

A19094

Leader in Biomolecular Solutions for Life Science



## [KO Validated] CDKN1A/p21 Rabbit mAb

Catalog No.: A19094

**KO** Validated

Recombinant

55 Publications

### Basic Information

#### Observed MW

18kDa(Mouse)/21kDa(Human/Rat)

#### Calculated MW

18kDa

#### Category

SMab Recombinant Monoclonal  
Antibody

#### Applications

WB,IHC-P,ELISA

#### Cross-Reactivity

Human,Mouse,Rat

#### CloneNo number

ARC51034

### Background

This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Multiple alternatively spliced variants have been found for this gene.

### Recommended Dilutions

**WB** 1:1000 - 1:2000

**IHC-P** 1:200 - 1:800

**ELISA** Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

### Immunogen Information

#### Gene ID

1026

#### Swiss Prot

P38936

#### Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 1-164 of human CDKN1A/p21CIP1 (NP\_000380.1).

#### Synonyms

P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1; 21

### Contact

 [www.abclonal.com](http://www.abclonal.com)

### Product Information

#### Source

Rabbit

#### Isotype

IgG

#### Purification

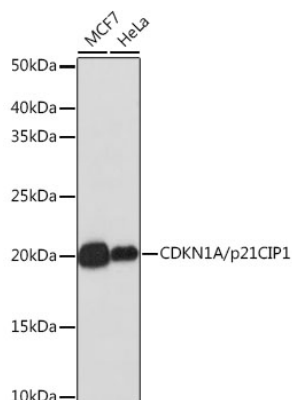
Affinity purification

#### 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 various lysates using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at 1:1000 dilution.

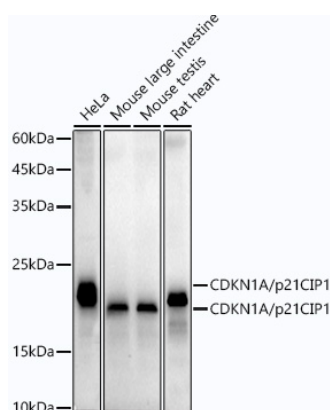
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

Exposure time: 3min.



Western blot analysis of various lysates using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at 1:1000 dilution.

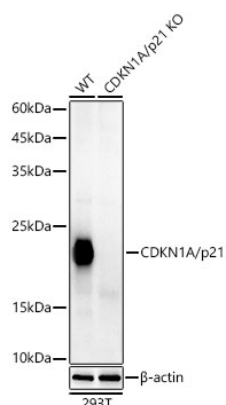
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

Exposure time: 90s.



Western blot analysis of lysates from wild type(WT) and CDKN1A/p21 knockout (KO) 293T cells, using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at 1:1000 dilution.

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

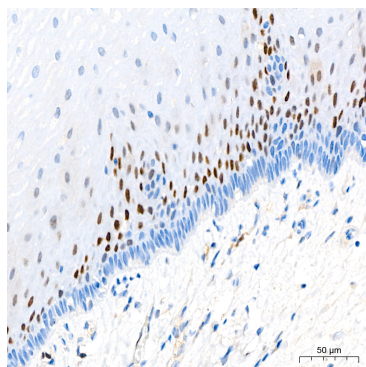
Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

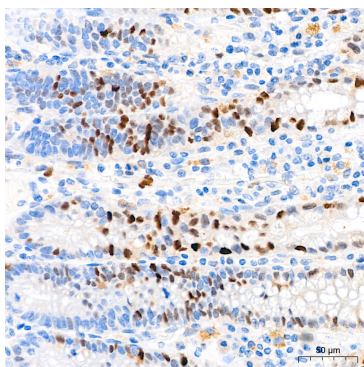
Detection: ECL Enhanced Kit (RM00021).

Exposure time: 90s.

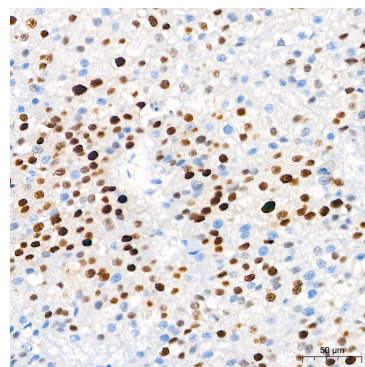
## Validation Data



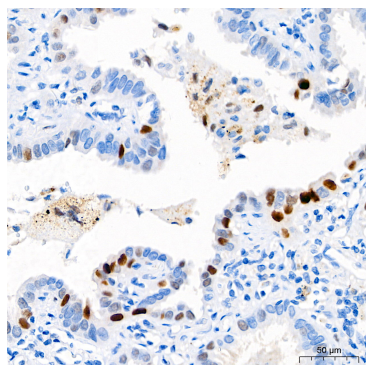
Immunohistochemistry analysis of paraffin-embedded Human esophagus tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer(pH 9.0) prior to IHC staining.



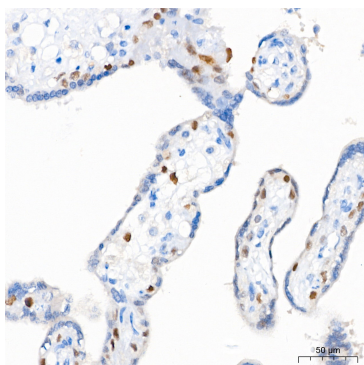
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer(pH 9.0) prior to IHC staining.



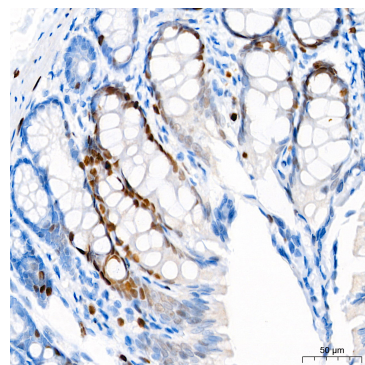
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer(pH 9.0) prior to IHC staining.



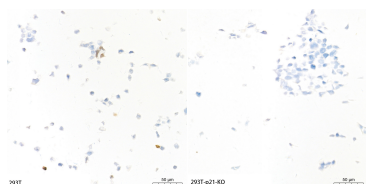
Immunohistochemistry analysis of paraffin-embedded Human lung adenocarcinoma tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer(pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human placenta tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (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 Rat colon tissue using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (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 293T and 293T-P21-KO cells using [KO Validated] CDKN1A/p21 Rabbit mAb (A19094) at a dilution of 1:200 (40x lens). High

## Validation Data

---

pressure antigen retrieval performed  
with 0.01M Tris-EDTA Buffer (pH 9.0)  
prior to IHC staining.