

For Research Use Only

# CoraLite®594-conjugated P21 Polyclonal antibody

Catalog Number: CL594-10355

Featured Product

1 Publications



## Basic Information

Catalog Number:

CL594-10355

Concentration:

1000 ug/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:

Antigen affinity purification

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10<sup>6</sup> cells in a  
100 µl suspension

Excitation/Emission maxima  
wavelengths:

588 nm / 604 nm

## Applications

Tested Applications:

IF/ICC, FC (Intra)

Cited Applications:

IF

Species Specificity:

human

Positive Controls:

IF/ICC : MCF-7 cells,

FC (Intra) : 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
LeeAnn A Hold	39975248	bioRxiv	IF

## Storage

Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

Storage Buffer:

PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

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

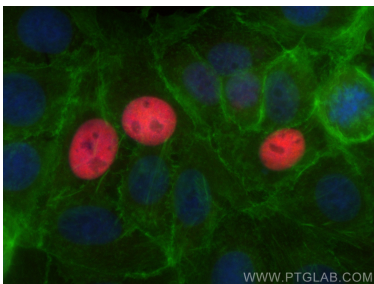
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

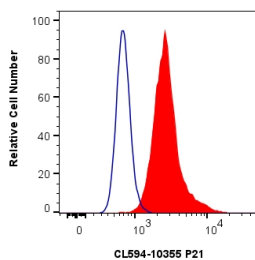
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CoraLite®594 P21 antibody (CL594-10355) at dilution of 1:200, CL488-phalloidin (green).



1X10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.8 ug CoraLite®594 Anti-Human P21 (CL594-10355) (red), or 0.8 ug CoraLite®594-conjugated Rabbit IgG control Rabbit PolyAb (CL594-30000, Clone: ) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.