

Datasheet for ABIN2854752

anti-p21 antibody**3** Images**1** Publication[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	p21 (CDKN1A)
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	Recombinant protein encompassing a sequence within the center region of human p21 Cip1. The exact sequence is proprietary.
Isotype:	IgG
Cross-Reactivity:	Human, Rat
Characteristics:	Rabbit Polyclonal antibody to p21 Cip1 (cyclin-dependent kinase inhibitor 1) p21 Cip1 antibody
Purification:	Purified by antigen-affinity chromatography.

Target Details

Target:	p21 (CDKN1A)
Alternative Name:	cyclin dependent kinase inhibitor 1A (CDKN1A Products)
Background:	This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator

Target Details

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 (PCNA), 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 CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Two alternatively spliced variants, which encode an identical protein, have been reported.

Cellular Localization: Cytoplasm , Nucleus

Molecular Weight:	18 kDa
Gene ID:	1026
UniProt:	P38936
Pathways:	p53 Signaling , PI3K-Akt Signaling , Cell Division Cycle , AMPK Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Mitotic G1-G1/S Phases , DNA Replication , Hepatitis C , Synthesis of DNA , Autophagy

Application Details

Application Notes:	WB: 1:500-1:3000. ICC/IF: 1:100-1:1000. Optimal dilutions/concentrations should be determined by the researcher. Not tested in other applications.
Comment:	Positive Control: HCT116 treated with 30uM cisplatin for 24hr Validation: Orthogonal
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	1XPBS (pH 7), 20 % Glycerol, 0.01 % Thimerosal
Preservative:	Thimerosal (Merthiolate)
Precaution of Use:	This product contains Thimerosal (Merthiolate): a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

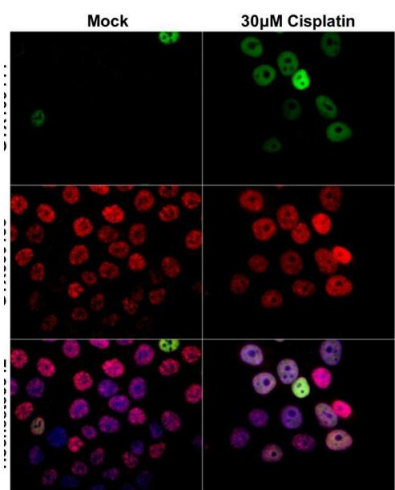
Handling

Storage:	4 °C,-20 °C
Storage Comment:	Store as concentrated solution. Centrifuge briefly prior to opening vial. For short-term storage (1-2 weeks), store at 4°C. For long-term storage, aliquot and store at -20°C or below. Avoid multiple freeze-thaw cycles.

Publications

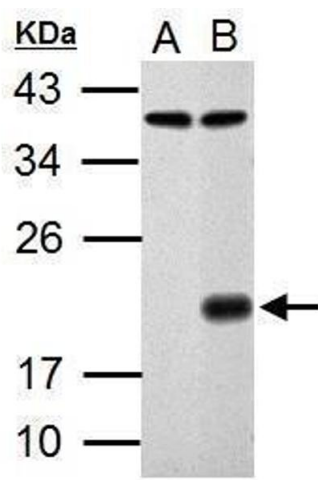
Product cited in:	Xu, Wu, Zheng, Yu, Yang, Yao, Zhou, Ching, Lau: "Proteome profiling of cadmium-induced apoptosis by antibody array analyses in human bronchial epithelial cells." in: Oncotarget , Vol. 7, Issue 5, pp. 6146-58, (2017) (PubMed).
-------------------	--

Images



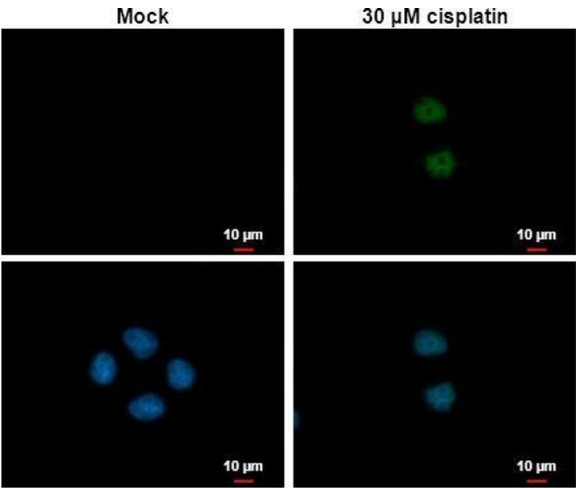
Immunofluorescence

Image 1. ICC/IF Image p21 Cip1 antibody detects p21 Cip1 protein at nucleus by immunofluorescent analysis. Samples: HCT116 cells mock (left) and treated with 30 µM Cisplatin for 24 hrs (right) were fixed in 4% paraformaldehyde at RT for 15 min. Green: p21 Cip1 protein stained by p21 Cip1 antibody , diluted at 1:1000. Red: Histone H3S10ph (phospho Ser10), a nucleus marker, stained by Histone H3S10ph (phospho Ser10) antibody [GT921] , diluted at 1:500. Blue: Hoechst 33342 staining.



Western Blotting

Image 2. WB Image Sample (30 ug of whole cell lysate) A: HCT116 B: HCT116 treated with 30uM cisplatin for 24hr 12% SDS PAGE antibody diluted at 1:1000



Immunofluorescence

Image 3. ICC/IF Image p21 Cip1 antibody detects p21 Cip1 protein at nucleus by immunofluorescent analysis. Samples: HCT116 cells mock and treated with 30μM cisplatin for 24hr and were fixed in 4% paraformaldehyde at RT for 15 min. Green: p21 Cip1 protein stained by p21 Cip1 antibody , diluted at 1:500. Blue: Hoechst 33342 staining. Scale bar = 10 μm.