

[KO Validated] CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A1483SP **KO Validated** **81 Publications**

Basic Information

Observed MW

21 kDa

Calculated MW

18 kDa

Category

Primary antibody

Applications

WB,IP,IHC-P,ELISA

Cross-Reactivity

Human, Mouse

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

IP 0.5 µg - 4 µg antibody for
200 µg - 400 µg extracts
of whole cells

IHC-P 1:500 - 1:1000

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ($\geq 1:10000$) a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

1026

Swiss Prot

P38936

Immunogen

This information is considered to be commercially sensitive.

Synonyms

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide. May contain 0.05% BSA as specified on the Certificate of Analysis.

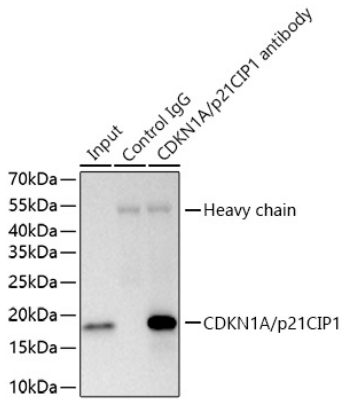
Contact

 | 400-999-6126

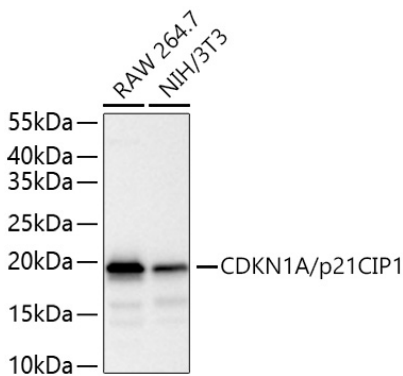
 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

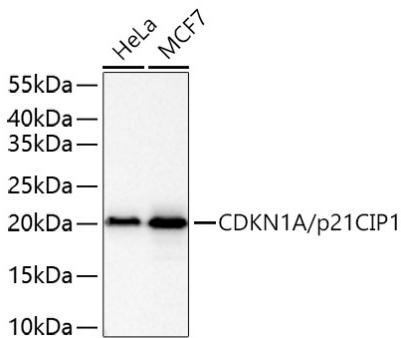
Validation Data



Immunoprecipitation of CDKN1A/p21CIP1 from 300 µg extracts of RAW 264.7 cells was performed using 2 µg of [KO Validated] CDKN1A/p21CIP1 Rabbit pAb (A1483SP). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with . The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using [KO Validated] CDKN1A/p21CIP1 Rabbit pAb (A1483SP) at a dilution of 1:1000.

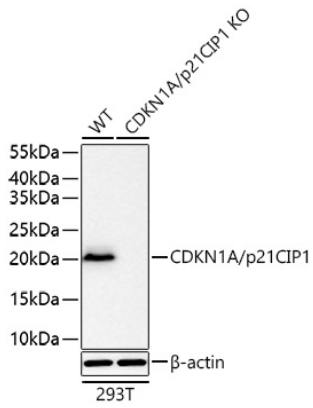


Western blot analysis of various lysates using [KO Validated] CDKN1A/p21CIP1 Rabbit pAb (A1483SP) at 1:1000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 10 s.



Western blot analysis of various lysates using [KO Validated] CDKN1A/p21CIP1 Rabbit pAb (A1483SP) at 1:1000 dilution incubated overnight at 4°C.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 20 s.

Validation Data



Western blot analysis of lysates from wild type (WT) and CDKN1A/p21CIP1 knockout (KO) 293T cells using [KO Validated] CDKN1A/p21CIP1 Rabbit pAb (A1483SP) at 1:1000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 μ g per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 45 s.