abcam

Product datasheet

Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] ab183550



1 References 7 Images

Overview

Product name Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499]

Description Rabbit monoclonal [EPR17499] to Cdk1 + Cdk2 (phospho T14)

Host species Rabbit

Tested applications

Suitable for: WB, IHC-P, IP, Dot blot

Species reactivity

Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa whole cell lysate treated with 2mg/ml hydroxyurea for 24 hours. IHC-P: Human colon,

Human colonic adenocarcinoma, Mouse spleen and Rat spleen tissues. IP: HeLa whole cell

extract.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificity
Long-term security of supply
Animal-free production
For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions 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.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

1

Clone number EPR17499

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab183550 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		1/1000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).	
IHC-P		1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.	
IP		1/40.	
Dot blot		1/1000.	

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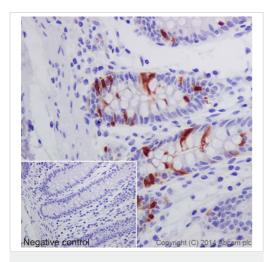
Relevance

Cdk2 is a member of the Ser/Thr protein kinase family. It is highly similar to the gene products of S. cerevisiae cdc28, and S. pombe cdc2. Cdk2 is closely related to cdc2 (cdk1) which has proved useful as a marker of proliferation. Cdk1 and Cdk2 are a catalytic subunits of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle.

Cellular localization

Cytoplasmic and Nuclear

Images

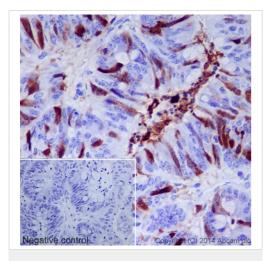


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling Cdk1 + Cdk2 (phospho T14) with ab183550 at 1/250 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Scattered nuclear and cytoplasmic staining on epithelial cells of Human colon tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

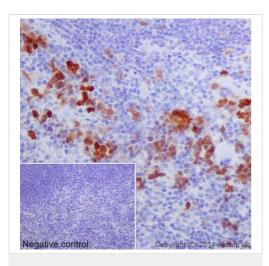


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

Immunohistochemical analysis of paraffin-embedded Human colonic adenocarcinoma tissue labeling Cdk1 + Cdk2 (phospho T14) with ab183550 at 1/250 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on cancer cells of Human colonic adenocarcinoma tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

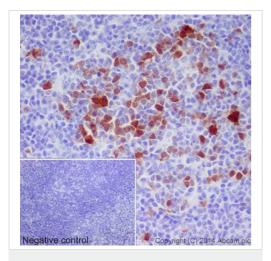


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Cdk1 + Cdk2 (phospho T14) with ab183550 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on lymphocytes of mouse spleen tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

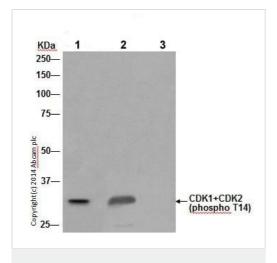


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling Cdk1 + Cdk2 (phospho T14) with ab183550 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) secondary antibody at 1/500 dilution. Nuclear and cytoplasmic staining on lymphocytes of rat spleen tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

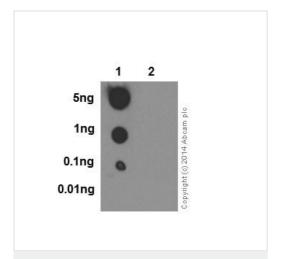
Cdk1 + Cdk2 (phospho T14) was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell extract with ab183550 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab183550 at 1/1000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1000 dilution.

Lane 1 (Input): HeLa whole cell extract 10 µg (Input).

Lane 2: ab183550 IP in HeLa whole cell extract.

Lane 3: Rabbit monoclonal $\lg G (\underline{ab172730})$ instead of ab183550 in HeLa whole cell extract.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

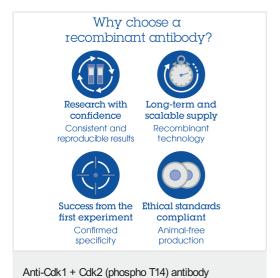


Dot Blot - Anti-Cdk1 + Cdk2 (phospho T14) antibody [EPR17499] (ab183550)

Dot blot analysis of Cdk1 + Cdk2 (phospho T14) peptide (Lane 1), and non-phospho peptide (Lane 2), labeled using ab183550 at 1/1000 dilution, followed by Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated secondary antibody at 1/1000 dilution.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time = 3 minutes



[EPR17499] (ab183550)

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