abcam

Product datasheet

Anti-Cdk9 antibody [EPR3119Y] ab76320



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Overview

Product name Anti-Cdk9 antibody [EPR3119Y]

Description Rabbit monoclonal [EPR3119Y] to Cdk9

Host species Rabbit

Tested applications Suitable for: WB, IP, IHC-P, ICC/IF, Flow Cyt (Intra)

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: HT-29, NIH/3T3, C6, HL-60, HeLa or 293 cell lysates. IHC-P: Human breast carcinoma,

Human Bladder, mouse testis tissue. ICC/IF: HT-29 cells Flow Cyt (intra): HeLa cells IP: HeLa

cells

General notes 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**.

Properties

Form Liquid

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

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

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

Purity Protein A purified

Clonality Monoclonal Clone number **EPR3119Y**

Isotype lgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab76320 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		1/5000. Predicted molecular weight: 43 kDa. For unpurified use as 1/1000 - 1/2000
IP		1/20. For unpurified use as 1/40
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
ICC/IF	★★★★☆ (1)	1/50. For unpurified use as 1/100 - 1/250
Flow Cyt (Intra)		1/60.

Target

Function Member of the cyclin-dependent kinase pair (CDK9/cyclin-T) complex, also called positive

transcription elongation factor b (P-TEFb), which facilitates the transition from abortive to production elongation by phosphorylating the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAP II), SUPT5H and RDBP. The CDK9/cyclin-K complex has also a

kinase activity toward CTD of RNAP II and can substitute for P-TEFb in vitro.

Tissue specificity Ubiquitous.

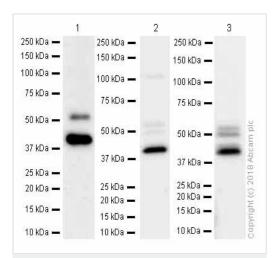
Sequence similarities Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX

subfamily.

Contains 1 protein kinase domain.

Cellular localization Nucleus.

Images



Western blot - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

All lanes : Anti-Cdk9 antibody [EPR3119Y] (ab76320) at 1/5000 dilution (Purified)

Lane 1: HT-29 (Human colorectal adenocarcinoma epithelial cell) whole cell lysates

Lane 2: NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

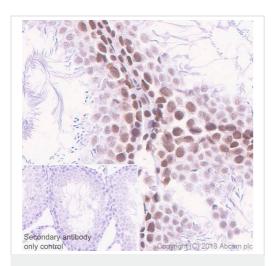
Lane 3: C6 (Rat glial tumor glial cell) whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

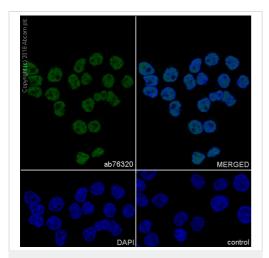
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 43 kDa Observed band size: 43 kDa



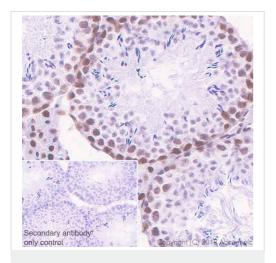
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat testis tissue sections labeling Cdk9 with Purified ab76320 at 1:100 dilution (1.08 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



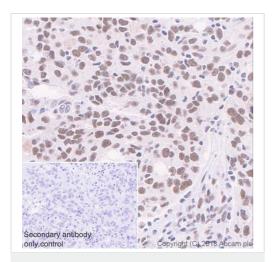
Immunocytochemistry/ Immunofluorescence - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

Immunocytochemistry/ Immunofluorescence analysis of HT-29 (Human colorectal adenocarcinoma epithelial cell) cells labeling Cdk9 with Purified ab76320 at 1:50 dilution (2.2 μ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 μ g/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



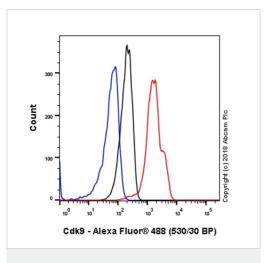
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse testis tissue sections labeling Cdk9 with Purified ab76320 at 1:100 dilution (1.08 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



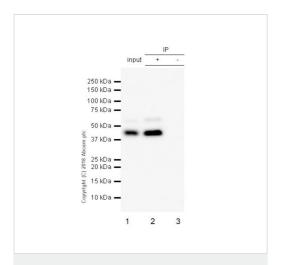
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human bladder carcinoma tissue sections labeling Cdk9 with Purified ab76320 at 1:100 dilution (1.08 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody. Negative control:PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cdk9 with Purified ab76320 at 1/60 dilution (10 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

ab76320 (purified) at 1:20 dilution (0.5 μ g) immunoprecipitating Cdk9 in HeLa whole cell lysate.

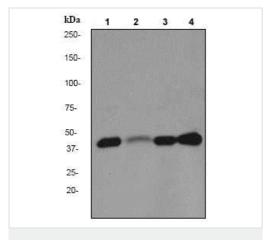
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab76320 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab76320 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

All lanes : Anti-Cdk9 antibody [EPR3119Y] (ab76320) at 1/2000 dilution (Unpurified)

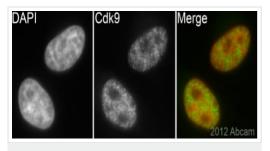
Lane 1: HT-29 cell lysate
Lane 2: HL-60 cell lysate
Lane 3: HeLa cell lysate
Lane 4: 293 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-rabbit HRP at 1/1000 dilution

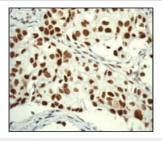
Predicted band size: 43 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

Image courtesy of an Abreview submitted by Dr. Kirk McManus, Univ. of Manitoba/Cancer Care MICB, Canada

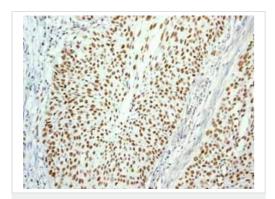
Unpurified ab76320 (1/200) staining Cdk9 in HeLa cells (green). Cells were fixed in paraformaldehyde, permeabilised in 0.5% Triton X100/ PBS and counterstained with DAPI in order to highlight the nucleus (red). For further experimental details please refer to Abreview.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Immunohistochemical analysis of paraffin-embedded human breast carcinoma using unpurified ab76320 at 1/100 dilution.

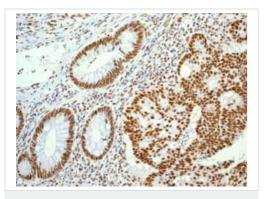
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Unpurified ab76320 showing positive staining in Cervical carcinoma tissue.

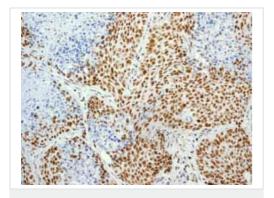
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Unpurified ab76320 showing positive staining in Colonic adenocarcinoma tissue.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Unpurified ab76320 showing positive staining in Lung adenocarcinoma tissue.

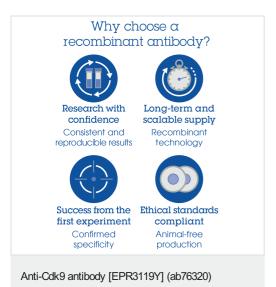
Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdk9 antibody
[EPR3119Y] (ab76320)

Unpurified ab76320 showing positive staining in Normal tonsil tissue.

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



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