

A2691

Leader in Biomolecular Solutions for Life Science



CDKN1A/p21CIP1 Rabbit pAb

Catalog No.: A2691

11 Publications

Basic Information

Observed MW

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

Calculated MW

18kDa

Category

Polyclonal 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.

Contact

 www.abclonal.com

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

Product Information

Source
Rabbit

Isotype
IgG

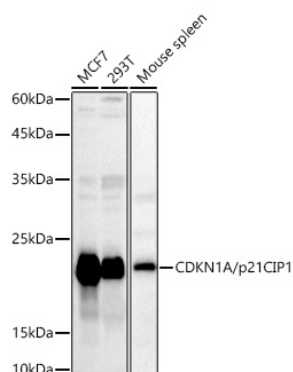
Purification
Affinity purification

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.

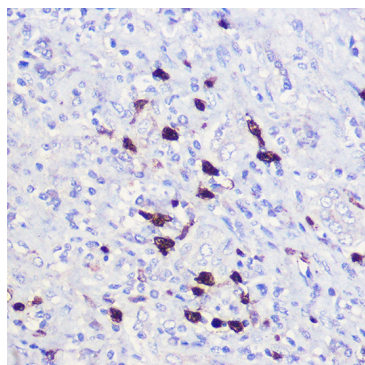
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25µg per lane.

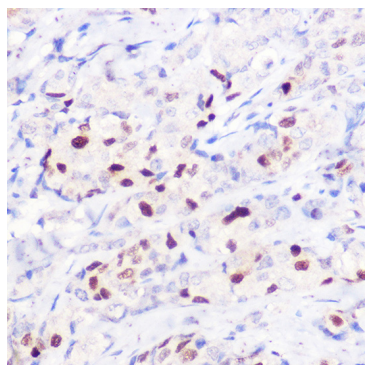
Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

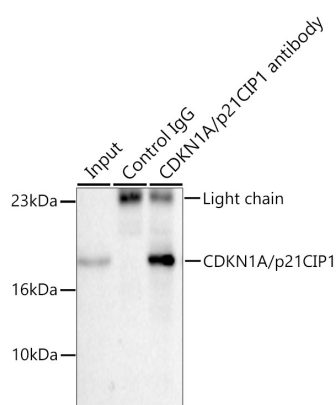
Exposure time: 180s.



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.



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.