

For Research Use Only

P21 Recombinant antibody

Catalog Number: 82669-2-RR

1 Publications



Basic Information

Catalog Number:

82669-2-RR

Size:

100ul, Concentration: 1000 ug/ml by Nanodrop;

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 1:2000-1:10000

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

IF/ICC 1:1000-1:4000

Applications

Tested Applications:

WB, IF/ICC, IP, ELISA

Cited Applications:

WB

Species Specificity:

human

Cited Species:

human

Positive Controls:

WB : MCF-7 cells, A549 cells, HCT 116 cells, HUVEC cells, HeLa cells, HepG2 cells, THP-1 cells, U-87 MG cells

IP : MCF-7 cells,

IF/ICC : 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Neng Li	38309505	J Biol Chem	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

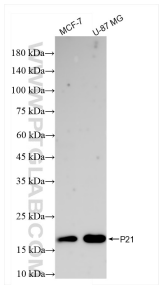
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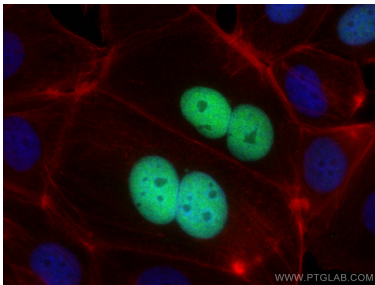
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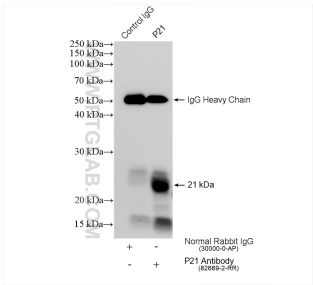
Selected Validation Data



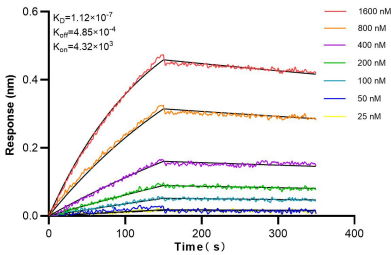
Various lysates were subjected to SDS PAGE followed by western blot with 82669-2-RR (P21 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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.



Biolayer interferometry (BLI) kinetic assays of 82669-2-RR against Human P21 were performed. The affinity constant is 112 nM.