abcam

Product datasheet

Anti-Casein Kinase 1 delta/CSNK1D antibody ab48031

Overview

Product name Anti-Casein Kinase 1 delta/CSNK1D antibody

Description Goat polyclonal to Casein Kinase 1 delta/CSNK1D

Host species Goat

Specificity This antibody is expected to recognise both reported isoforms of Casein Kinase 1

delta/CSNK1D.

Tested applications Suitable for: WB, ICC/IF

Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat, Cow, Dog, Chimpanzee, Macaque monkey

Immunogen Synthetic peptide corresponding to Human Casein Kinase 1 delta/CSNK1D aa 310-324 (internal

sequence). Sequence:

DREERLRHSRNPATR

Database link: P48730

WB: HEK 293 cell lysate. ICC/UF U251 cells.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

Run BLAST with

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Positive control

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer pH: 7.30

Preservative: 0.02% Sodium azide

Constituents: Tris buffered saline, 0.5% BSA

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Purity Immunogen affinity purified

Purification notes Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity

chromatography using the immunizing peptide.

Clonality Polyclonal

Isotype ΙgG

Applications

Target

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab48031 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)	Use a concentration of 0.3 - 1 µg/ml. Detects a band of approximately 48 kDa (predicted molecular weight: 47 kDa). 1 hour primary incubation is recommended for this product.
ICC/IF		Use a concentration of 10 μg/ml.

Function	Casein kinases are operationally defined by their preferential utilization of acidic proteins such as		
	caseins as substrates. It can phosphorylate a large number of proteins. Participates in Wnt		

proteins. Participates in Wnt signaling. Central component of the circadian clock. May act as a negative regulator of circadian

rhythmicity by phosphorylating PER1 and PER2. Retains PER1 in the cytoplasm.

Tissue specificity Expressed in all tissues examined, including brain, heart, lung, liver, pancreas, kidney, placenta

and skeletal muscle. In blood, highly expressed in hemopoietic cells and mature granulocytes.

Also found in monocytes and lymphocytes.

Involvement in disease Defects in CSNK1D are a cause of familial advanced sleep-phase syndrome (FASPS)

> [MIM:604348]. FASPS is characterized by very early sleep onset and offset. Individuals are 'morning larks' with a 4 hours advance of the sleep, temperature and melatonin rhythms.

Sequence similarities Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. Casein kinase I

subfamily.

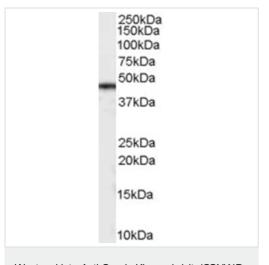
Contains 1 protein kinase domain.

Post-translational modifications

Autophosphorylated on serine and threonine residues.

Cellular localization Cytoplasm. Nucleus.

Images

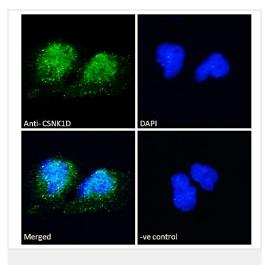


Western blot - Anti-Casein Kinase 1 delta/CSNK1D antibody (ab48031)

Anti-Casein Kinase 1 delta/CSNK1D antibody (ab48031) at 0.3 μ g/ml + HEK 293 cell lysate in RIPA buffer at 35 μ g

Predicted band size: 47 kDa **Observed band size:** 48 kDa

Primary incubation was 1 hour. Detected using chemiluminescence.



Immunocytochemistry/ Immunofluorescence - Anti-Casein Kinase 1 delta/CSNK1D antibody (ab48031) Immunocytochemistry/Immunofluorescence analysis of U251 cells labelling Casein Kinase 1 delta/CSNK1D with ab48031 at 10 µg/ml. Cells were paraformaldehyde fixed and permeabilized with 0.15% triton. Primary antibody icubation was for 1 hour followed by incubation with an Alexa Fluor[®] 488-conjugated secondary antibody at 2 µg/ml. DAPI nuclear counterstain was used.

Negative control: Unimmunized goat lgG (10 μ g/ml) followed by an Alexa Fluor[®] 488-conjugated secondary antibody (2 μ g/ml).

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

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