

For Research Use Only

# P21 Recombinant antibody

Catalog Number: 82669-2-RR



## Basic Information

**Catalog Number:**

82669-2-RR

**Size:**

1000 µg/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG0368

**GenBank Accession Number:**

BC000275

**GeneID (NCBI):**

1026

**UNIPROT ID:**

P38936

**Full Name:**

cyclin-dependent kinase inhibitor 1A (p21, Cip1)

**Calculated MW:**

18 kDa

**Observed MW:**

21 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

3N14

**Recommended Dilutions:**

WB 1:5000-1:20000

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

IF 1:1000-1:4000

## Applications

**Tested Applications:**

IF/ICC, IP, WB, ELISA

**Species Specificity:**

Human, mouse

**Positive Controls:**

**WB :** HeLa cells, MCF-7 cells, U-87 MG cells, NIH/3T3 cells

**IP :** MCF-7 cells,

**IF :** MCF-7 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. Two alternatively spliced variants, which encode an identical protein, have been reported.

## Storage

**Storage:**

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

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

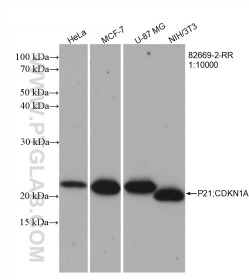
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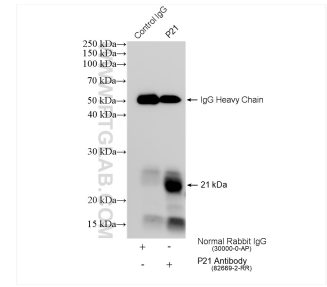
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 82669-2-RR (P21;CDKN1A antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using P21 antibody (82669-2-RR, Clone: 3N14) at dilution of 1:2000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-P21 (IP:82669-2-RR, 4ug; Detection:82669-2-RR 1:800) with MCF-7 cells lysate 760 ug.