

# CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A2691 **11 Publications**

## Basic Information

### Observed MW

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

### Calculated MW

18kDa

### Category

Primary antibody

### Applications

WB,IHC-P,IP,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** 1:500 - 1:1000**IHC-P** 1:50 - 1:200**IP** 0.5µg-4µg antibody for  
200µg-400µg extracts of  
whole cells**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 protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

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

## Contact

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## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

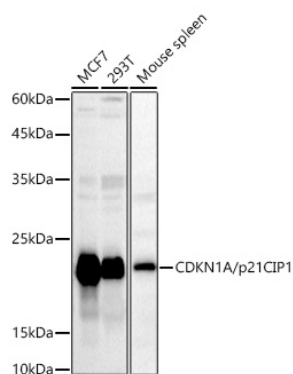
Affinity purification

### Storage

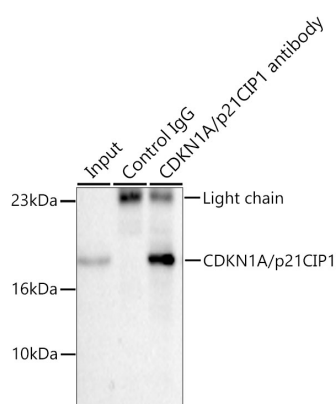
Store at -20°C. Avoid freeze / thaw cycles.

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

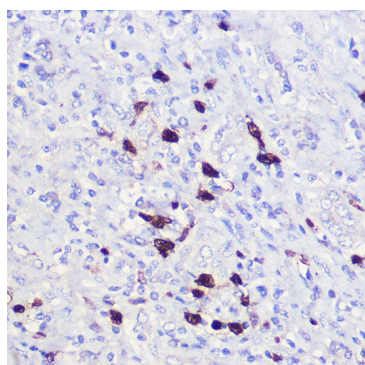
## Validation Data



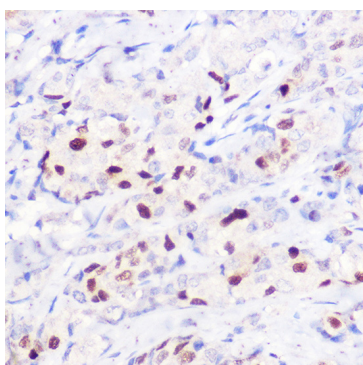
Western blot analysis of various lysates using CDKN1A/p21CIP1 Rabbit pAb (A2691) at 1:1000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 180s.



Immunoprecipitation of CDKN1A/p21CIP1 from 200 µg extracts of MCF7 cells was performed using 0.5 µg of CDKN1A/p21CIP1 Rabbit pAb (A2691). Rabbit IgG isotype control (AC042) was used to precipitate the Control IgG sample. IP samples were eluted with 1X Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using CDKN1A/p21CIP1 Rabbit pAb (A2691) at a dilution of 1:500.



Immunohistochemistry analysis of paraffin-embedded Human liver using CDKN1A/p21CIP1 Rabbit pAb (A2691) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer using CDKN1A/p21CIP1 Rabbit pAb (A2691) at dilution of 1:100 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.