abcam

Product datasheet

Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free ab239860

Recombinant RabMAb

6 Images

Overview

Product name Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free

Description Rabbit monoclonal [EP2234Y] to CDK2 (phospho T14) - BSA and Azide free

Host species Rabbit

Specificity This antibody detects Cdk2 phosphorylated on Threonine 14.

The Chinese hamster recommendation is based on the WB result. We do not guarantee IHC-P for

Chinese hamster.

Suitable for: IHC-P. WB **Tested applications**

Unsuitable for: Flow Cyt

Reacts with: Mouse, Rat, Human, Chinese hamster Species reactivity

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

Positive control WB: HeLa,C2C12 (Mouse myoblasts myoblast) treated with 1mM hydroxyurea for 16 hours, C6

> (Rat glial tumor glial cell) treated with 1mM hydroxyurea for 16 hours, CHO-S (Chinese hamster ovary epithelial cell) whole cell lysates. IHC: Human ovarian carcinoma, mouse and rat stomach

tissues.

General notes ab239860 is the carrier-free version of ab68265.

> 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.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

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.

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.

This 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**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

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 Protein A purified

Clonality Monoclonal
Clone number EP2234Y

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab239860 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. The Chinese hamster recommendation is based on the WB result. We do not guarantee IHC-P for Chinese hamster.
WB		Use at an assay dependent concentration. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).

Application notes Is unsuitable for Flow Cyt.

Target

Function Involved in the control of the cell cycle. Interacts with cyclins A, B1, B3, D, or E. Activity of CDK2 is

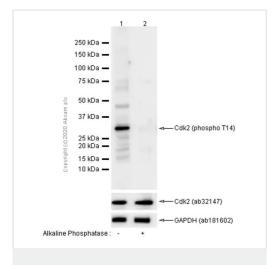
maximal during S phase and G2.

Sequence similarities Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX

subfamily.

Contains 1 protein kinase domain.

Images



Western blot - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860) **All lanes :** Anti-CDK2 (phospho T14) antibody [EP2234Y] (ab68265) at 1/1000 dilution

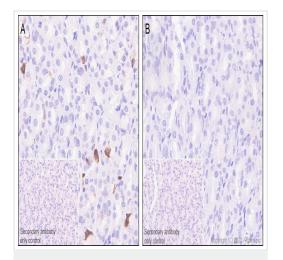
Lane 1: CHO-S (Chinese hamster ovary epithelial cell) whole cell lysate

Lane 2 : CHO-S (Chinese hamster ovary epithelial cell) whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

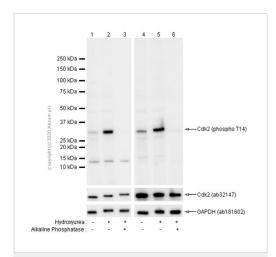
Predicted band size: 34 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860)

This data was developed using ab239860, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat stomach tissue sections labeling CDK2 with Purified 239860 at 1:1000 dilution (0.24 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0) . Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860)

Lane 1 : Anti-CDK2 (phospho T14) antibody [EP2234Y] (ab68265) at 1/1000 dilution (Purified)

Lanes 2-6: Anti-CDK2 (phospho T14) antibody [EP2234Y] (ab68265) at 1/1000 dilution

Lane 1: Untreated C6 (Rat glial tumor glial cell) whole cell lysate

Lane 2: C6 (Rat glial tumor glial cell) treated with 1mM

hydroxyurea for 16 hours whole cell lysate

Lane 3: C6 (Rat glial tumor glial cell) treated with 1mM hydroxyurea for 16 hours whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lane 4: Untreated C2C12 (Mouse myoblasts myoblast) whole cell lysate

Lane 5: C2C12 (Mouse myoblasts myoblast) treated with 1mM hydroxyurea for 16 hours whole cell lysate

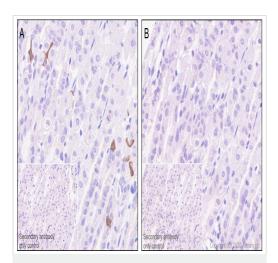
Lane 6: C2C12 (Mouse myoblasts myoblast) treated with 1mM hydroxyurea for 16 hours whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

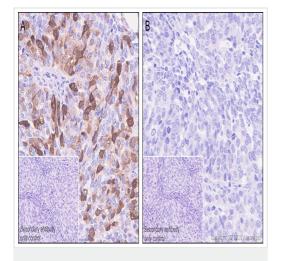
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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860)

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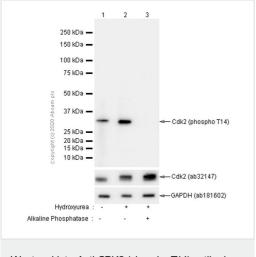
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Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860)

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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human ovarian carcinoma tissue sections labeling CDK2 with Purified 239860 at 1:1000 dilution (0.24 µg/ml). Heat mediated antigen retrieval using Bond™ Epitope Retrieval Solution 2 (pH 9.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860)

All lanes : Anti-CDK2 (phospho T14) antibody [EP2234Y] - BSA and Azide free (ab239860) at 1/1000 dilution

Lane 1 : Untreated HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: HeLa (Human cervix adenocarcinoma epithelial cell) starved overnight, then treated with 3mM hydroxyurea for 24 hours whole cell lysate

Lane 3: HeLa (Human cervix adenocarcinoma epithelial cell) starved overnight, then treated with 3mM hydroxyurea for 24 hours whole cell lysate, then the membrane treated with Alkaline Phosphatase for 1 hour

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 34 kDa

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

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