

## Product datasheet

# Anti-CDK1 antibody [EPR165] ab133327

Recombinant RabMAb

★★★★★ 3 Abreviews 44 References 6 Images

### Overview

<b>Product name</b>	Anti-CDK1 antibody [EPR165]
<b>Description</b>	Rabbit monoclonal [EPR165] to CDK1
<b>Host species</b>	Rabbit
<b>Specificity</b>	We have preliminary internal testing data to indicate this antibody doesn't react with CDK2, CDK3 and CDK5. Please contact us for more information.
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human CDK1 aa 250 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: <a href="#">P06493</a>
<b>Positive control</b>	WB: HeLa, Saos-2, Namalwa, and Jurkat whole cell lysate ( <a href="#">ab7899</a> ). IHC-P: Human tonsil tissue. IP: HeLa. Flow Cyt: Jurkat cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p><b>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.</b></p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR165
<b>Isotype</b>	IgG

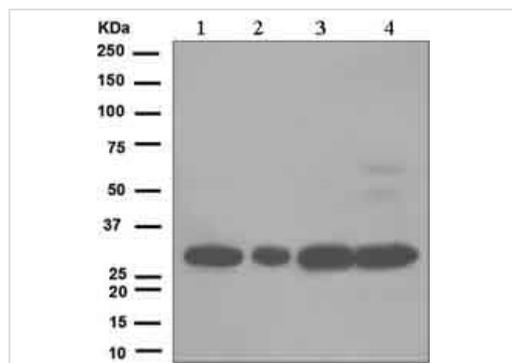
## Applications

**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab133327 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
Flow Cyt (Intra)		1/130. <a href="#">ab172730</a> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (1)	1/100 - 1/250.
WB	★★★★★ (2)	1/10000 - 1/50000. Predicted molecular weight: 34 kDa.
IP		1/10 - 1/100.
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Plays a key role in the control of the eukaryotic cell cycle. It is required in higher cells for entry into S-phase and mitosis. p34 is a component of the kinase complex that phosphorylates the repetitive C-terminus of RNA polymerase II.
<b>Tissue specificity</b>	Isoform 2 is found in breast cancer tissues.
<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.
<b>Form</b>	CDK1 can be located to the Nucleus, cytoplasm and Mitochondria. It's cytoplasmic during interphase and reversibly translocated from cytoplasm to the nucleus when phosphorylated before G2-M transition when associated with cyclin-B1. Accumulates in mitochondria in G2-arrested cells upon DNA-damage.



Western blot - Anti-CDK1 antibody [EPR165] (ab133327)

**All lanes** : Anti-CDK1 antibody [EPR165] (ab133327) at 1/10000 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : Saos-2 cell lysate

**Lane 3** : Namalwa cell lysate

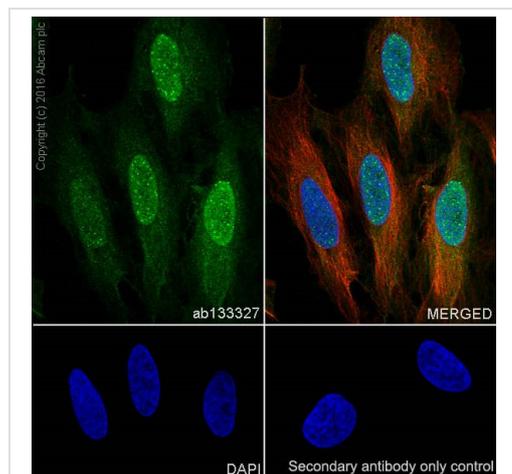
**Lane 4** : Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

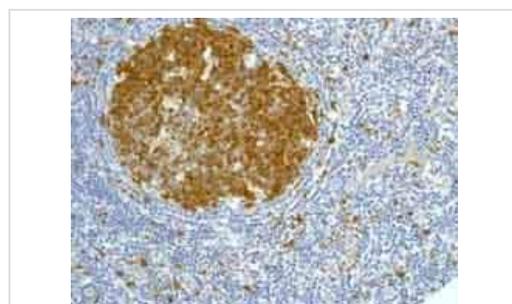
**All lanes** : HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 34 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CDK1 antibody [EPR165] (ab133327)

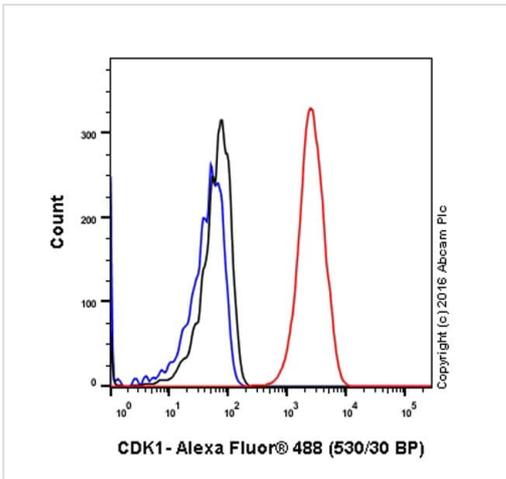
Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling CDK1 with ab133327 at 1/500 dilution (0.6 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889, an anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml). ab150077, a Goat anti-rabbit IgG (Alexa Fluor® 488) was used as the secondary antibody at 1/1000 dilution (2 µg/ml). DAPI nuclear counterstain. Confocal image showing strong nuclear and weakly cytoplasmic staining on HeLa cell line.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDK1 antibody [EPR165] (ab133327)

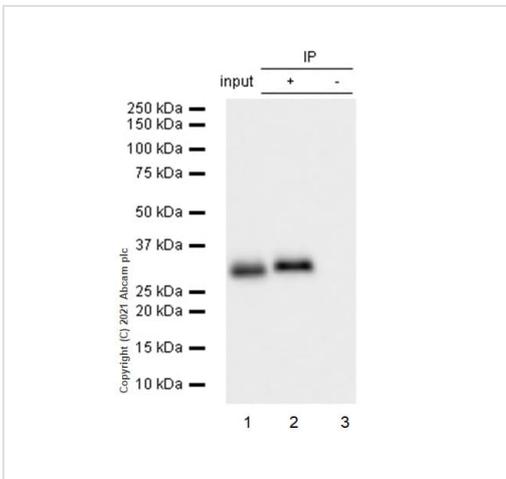
Immunohistochemical analysis of paraffin-embedded human tonsil tissue labelling CDK1 with ab133327 at 1/250 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-CDK1 antibody [EPR165] (ab133327)

Intracellular Flow Cytometry analysis of Jurkat (human acute T cell leukemia) cells labeling CDK1 with purified ab133327 at 1/130 dilution (10ug/mL) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluor®488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) was used as the unlabeled control.



Immunoprecipitation - Anti-CDK1 antibody [EPR165] (ab133327)

CDK1 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 µg with 133327 at 1/20 dilution (2µg) . VeriBlot for IP Detection Reagent (HRP) (ab131366) was used at 1/5000 dilution.

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

Lane 2: ab133327 IP in HeLa whole cell lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab133327 in HeLa whole cell lysate

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

Why choose a recombinant antibody?

- Research with confidence**  
Consistent and reproducible results
- Long-term and scalable supply**  
Recombinant technology
- Success from the first experiment**  
Confirmed specificity
- Ethical standards compliant**  
Animal-free production

Anti-CDK1 antibody [EPR165] (ab133327)

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