

CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A1483

77 Publications

Basic Information

Observed MW

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

Calculated MW

18kDa

Category

Primary antibody

Applications

WB, IHC-P, IF/ICC, ELISA

Cross-Reactivity

Human, Mouse, Rat

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**IF/ICC** 1:50 - 1:200

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

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

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

Contact

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

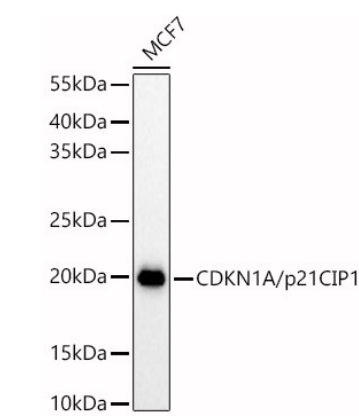
Affinity purification

Storage

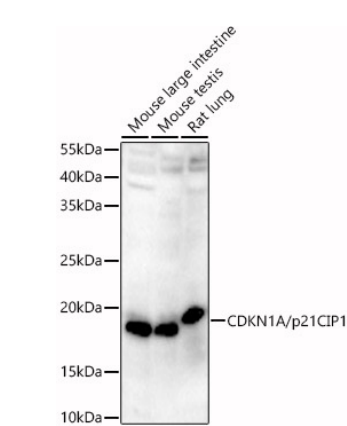
Store at -20°C. Avoid freeze / thaw cycles.

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

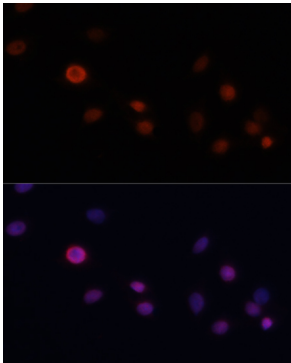
Validation Data



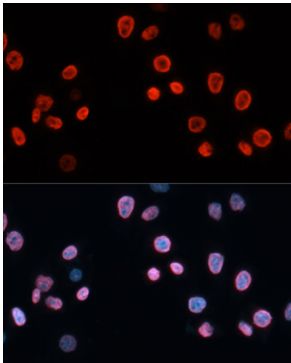
Western blot analysis of lysates from MCF7 cells, using CDKN1A/p21CIP1 Rabbit pAb (A1483) at 1:900 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.



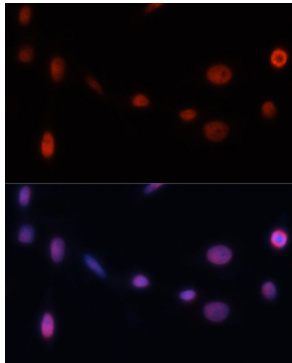
Western blot analysis of various lysates, using CDKN1A/p21CIP1 Rabbit pAb (A1483) at 1:900 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 180s.



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

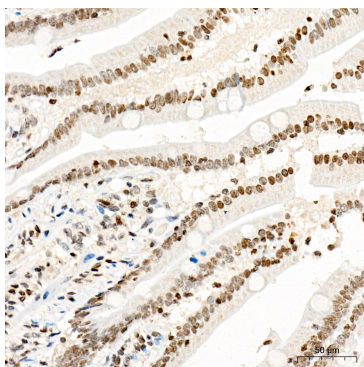


Immunofluorescence analysis of HeLa cells using CDKN1A/p21CIP1 Rabbit pAb (A1483) at dilution of 1:100. Blue: DAPI for nuclear staining.



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

Validation Data



Immunohistochemistry analysis of paraffin-embedded Human colon tissue using CDKN1A/p21CIP1 Rabbit pAb (A1483) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.