abcam

ab219723

Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EP435Y-129R
Purification technique	Affinity purification Protein A
Concentration	1.004 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Tested

Species	Human
Dilution info	-

Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target data

See full target information CDKN2A

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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab219723 is the carrier-free version of ab81278.

Species reactivity

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

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. 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.

Compatibility

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

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

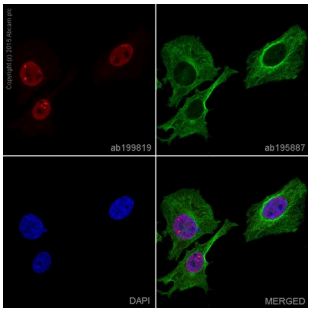
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

---

7 product images

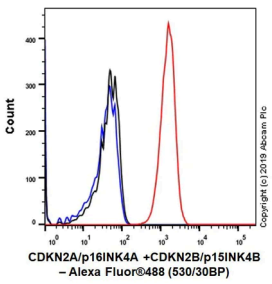


Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

CDKN2A/p16INK4A + CDKN2B/p15INK4B Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody

Clone EP435Y-129R (ab219723) has been successfully conjugated by Abcam. This image was generated using Anti-CDKN2A/p16INK4A +CDKN2B/p15INK4B antibody [EP435Y-129R] (Alexa Fluor® 647). Please refer to ab199819 for protocol details.
ab199819 staining CDKN2A/p16INK4a in HeLa cells. The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab199819 at 1/200 dilution (shown in red) and ab195887, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 488), at 2µg/ml (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).

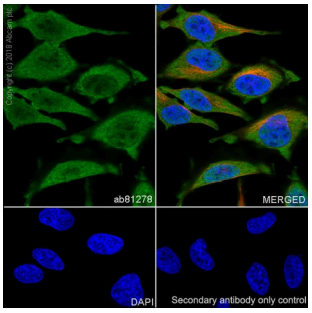
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

CDKN2A/p16INK4A + CDKN2B/p15INK4B Flow Cytometry (Intracellular) staining using rabbit Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody

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.
This data was developed using ab81278, the same antibody clone in a different buffer formulation.

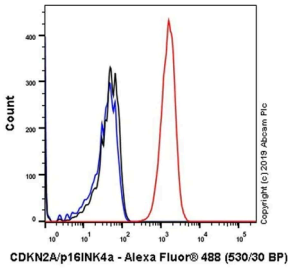


Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

CDKN2A/p16INK4A + CDKN2B/p15INK4B Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody

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).

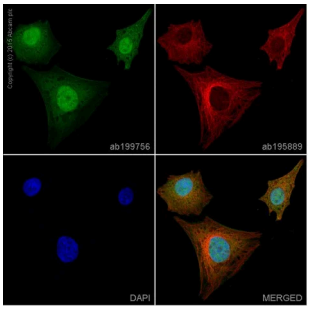
This data was developed using ab81278, the same antibody clone in a different buffer formulation.



Flow Cytometry (Intracellular) - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

CDKN2A/p16INK4A + CDKN2B/p15INK4B Flow Cytometry (Intracellular) staining using rabbit Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized HEK-293 (Human embryonic kidney epithelial cell) cells labelling CDKN2A with ab219723 at 1/100 dilution (1µg)/ Red compared with a Rabbit monoclonal IgG (ab172730) / Black isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) at 1/2000 dilution was used as the secondary antibody. Gated on viable cells.

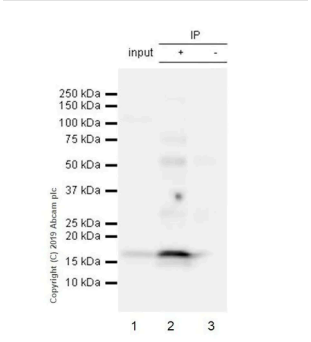


Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

CDKN2A/p16INK4A + CDKN2B/p15INK4B Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody

Clone EP435Y-129R (ab219723) has been successfully conjugated by Abcam. This image was generated using Anti-CDKN2A/p16INK4a antibody [EP435Y-129R] (Alexa Fluor® 488). Please refer to ab199756 for protocol details.
ab199756 staining CDKN2A/p16INK4a in HeLa cells. The cells were fixed with 4% formaldehyde (10min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab199756 at 1/100 dilution (shown in green) and ab195889, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 2µg/ml (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Immunoprecipitation - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

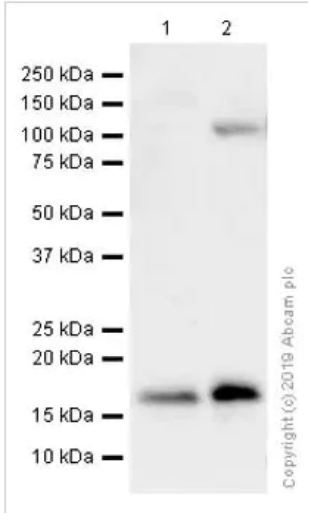
CDKN2A/p16INK4a was immunoprecipitated from 0.35 mg HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate 10µg with ab219723 at 1:50 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab219723 1:1000 dilution (2 µg/ml). VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.
Lane 1: HEK-293 (Human embryonic kidney epithelial cell) whole cell lysate 10µg
Lane 2: ab219723 IP in HEK-293 whole cell lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab219723 in HEK-293 whole cell lysate.

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

Exposure time: 3 seconds

All lanes:
Immunoprecipitation - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

Predicted band size: 17 kDa



Western blot - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723)

All lanes:
Western blot - Anti-CDKN2A/p16INK4A + CDKN2B/p15INK4B antibody [EP435Y-129R] - BSA and Azide free (ab219723) at 1/10000 dilution

Lane 1:
HEK-293 cell lysate at 1/20 dilution

Lane 2:
HeLa cell lysate at 1/20 dilution

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/20000 dilution

Predicted band size: 17 kDa

Exposure time: 3s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.