

# [KO Validated] CDKN2A Rabbit PolymAb®

Catalog No.: A26919PM **KO Validated**

## Basic Information

### Observed MW

14-21kDa

### Calculated MW

17kDa/14kDa/19kDa

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, ELISA

### Cross-Reactivity

Human, Mouse, Rat

## Background

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, the E3 ubiquitin-protein ligase MDM2, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

## Recommended Dilutions

<b>WB</b>	1:1500 - 1:6000
<b>IHC-P</b>	1:200 - 1:800
<b>IF/ICC</b>	1:200 - 1:800
<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Contact

	400-999-6126
	cn.market@abclonal.com.cn
	www.abclonal.com.cn

## Immunogen Information

### Gene ID

1029/12578

### Swiss Prot

P42771/Q8N726/Q64364-1

### Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human CDKN2A (NP\_002992.1).

### Synonyms

ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4i; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

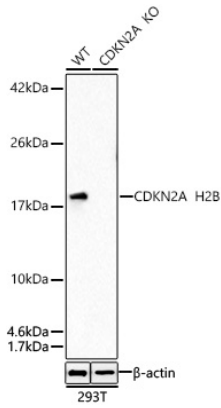
Affinity purification

### Storage

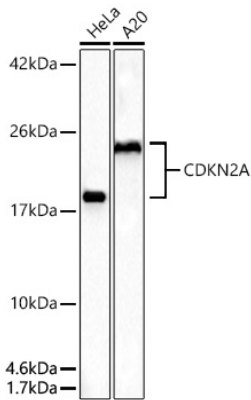
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

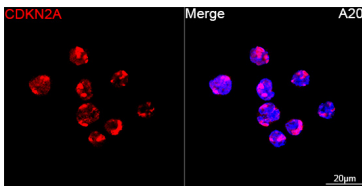
## Validation Data



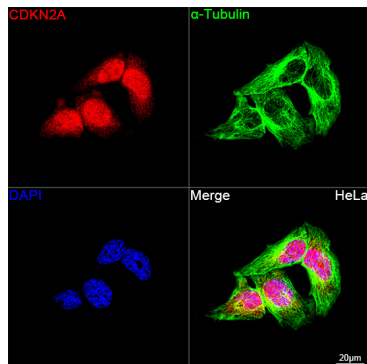
Western blot analysis of lysates from wild type (WT) and CDKN2A knockout (KO) 293T cells using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at 1:3000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 45s.



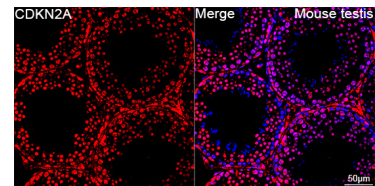
Western blot analysis of various lysates using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at 1:3000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 45s.



Confocal imaging of A20 cells using [KO Validated] CDKN2A Rabbit PolymAb® (A26919-PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.

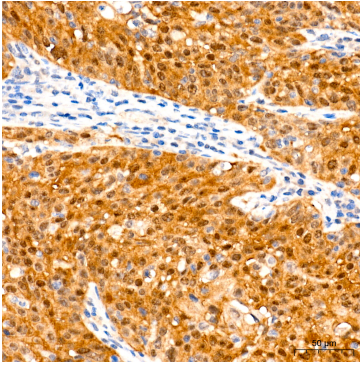


Confocal imaging of HeLa cells using [KO Validated] CDKN2A Rabbit PolymAb® (A26919-PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with  $\alpha$ -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

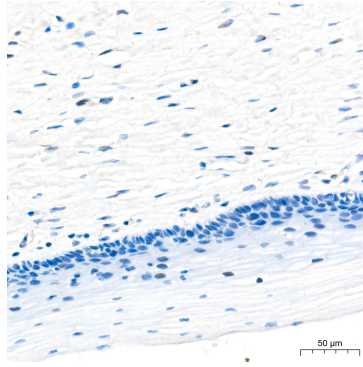


Confocal imaging of paraffin-embedded Mouse testis tissue using [KO Validated] CDKN2A Rabbit PolymAb® (A26919-PM, dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer(pH 6.0) prior to IF staining. Objective: 40x.

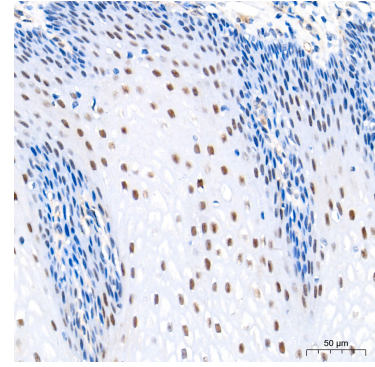
## Validation Data



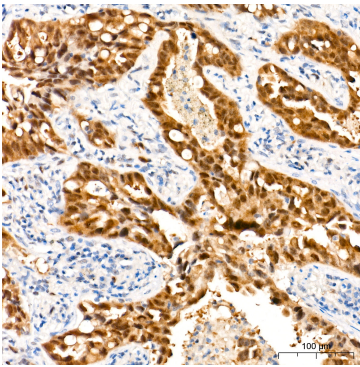
Immunohistochemistry analysis of paraffin-embedded Human cervix cancer tissue using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human cervix [negative sample control] tissue using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human lung squamous carcinoma tissue using [KO Validated] CDKN2A Rabbit PolymAb® (A26919PM) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.