

[KO Validated] CDKN2A/p16INK4a Rabbit mAb

Catalog No.: A11651 **KO** **Validated** **Recombinant** **5 Publications**

Basic Information

Observed MW

16kDa

Calculated MW

17kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P, IF/ICC

Cross-Reactivity

Human

CloneNo number

ARC0661

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

WB	1:500 - 1:2000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
1029	P42771

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 57-156 of human CDKN2A/p16INK4a (P42771).

Synonyms

ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A; 4a

Contact

 | www.abclonal.com

Product Information

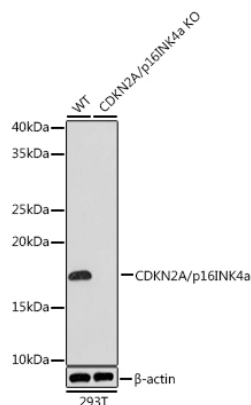
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

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

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH 7.3.

Validation Data



Western blot analysis of lysates from wild type (WT) and CDKN2A/p16INK4a knockout (KO) 293T cells, using CDKN2A/p16INK4a Rabbit mAb (A11651) at 1:1000 dilution.

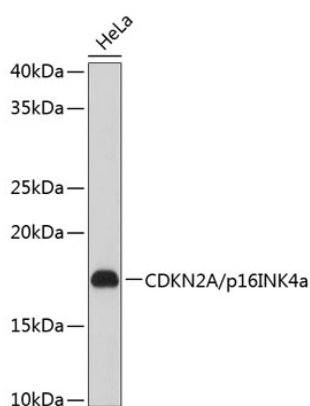
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 3min.



Western blot analysis of lysates from HeLa cells, using CDKN2A/p16INK4a Rabbit mAb (A11651) at 1:1000 dilution.

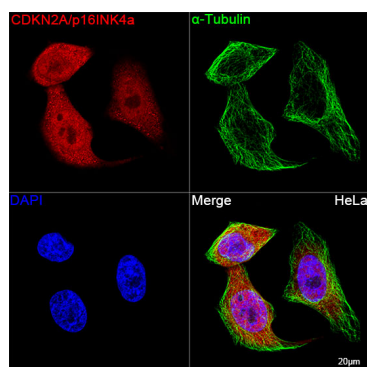
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

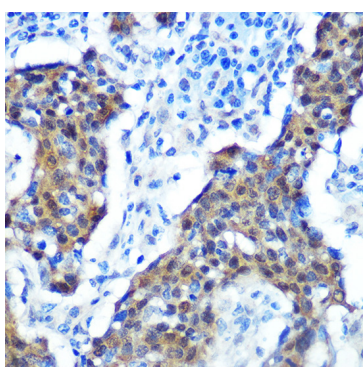
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 3min.



Confocal imaging of HeLa cells using [KO Validated] CDKN2A/p16INK4a Rabbit mAb (A11651, 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 α-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.



Immunohistochemistry analysis of CDKN2A/p16INK4a in paraffin-embedded human cervix cancer using [KO Validated] CDKN2A/p16INK4a Rabbit mAb (A11651) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.