

## Product datasheet

# Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] ab81278

Recombinant RabMAb

[31 References](#) [5 Images](#)

### Overview

<b>Product name</b>	Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R]
<b>Description</b>	Rabbit monoclonal [EP435Y-129R] to CDKN2A/p16INK4A +CDKN2B/p15INK4B
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), WB, ICC/IF, IP <b>Unsuitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	HeLa cells and 293 cell lysate WB: Human CDKN2A full-length recombinant protein with His-tag, Human CDKN2B full-length recombinant protein with GST-tag
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> . 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> .

### 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: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number** EP435Y-129R  
**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab81278 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)		1/50 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/2000. Predicted molecular weight: 17 kDa.
ICC/IF		1/100 - 1/500.
IP		Use at an assay dependent concentration.

**Application notes** Is unsuitable for IHC-P.

## Target

**Function** Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.

**Tissue specificity** Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific.

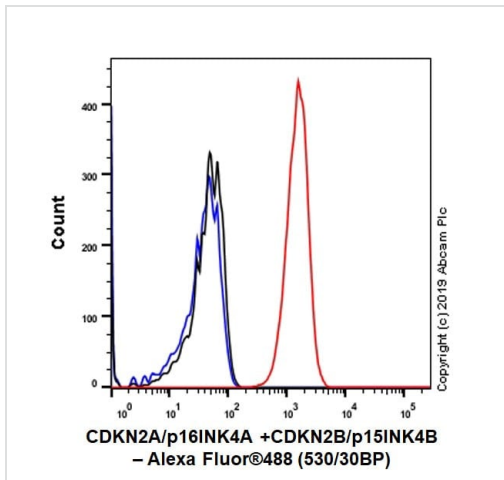
**Involvement in disease** The association between cutaneous and uveal melanomas in some families suggests that mutations in CDKN2A may account for a proportion of uveal melanomas. However, CDKN2A mutations are rarely found in uveal melanoma patients.  
Melanoma, cutaneous malignant 2  
Familial atypical multiple mole melanoma-pancreatic carcinoma syndrome  
Melanoma-astrocytoma syndrome

**Sequence similarities** Belongs to the CDKN2 cyclin-dependent kinase inhibitor family.  
Contains 4 ANK repeats.

**Post-translational modifications** Phosphorylation seems to increase interaction with CDK4.

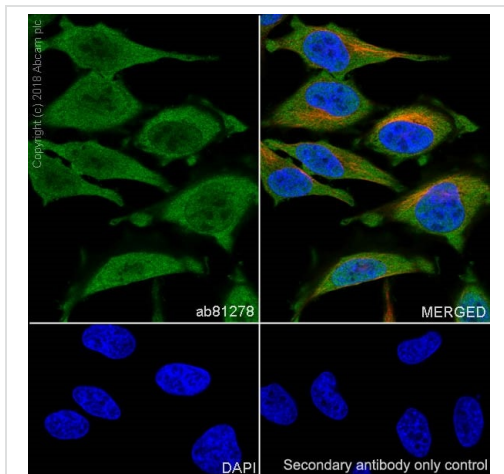
**Cellular localization** Cytoplasm. Nucleus.

## Images



Flow Cytometry (Intracellular) - Anti-  
CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody  
[EP435Y-129R] (ab81278)

Flow cytometric analysis of 4% paraformaldehyde fixed and 90% methanol permeabilised HEK-293 (Human embryonic kidney epithelial cell) with ab81278 at 1/20 dilution (red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti rabbit IgG (Alexa Fluor® 488) ([ab150077](#)) at 1/2000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-  
CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody  
[EP435Y-129R] (ab81278)

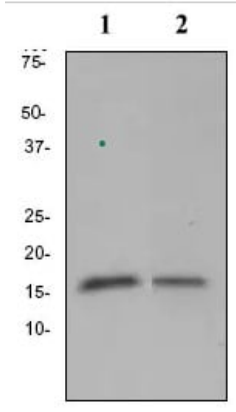
Immunofluorescent analysis of 4% Paraformaldehyde fixed 0.1% Triton X-100 permeabilised HeLa (human cervix adenocarcinoma epithelial cell) labelling CDKN2A/p16INK4a with ab81278 at 1/250 dilution, followed by AlexaFluor® 488 Goat anti-Rabbit secondary antibody ([ab150077](#)) at 1/1000 dilution (green). Confocal image showing cytoplasmic and nuclear staining in HeLa is observed. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ([ab195889](#)) was used to counterstain alpha Tubulin at 1/200 dilution (red). The Nuclear counterstain was DAPI (blue).

**Secondary antibody only control:** Secondary antibody is AlexaFluor® 488 Goat anti-Rabbit secondary antibody ([ab150077](#)) at 1/1000 dilution (green).

Why choose a recombinant antibody?



Anti-CDKN2A/p16INK4A +CDKN2B/p15INK4B antibody [EP435Y-129R] (ab81278)



Western blot - Anti-CDKN2A/p16INK4A +CDKN2B/p15INK4B antibody [EP435Y-129R] (ab81278)

**All lanes** : Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] (ab81278) at 1/20000 dilution

**Lane 1** : HeLa cell lysate

**Lane 2** : 293 cell lysate

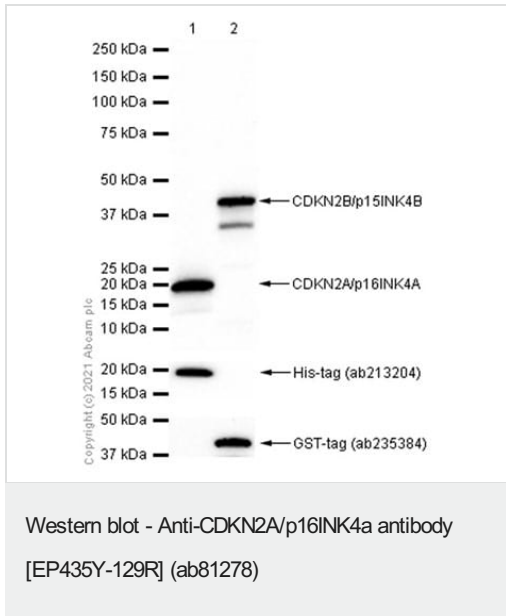
Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size:** 17 kDa

**Observed band size:** 17 kDa



**All lanes** : Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] (ab81278) at 1/1000 dilution

**Lane 1** : Human CDKN2A full-length recombinant protein with His-tag

**Lane 2** : Human CDKN2B full-length recombinant protein with GST-tag

### Secondary

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

**Predicted band size:** 17 kDa

**Observed band size:** 17, 40 kDa

**Exposure time:** 10 seconds

5% NFDm/TBST was used as blocking and diluting buffer.

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

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