

Product datasheet

Anti-CAMK1D antibody [EPR3536(2)] - BSA and Azide free ab249712

KO VALIDATED Recombinant RabMAB

4 Images

Overview

Product name	Anti-CAMK1D antibody [EPR3536(2)] - BSA and Azide free
Description	Rabbit monoclonal [EPR3536(2)] to CAMK1D - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: ICC/IF, WB Unsuitable for: Flow Cyt, IHC-P or IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	<p>ab249712 is the carrier-free version of ab172618.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Affinity purified
Clonality	Monoclonal
Clone number	EPR3536(2)
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab249712 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

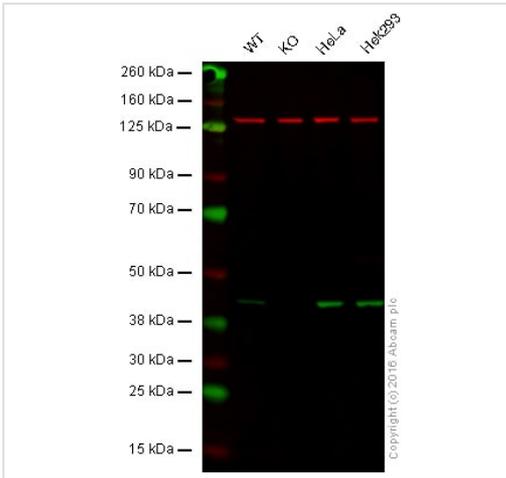
Application	Abreviews	Notes
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 40 kDa (predicted molecular weight: 43 kDa).

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

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 [EPR3536(2)]
- BSA and Azide free (ab249712)

This data was developed using [ab172618](#), the same antibody clone in a different buffer formulation.

Lane 1: Wild-type HAP1 cell lysate (20 µg)

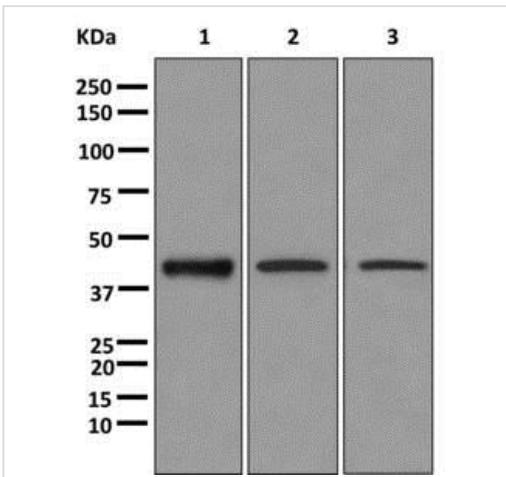
Lane 2: CAMK1D knockout HAP1 cell lysate (20 µg)

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

Lane 1 : Human fetal forebrain tissue lysate

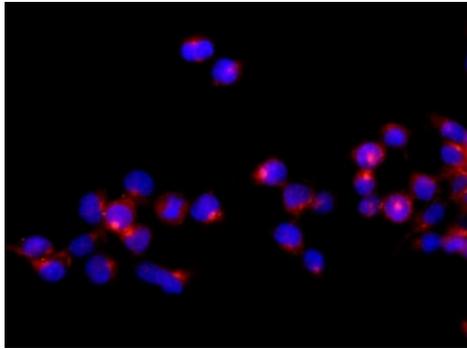
Lane 2 : HeLa cell lysate

Lane 3 : 293T cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 43 kDa

This data was developed using [ab172618](#), the same antibody clone in a different buffer formulation.



This data was developed using [ab172618](#), the same antibody clone in a different buffer formulation. Immunofluorescent analysis of 293T cells labeling CAMK1D with [ab172618](#) at 1/50 dilution (red). DAPI nuclear staining (blue).

Immunocytochemistry/ Immunofluorescence - Anti-CAMK1D antibody [EPR3536(2)] - BSA and Azide free (ab249712)

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

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

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