMK1D knockout HAP1 cell lysate (20 µg)  
**Lane 3:** HeLa cell lysate (20 µg)  
**Lane 4:** HEK293 cell lysate (20 µg)  
**Lanes 1 - 4:** Merged signal (red and green). Green - ab172618 observed at 43 kDa. Red - loading control, ab18058, observed at 124 kDa.

ab172618 was shown to specifically react with CAMK1D when CAMK1D knockout samples were used. Wild-type and CAMK1D knockout samples were subjected to SDS-PAGE. ab172618 and ab18058 (loading control to Vinculin) were both diluted 1/10,000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



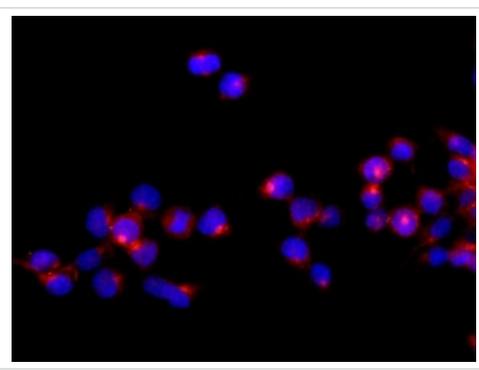
Western blot - Anti-CAMK1D antibody [EPR3536(2)] (ab172618)

**All lanes :** Anti-CAMK1D antibody [EPR3536(2)] (ab172618) at 1/10000 dilution

**Lane 1 :** Human fetal forebrain tissue lysate  
**Lane 2 :** HeLa cell lysate  
**Lane 3 :** 293T cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 43 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CAMK1D antibody [EPR3536(2)] (ab172618)

Immunofluorescent analysis of 293T cells labeling CAMK1D with ab172618 at 1/50 dilution (red). DAPI nuclear staining (blue).

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-CAMK1D antibody [EPR3536(2)] (ab172618)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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