

## Product datasheet

# Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free ab247292

Recombinant RabMAb

6 Images

### Overview

<b>Product name</b>	Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EP435Y] to CDKN2A/p16INK4A +CDKN2B/p15INK4B - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt (Intra), IP <b>Unsuitable for:</b> ICC/IF or IHC
<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>	WB: Human CDKN2A full-length recombinant protein with His-tag, Human CDKN2B full-length recombinant protein with GST-tag, HEK 293, HeLa Flow Cyt (intra): HEK-293 cells IP: HeLa whole cell lysate.
<b>General notes</b>	ab247292 is the carrier-free version of <a href="#">ab40803</a> .

Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to [RabMAb® patents](#).

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP435Y
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab247292 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
<b>WB</b>		Use at an assay dependent concentration. Detects a band of approximately 17 kDa (predicted molecular weight: 17 kDa).
<b>Flow Cyt (Intra)</b>		Use at an assay dependent concentration.
<b>IP</b>		Use at an assay dependent concentration.

**Application notes** Is unsuitable for ICC/IF or IHC.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific.
<b>Involvement in disease</b>	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
<b>Sequence similarities</b>	Belongs to the CDKN2 cyclin-dependent kinase inhibitor family.

Contains 4 ANK repeats.

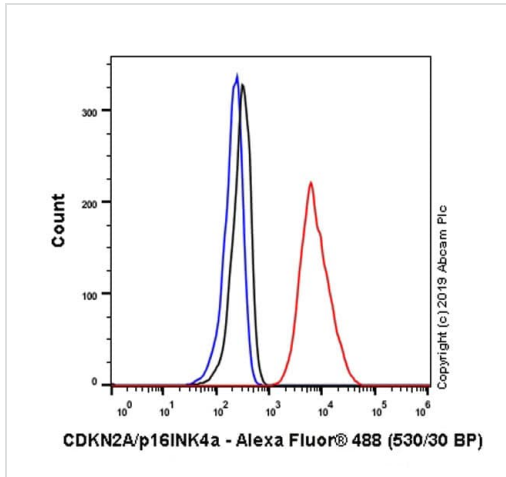
**Post-translational modifications**

Phosphorylation seems to increase interaction with CDK4.

**Cellular localization**

Cytoplasm. Nucleus.

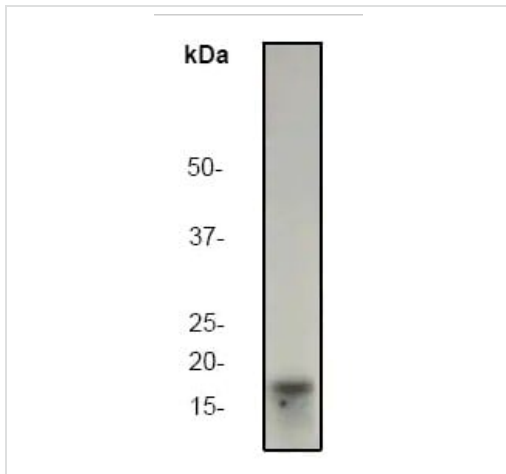
**Images**



Flow Cytometry (Intracellular) - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free (ab247292)

This data was developed using [ab40803](#), the same antibody clone in a different buffer formulation.

Intracellular Flow Cytometry analysis of HEK-293 (Human embryonic kidney epithelial cell) cells labeling CDKN2A/p16INK4a with purified [ab40803](#) at 1/100 dilution (10 µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cells without incubation with primary antibody and secondary antibody (Blue).



Western blot - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free (ab247292)

Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] ([ab40803](#)) at 1/1000 dilution + 293 cell lysate at 10 µg

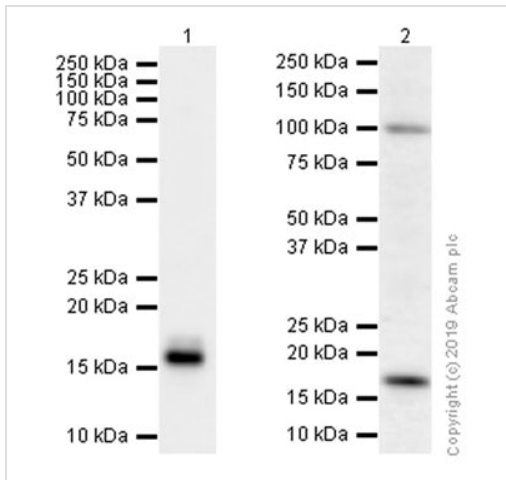
**Secondary**

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#))

**Predicted band size:** 17 kDa

**Observed band size:** 17 kDa

This data was developed using [ab40803](#), the same antibody clone in a different buffer formulation.



Western blot - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free (ab247292)

**All lanes :** Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] (**ab40803**) at 1/1000 dilution

**Lane 1 :** HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate

**Lane 2 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

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:** 17 kDa

**Observed band size:** 17 kDa

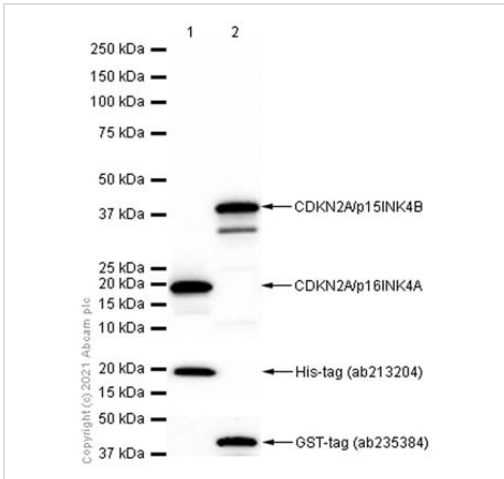
This data was developed using **ab40803**, the same antibody clone in a different buffer formulation.

5% NFD/MTBST was used as a blocking and diluting buffer.

Exposure times:

Lane 1: 20 seconds

Lane 2: 180 seconds



Western blot - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free (ab247292)

**All lanes :** Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] (**ab40803**) at 1/10000 dilution

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

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

Lysates/proteins at 0.01 µg per lane.

**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

This data was developed using **ab40803**, the same antibody clone in a different buffer formulation.

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

This data was developed using **ab40803**, the same antibody clone in a different buffer formulation.

Purified **ab40803** at 1/50 dilution (2µg) immunoprecipitating CDKN2A/p16INK4a in HeLa whole cell lysate.

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

Lane 2 (+): **ab40803** + HeLa whole cell lysate.

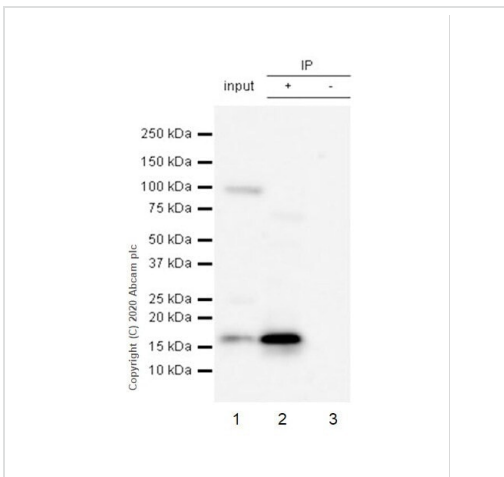
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab40803** in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 17 kDa



Immunoprecipitation - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y] - BSA and Azide free (ab247292)

### 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-CDKN2A/p16INK4A + CDKN2B/p15INK4B  
antibody [EP435Y] - BSA and Azide free (ab247292)

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

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- Extensive multi-media technical resources to help you
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