

CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A1483 **18 Publications**

Basic Information

Catalog No.

A1483

Observed MW

21kDa

Calculated MW

21kDa

Category

Primary antibody

Applications

WB, IF

Cross-Reactivity

Human, Mouse, Rat

Recommended Dilutions

WB	1:500 - 1:2000
IF	1:50 - 1:200

Contact

 | www.abclonal.com

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.

Immunogen Information

Gene ID	Swiss Prot
1026	P38936

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 43-142 of human CDKN1A/p21CIP1 (NP_000380.1).

Synonyms

CAP20;CDKN1;CIP1;MDA-6;P21;SDI1;WAF1;p21CIP1;CDKN1A

Product Information

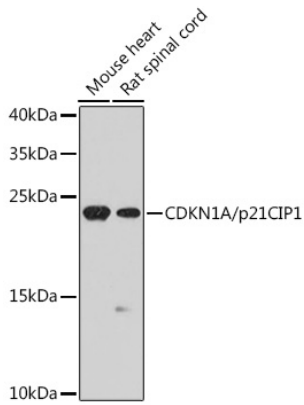
Source	Isotype	Purification
Rabbit	IgG	Affinity purification

Storage

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

Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.

Validation Data



Western blot analysis of extracts of various cell lines, using CDKN1A/p21CIP1 antibody (A1483) at 1:1000 dilution.

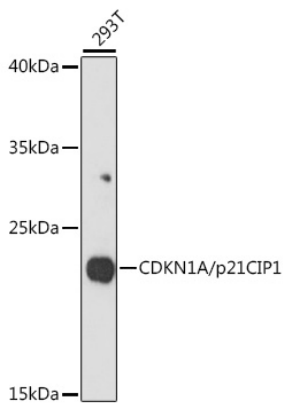
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 90s.



Western blot analysis of extracts of 293T cells, using CDKN1A/p21CIP1 antibody (A1483) at 1:1000 dilution.

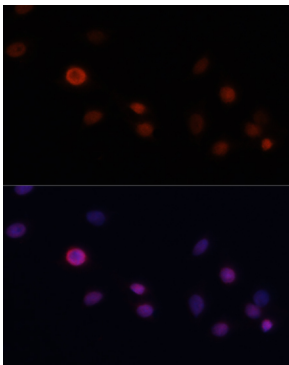
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25ug per lane.

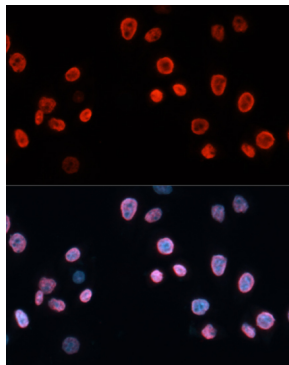
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

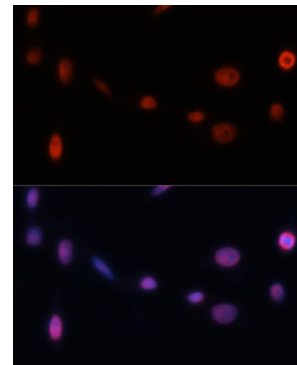
Exposure time: 10s.



Immunofluorescence analysis of C6 cells using CDKN1A/p21CIP1 antibody (A1483) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of HeLa cells using CDKN1A/p21CIP1 antibody (A1483) at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of NIH/3T3 cells using CDKN1A/p21CIP1 antibody (A1483) at dilution of 1:100. Blue: DAPI for nuclear staining.