abcam

ab216602

Anti-CDKN2A/p14ARF antibody [SP271]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	SP271
Purification technique	Affinity purification Protein A
Concentration	0.429 - 0.436 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/400
Notes	(Incubate for 1 hour at room temperature).

ICC/IF

Tested

Species	Human
Dilution info	1/500
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/400 - 1/420
Notes	(Incubate for 30 minutes at 4Â°C).

IHC-P

Tested

Species	Human
Dilution info	1/100
Notes	(Primary incubation for 10 minutes at room temperature). Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target data

See full target information CDKN2A

Function

Capable of inducing cell cycle arrest in G1 and G2 phases. Acts as a tumor suppressor. Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus. This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis. Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes. Binds to BCL6 and down-regulates BCL6-induced transcriptional repression. Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression. Binds to TOP1/TOPOI and stimulates its activity. This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation. Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing. Plays a role in inhibiting ribosome biogenesis, perhaps by binding to the nucleolar localization sequence of transcription termination factor TTF1, and thereby preventing

nucleolar localization of TTF1 (By similarity). Interacts with COMMD1 and promotes its 'Lys63'-linked polyubiquitination. Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1. Binds to HUWE1 and represses its ubiquitin ligase activity. May play a role in controlling cell proliferation and apoptosis during mammary gland development. Isoform smARF. May be involved in regulation of autophagy and caspase-independent cell death; the short-lived mitochondrial isoform is stabilized by C1QBP.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

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.

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.

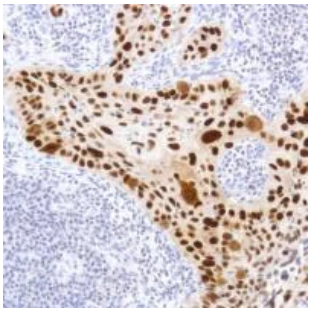
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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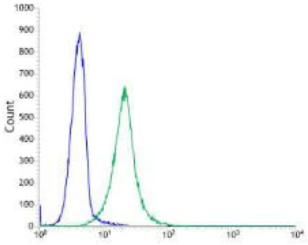
5 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602)

CDKN2A/p14ARF Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CDKN2A/p14ARF antibody

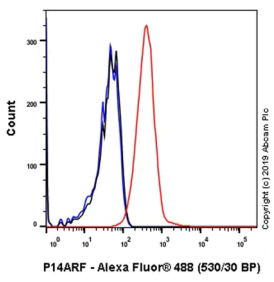
Immunohistochemical analysis of formalin-fixed paraffin-embedded Human cervical squamous cell carcinoma labeling CDKN2A/p14ARF with ab216602 at 1/100 dilution.



Flow Cytometry (Intracellular) - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602)

CDKN2A/p14ARF Flow Cytometry (Intracellular) staining using rabbit Anti-CDKN2A/p14ARF antibody

Intracellular flow cytometric analysis of HEK293 cells labeling CDKN2A/p14ARFwith ab216602 at 1/400 dilution (green) compared to negative control rabbit IgG (blue) .

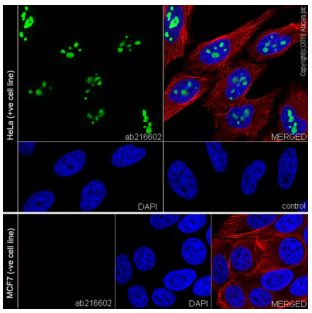


Flow Cytometry (Intracellular) - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602)

CDKN2A/p14ARF Flow Cytometry (Intracellular) staining using rabbit Anti-CDKN2A/p14ARF antibody

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma epithelial cell) cells labeling CDKN2A/p14ARF with purified ab216602 at 1/420 dilution (1.02µg/ml) (Red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG

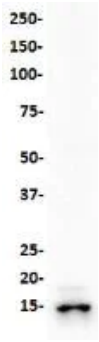
(Alexa Fluor® 488, ab150077) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (ab172730) / Black. Unlabeled control - Unlabelled cells / blue.



Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602)

CDKN2A/p14ARF Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CDKN2A/p14ARF antibody

"Immunocytochemistry/ Immunofluorescence analysis of HeLa (human cervix adenocarcinoma epithelial cell) and MCF7 (human breast adenocarcinoma epithelial cell) cells labeling CDKN2A/p14ARF with purified ab216602 at 1/500 (0.86 µg/ml). Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control."



Western blot - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602)

CDKN2A/p14ARF Western blot staining of HeLa cell lysate using rabbit Anti-CDKN2A/p14ARF antibody

All lanes:
Western blot - Anti-CDKN2A/p14ARF antibody [SP271] (ab216602) at 1/400 dilution

All lanes:
HeLa cell lysate

Predicted band size: 14 kDa

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