

Datasheet for ABIN7266599

**anti-p21 antibody****7** Images[Go to Product page](#)

## Overview

Quantity:	100 µL
Target:	p21 (CDKN1A)
Reactivity:	Human
Host:	Rabbit
Clonality:	Monoclonal
Conjugate:	This p21 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

## Product Details

Purpose:	[KO Validated] CDKN1A/p21CIP1 Rabbit mAb
Immunogen:	A synthesized peptide derived from human CDKN1A/p21CIP1
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Monoclonal Antibodies
Purification:	Affinity purification
Grade:	KO Validated

## Target Details

Target:	p21 (CDKN1A)
Alternative Name:	CDKN1A ( <a href="#">CDKN1A Products</a> )

## Target Details

Background:	<p>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. [provided by RefSeq, Sep 2015],CAP20,CDKN1,CIP1,MDA-6,P21,SDI1,WAF1,p21CIP1,CDKN1A,AMPK Signaling Pathway,Apoptosis,Cancer,Cell Biology &amp; Developmental Biology,Cell Cycle,Cell Cycle_Cell cycle inhibitors,DNA Damage &amp; Repair,Endocrine &amp; Metabolism,Epigenetics &amp; Nuclear Signaling,G1/S Checkpoint,G2/M DNA Damage Checkpoint,Immunology &amp; Inflammation,Kinase,PI3K-Akt Signaling Pathway,Signal Transduction,Stem Cells,Tumor suppressors,Tumor suppressors_p53 pathway,CDKN1A</p>
Molecular Weight:	21kDa
Gene ID:	1026
UniProt:	<a href="#">P38936</a>
Pathways:	<a href="#">p53 Signaling</a> , <a href="#">PI3K-Akt Signaling</a> , <a href="#">Cell Division Cycle</a> , <a href="#">AMPK Signaling</a> , <a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a> , <a href="#">Mitotic G1-G1/S Phases</a> , <a href="#">DNA Replication</a> , <a href="#">Hepatitis C</a> , <a href="#">Synthesis of DNA</a> , <a href="#">Autophagy</a>

## Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200
Restrictions:	For Research Use only

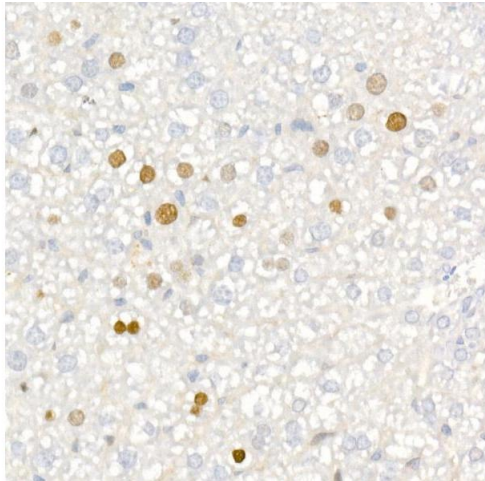
## Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,0.05 % BSA,50 % glycerol, pH 7.3.
Preservative:	Sodium azide

## Handling

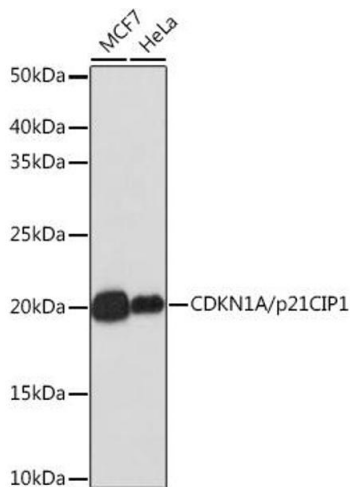
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

## Images



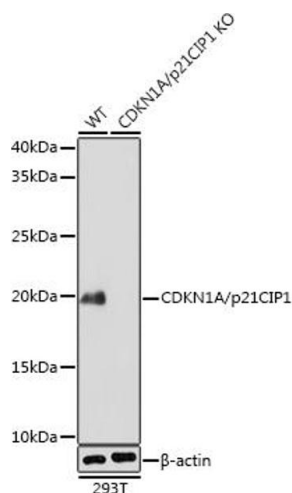
### Immunohistochemistry

**Image 1.** Immunohistochemistry of paraffin-embedded mouse liver using [KO Validated] CDKN1A/p21CIP1 Rabbit mAb (ABIN7266599) at dilution of 1:100 (40x lens). Perform high pressure antigen retrieval with 10 mM citrate buffer pH 6.0 before commencing with IHC staining protocol.



### Western Blotting

**Image 2.** Western blot analysis of extracts of various cell lines, using CDKN1A/p21CIP1 antibody (ABIN7266599) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Enhanced Kit (RM00021). Exposure time: 3 min.



### Western Blotting

**Image 3.** Western blot analysis of extracts from wild type (WT) and CDKN1A/p21CIP1 knockout (KO) 293T cells, using CDKN1A/p21CIP1 antibody (ABIN7266599) at 1:1000 dilution. Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (ABIN1684268 and ABIN3020597) at 1:10000 dilution. Lysates/proteins: 25  $\mu$ g per lane. Blocking buffer: 3 % nonfat dry milk in TBST. Detection: ECL Enhanced Kit (RM00021). Exposure time: 3 min.

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN7266599.