

## Product datasheet

# Anti-Cdk9 antibody [EPR3119Y] ab76320

Recombinant **RabMAb**

★★★★☆ 3 Abreviews 4 References 14 Images

### Overview

<b>Product name</b>	Anti-Cdk9 antibody [EPR3119Y]
<b>Description</b>	Rabbit monoclonal [EPR3119Y] to Cdk9
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, IHC-P, ICC/IF, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human Cdk9 aa 350 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">P50750</a>
<b>Positive control</b>	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 FC: HeLa cells IP: HeLa cells

### General notes

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

**We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.**

This product is a [recombinant rabbit monoclonal antibody](#).

### Properties


<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR3119Y
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab76320** in the following tested applications.

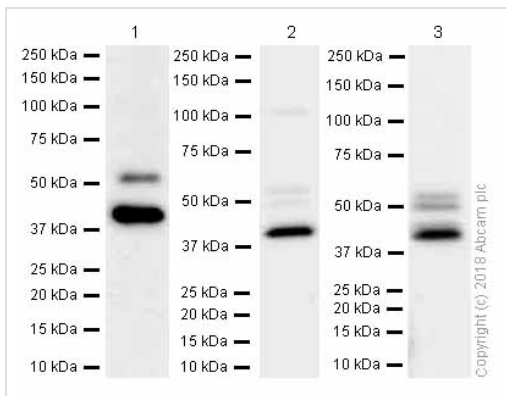
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000. Predicted molecular weight: 43 kDa. <b>For unpurified use as 1/1000 - 1/2000</b>
IP		1/20. <b>For unpurified use as 1/40</b>
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <a href="#">IHC antigen retrieval protocols</a> .
ICC/IF		1/50. <b>For unpurified use as 1/100 - 1/250</b>
Flow Cyt		1/60.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Ubiquitous.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.
<b>Cellular localization</b>	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

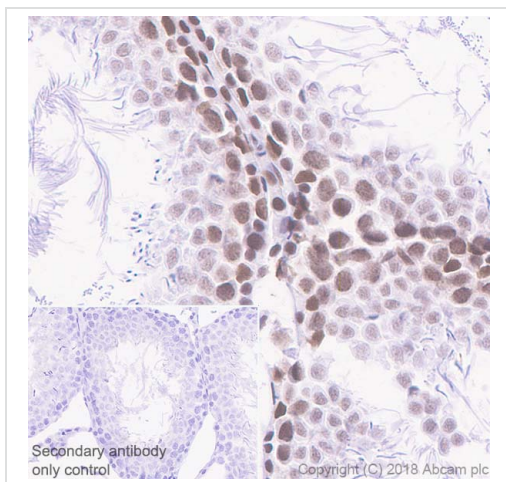
Lysates/proteins at 15 µg per lane.

### Secondary

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

**Predicted band size:** 43 kDa

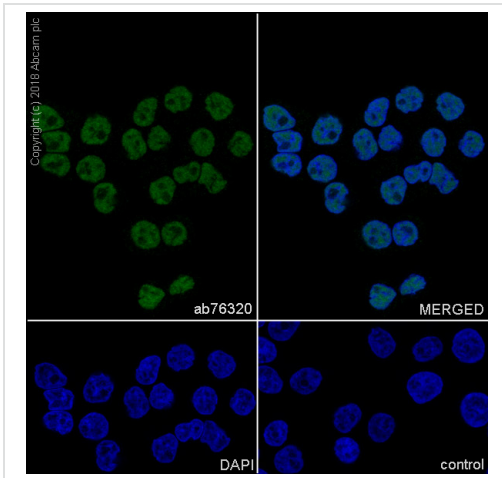
**Observed band size:** 43 kDa



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

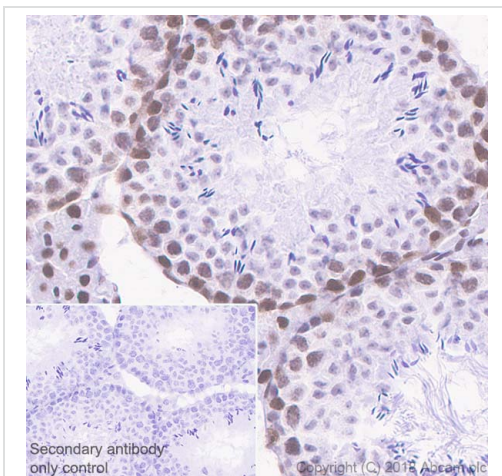
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat testis tissue sections labeling Cdk9 with Purified ab76320 at 1:100 dilution (1.08 µg/ml). Heat mediated antigen retrieval was performed Perform heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0).

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.



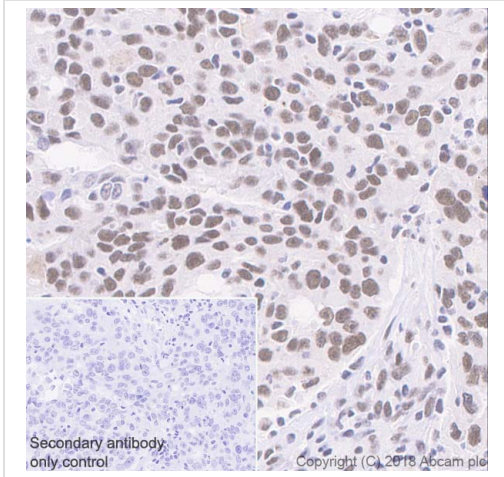
Immunocytochemistry/ Immunofluorescence - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

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



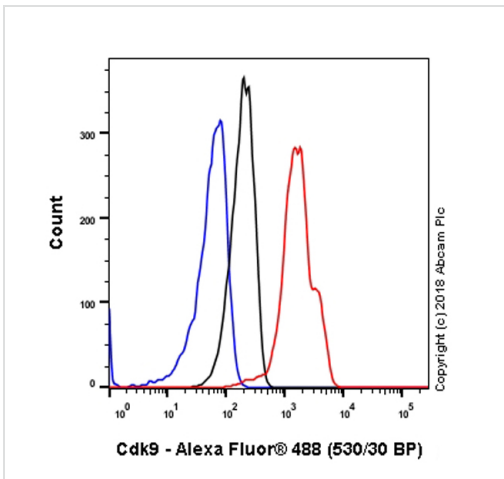
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

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 Perform heat mediated antigen retrieval 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.



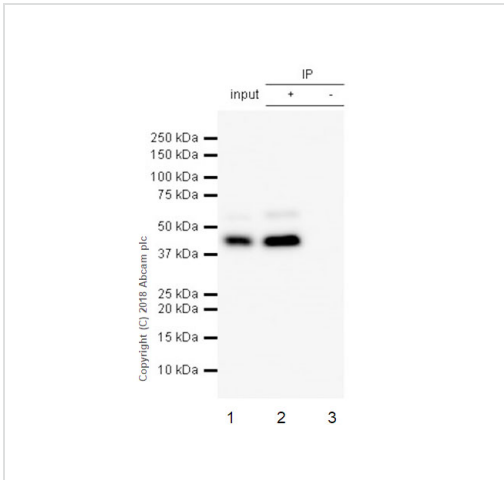
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

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 Perform heat mediated antigen retrieval 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 - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

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 IgG (Alexa Fluor® 488, ab150077) secondary antibody was used at 1:2000. Isotype control - Rabbit monoclonal IgG (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 (0.5µg) immunoprecipitating Cdk9 in HeLa whole cell lysate.

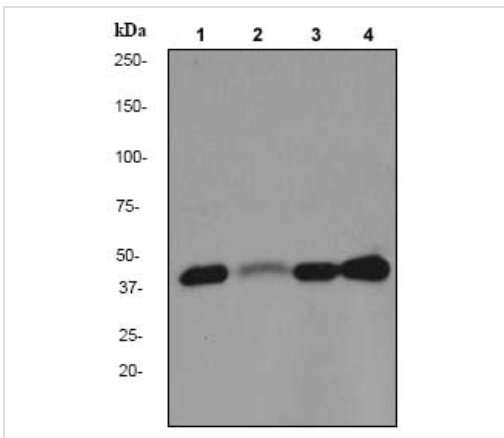
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

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

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab76320 in HeLa whole cell lysate

For western blotting, VeriBlot for IP secondary antibody (HRP) (ab131366) was used as the secondary antibody 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

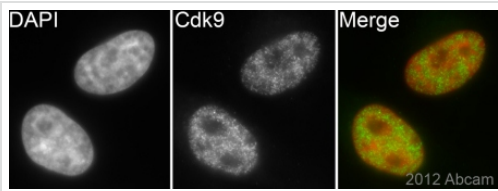
**Lane 4** : 293 cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

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

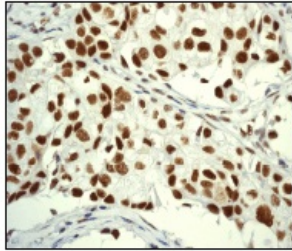
**Predicted band size:** 43 kDa



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

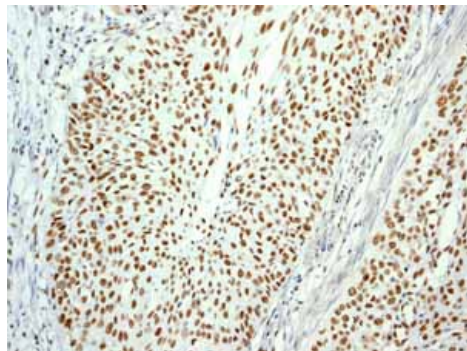
Image courtesy of an Abreview submitted by Dr. Kirk McManus, Univ. of Manitoba/Cancer Care MCB, Canada

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.



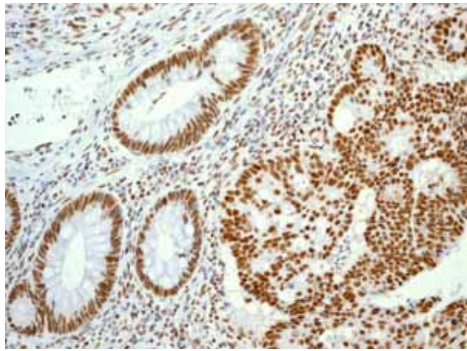
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

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



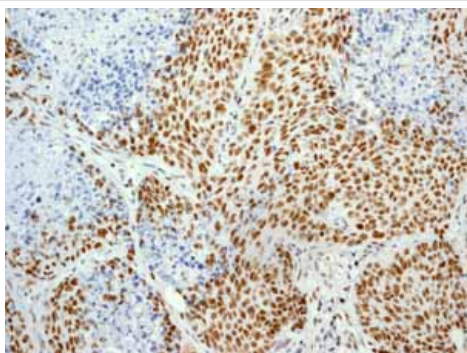
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cdk9 antibody [EPR3119Y] (ab76320)

Unpurified ab76320 showing positive staining in Cervical carcinoma tissue.



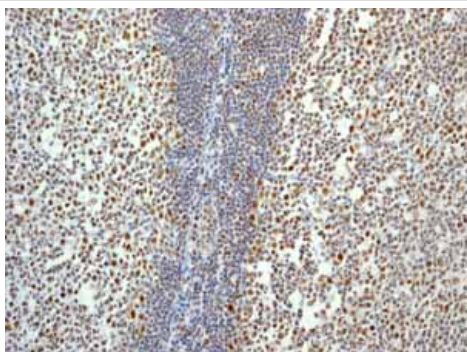
Unpurified ab76320 showing positive staining in Colonic adenocarcinoma tissue.

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



Unpurified ab76320 showing positive staining in Lung adenocarcinoma tissue.

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



Unpurified ab76320 showing positive staining in Normal tonsil tissue.

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

**Please note:** All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

**Our Abpromise to you: Quality guaranteed and expert technical support**



- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors