

Datasheet for 600-401-AJ9

CDKN2A Antibody

Overview

Description:	Anti-CDKN2A (RABBIT) Antibody - 600-401-AJ9
Item No.:	600-401-AJ9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	The CDKN2A locus gives rise to 2 distinct transcripts from different promoters. The transcripts have been designated p16(INK4A) and p14(ARF). This chromosomal region undergoes a number of inversions, translocations, heterozygous deletions, and homozygous deletions in a variety of malignant cell lines including those from glioma, non-small cell lung cancer, leukemia, and melanoma. Deletion of the region containing CDKN2A is found in more than half of all melanoma cell lines. Conversely, transfection of CDKN2A suppressed the growth of two independent mesothelioma cell lines, suggesting that inactivation of the CDKN2 gene is an essential step in the etiology of malignant mesotheliomas. CDKN2A induces a G1 cell cycle arrest by inhibiting the phosphorylation of the Rb protein by the cyclin-dependent kinases CDK4 and CDK6. CDKN2A is expressed as at least three distinct isoforms.
Synonyms:	CDKN2A Antibody, ARF, MLM, P14, P16, P19, CMM2, INK4, MTS1, TP16, CDK4I, CDKN2, INK4A, MTS-1, P14ARF, P19ARF, P16INK4, P16INK4A, P16-INK4A, Cyclin-dependent kinase 4 inhibitor A
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	CDKN2A
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-CDKN2A antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the N-terminus of human CDKN2A.
Purity/Specificity:	Anti-CDKN2A Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with CDKN2A from other sources has not been determined.
Relevant Links:	• UniProtKB - P42771 • GeneID - 1029 • NCBI - NP_000068

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-CDKN2A Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 17 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000-1:20,000
IF:	20 µg/mL
IHC:	10 µg/mL
WB:	1-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

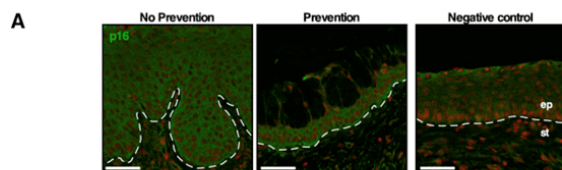
Shipping & Handling

Shipping Condition:	Wet Ice
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Storage Condition: Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.

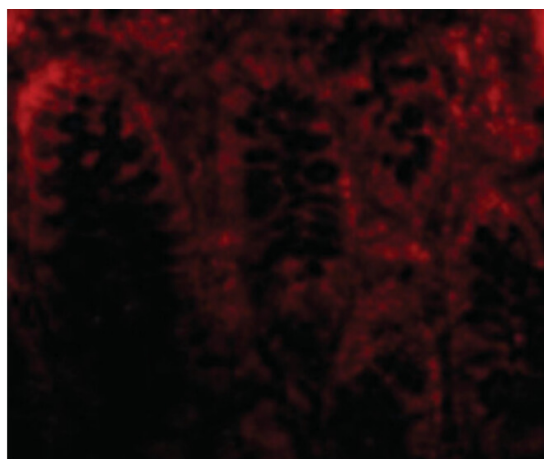
Expiration: Expiration date is one (1) year from date of receipt.

Images



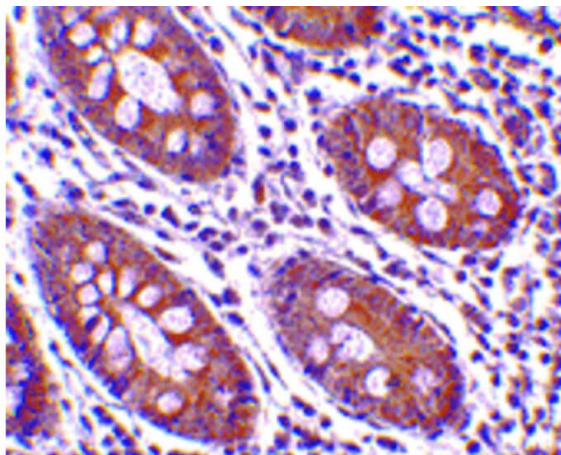
Immunofluorescence Microscopy

Biomarker expression is similar in all groups. A: Cervical sections were stained for p16Ink4a (green). Nuclei were stained with Hoechst 33258 and pseudocolored red. Nontransgenic mouse cervix was used as a negative control. Fig 3. PMID: 31732107



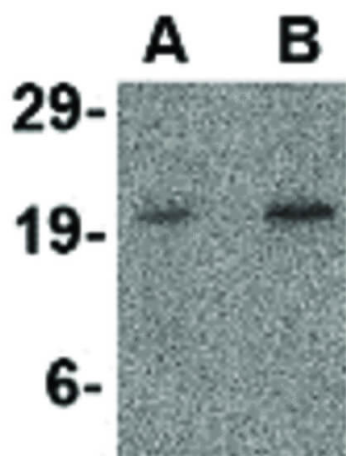
Immunofluorescence Microscopy

Immunofluorescence Microscopy of CDKN2A antibody.
 Tissue: Human colon cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: CDKN2A antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: CDKN2A as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of CDKN2A antibody. Tissue: Human colon tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: CDKN2A antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: CDKN2A is nuclear and occasionally cytoplasmic. Staining: CDKN2A as precipitated red signal with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of CDKN2A antibody. Lane A: Mouse colon tissue lysate at 1 µg/mL. Lane B: Mouse colon tissue lysate at 2 µg/mL Load: 35 µg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 16.5 kDa, 20 kDa for CDKN2A.

References

- Baik S et al. Medroxyprogesterone acetate prevention of cervical cancer through progesterone receptor in a human papillomavirus transgenic mouse model. *Am J Pathol.* (2019)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.