

[KO Validated] CDKN1A/p21 Rabbit mAb

Catalog No.: A19094 **KO** **Validated** **Recombinant** **27 Publications**

Basic Information

Observed MW

21kDa/18kDa

Calculated MW

18kDa

Category

Primary antibody

Applications

ELISA, WB, IHC-P

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 | 1:500 - 1:1000 |
| IHC-P | 1:50 - 1:200 |

Immunogen Information

| | |
|----------------|-------------------|
| Gene ID | Swiss Prot |
| 1026 | 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

Product Information

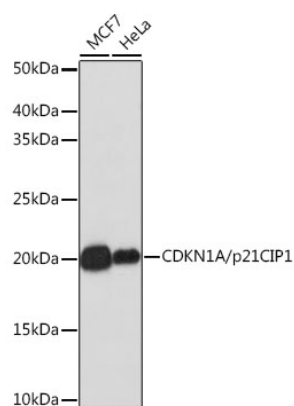
| | | |
|---------------|----------------|-----------------------|
| Source | Isotype | Purification |
| Rabbit | IgG | Affinity purification |

Storage

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

Buffer: PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using CDKN1A/p21CIP1 antibody (A19094) at 1:1000 dilution.

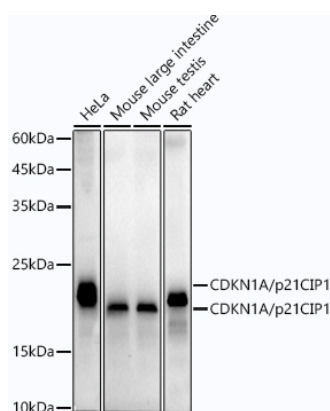
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

Exposure time: 3min.



Western blot analysis of extracts of various cell lines, using CDKN1A/p21CIP1 antibody (A19094) at 1:1000 dilution.

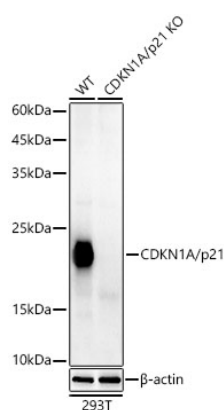
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Enhanced Kit (RM00021).

Exposure time: 90s.



Western blot analysis of extracts 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 Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

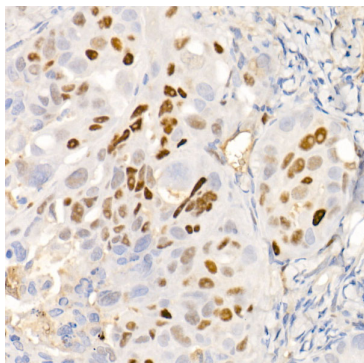
Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

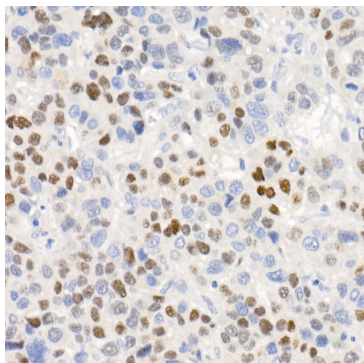
Detection: ECL Enhanced Kit (RM00021).

Exposure time: 90s.

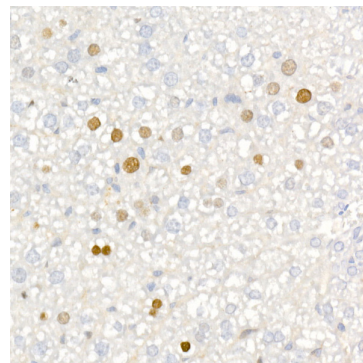
Validation Data



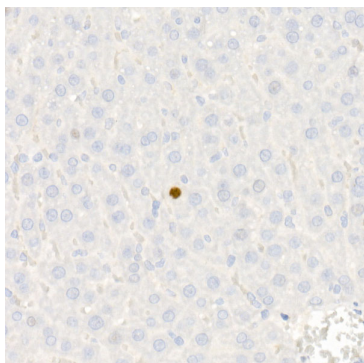
Immunohistochemistry analysis of paraffin-embedded human colon carcinoma using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (A19094) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



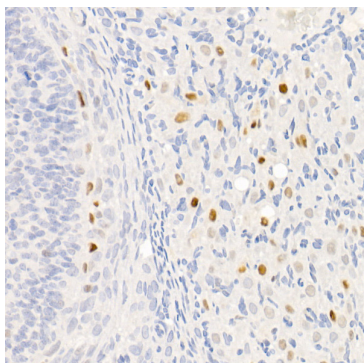
Immunohistochemistry analysis of paraffin-embedded human liver cancer using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (A19094) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded mouse liver using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (A19094) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded rat liver using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (A19094) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of paraffin-embedded rat ovary using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (A19094) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.