

For Research Use Only

# p21 Polyclonal antibody

Catalog Number: 28248-1-AP

72 Publications



## Basic Information

### Catalog Number:

28248-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG28394

### GenBank Accession Number:

NM\_001111099

### GeneID (NCBI):

12575

### UNIPROT ID:

P39689

### Full Name:

cyclin-dependent kinase inhibitor 1A (P21)

### Calculated MW:

18 kDa

### Observed MW:

18 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

mouse, rat

### Cited Species:

mouse, rat

### Positive Controls:

WB: PC-12 cells, NIH/3T3 cells, DC2.4 cells, HSC-T6 cells, RAW 264.7 cells, Sp2/0 cells, Neuro-2a cells

IP: NIH/3T3 cells,

IF/ICC: NIH/3T3 cells,

## Background Information

CDKN1A (p21, CIP1, WAF1) is a cyclin-dependent kinase inhibitor. CDKN1A binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at the G1 phase. The expression of CDKN1A is induced by wild-type but not mutant p53 protein, through which CDKN1A mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. CDKN1A can interact with proliferating cell nuclear antigen (PCNA), and plays a regulatory role in S phase DNA replication and DNA damage repair. CDKN1A 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jingjing Pan	36152427	Ecotoxicol Environ Saf	WB
Jiying Hou	36077440	Int J Mol Sci	WB
Haowei Fu	36423848	Sci Total Environ	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

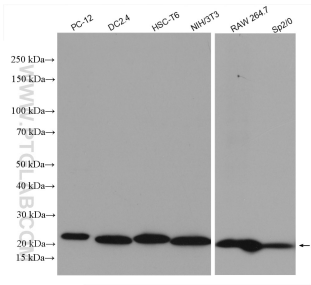
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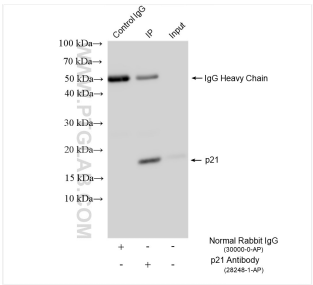
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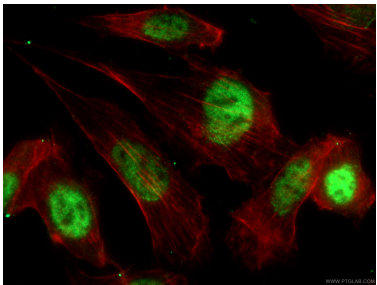
Selected Validation Data



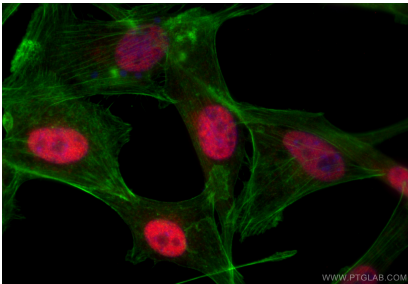
Various lysates were subjected to SDS PAGE followed by western blot with 28248-1-AP (p21 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



IP result of anti-p21 (IP:28248-1-AP, 4ug; Detection:28248-1-AP 1:1000) with NIH/3T3 cells lysate 1920 ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using 28248-1-AP (p21 antibody), at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). F-actin is stained using CL555-phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using p21 antibody (28248-1-AP) at dilution of 1:200 and Coralite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-phalloidin (green).