

## Product datasheet

# Anti-CDKN2A/p16INK4a antibody [DCS50.1] ab16123

★★★★☆ 2 Abreviews 5 References 4 Images

### Overview

<b>Product name</b>	Anti-CDKN2A/p16INK4a antibody [DCS50.1]
<b>Description</b>	Mouse monoclonal [DCS50.1] to CDKN2A/p16INK4a
<b>Host species</b>	Mouse
<b>Specificity</b>	This antibody shows no cross reactivity with the closely related inhibitors p15INK4b and p18INK4c.
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, IHC-P, WB, IP, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	<p>Recombinant full length protein corresponding to Human CDKN2A/p16INK4a aa 1-156. Sequence:</p> <p>MEPAAGSSMEPSADWLATAAARGRVEEVRALLEAGALP NAPNSYGRRPIQ VMMMG SARVAELLLLHGAEPNCADPATLTRPVHDAARE GFLDTLVVLHRA GARLDVRDAWGRLPVDLAEELGHRDVARYLR AAAGGTR GSNHARIDAAEG PSDIPD</p> <p>Database link: <a href="#">P42771</a></p> <p style="text-align: right;"> <a href="#">Run BLAST with</a>                 <a href="#">Run BLAST with</a> </p>
<b>Positive control</b>	WB: HEK-293 and HeLa cell lysates. Flow cyt: HEK-293 cells. IHC-P: Bladder tumor tissue. ICC/IF: Hepp cells.
<b>General notes</b>	<p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.</p>

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.08% Sodium azide Constituent: 99.9% PBS
<b>Purity</b>	Protein A/G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	DCS50.1
<b>Isotype</b>	IgG1

## Applications

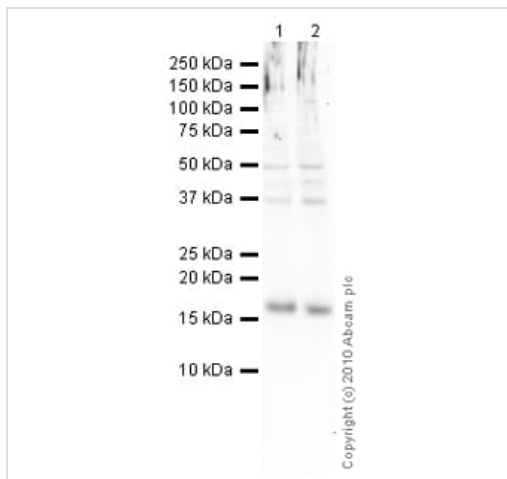
Our [Abpromise guarantee](#) covers the use of **ab16123** in the following tested applications.

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

Application	Abreviews	Notes
ICC/IF		Use a concentration of 1 µg/ml.
IHC-P		Use a concentration of 10 µg/ml.
WB	★★★★☆	Use at an assay dependent concentration. Detects a band of approximately 16 kDa (predicted molecular weight: 16 kDa).
IP		Use at an assay dependent concentration. Co-precipitates cdk4/cdk6.
Flow Cyt		Use 1µg for 10 <sup>6</sup> cells. <a href="#">ab170190</a> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Cellular localization</b>	Cytoplasmic and Nuclear
<b>Form</b>	There are 4 isoforms produced by alternative splicing. Isoform 1 also known as: p16INK4a; Isoform 3 also known as: p12; Isoform 4 also known as: p14ARF; p19ARF; ARF.



Western blot - Anti-CDKN2A/p16INK4a antibody [DCS50.1] (ab16123)

**All lanes :** Anti-CDKN2A/p16INK4a antibody [DCS50.1] (ab16123) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Mouse IgG H&L (HRP) preadsorbed (ab97040) at 1/5000 dilution

Developed using the ECL technique.

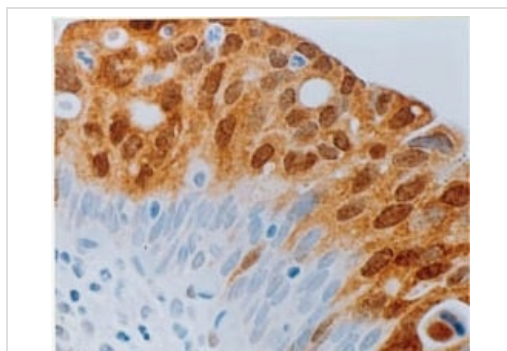
Performed under reducing conditions.

**Predicted band size:** 16 kDa

**Observed band size:** 16 kDa

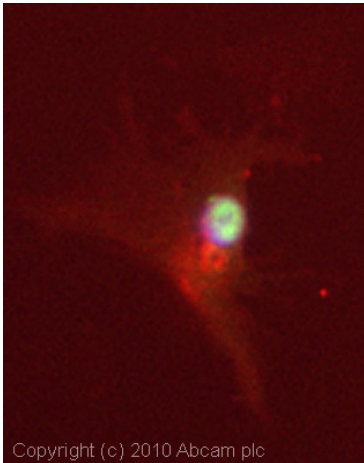
**Additional bands at:** 37 kDa, 50 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 12 minutes



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p16INK4a antibody [DCS50.1] (ab16123)

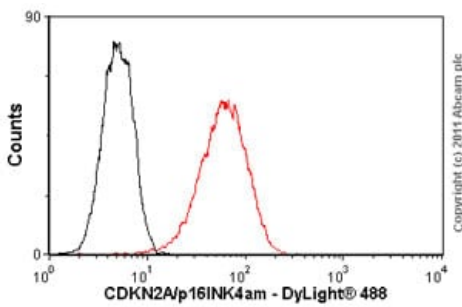
Immunohistochemical analysis of formalin-fixed, paraffin-embedded bladder tumor tissue labelling CDKN2A/p16INK4a with ab16123 at 10µg/ml.



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Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p16INK4a antibody [DCS50.1] (ab16123)

ICC/IF image of ab16123 stained Hepp cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab16123, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor<sup>®</sup> 488 goat anti-mouse IgG (H+L) [ab150113](#) used at a 1/1000 dilution for 1h. Alexa Fluor<sup>®</sup> 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



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Flow Cytometry - Anti-CDKN2A/p16INK4a antibody [DCS50.1] (ab16123)

Overlay histogram showing HEK293 cells stained with ab16123 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab16123, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-mouse IgG (H+L) ([ab96879](#)) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] ([ab91353](#), 2µg/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HEK293 cells fixed with 100% methanol used under the same conditions.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.

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

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