

For Research Use Only

# CoraLite® Plus 488-conjugated P21 Recombinant antibody

Catalog Number: CL488-82669-2



## Basic Information

<b>Catalog Number:</b> CL488-82669-2	<b>GenBank Accession Number:</b> BC000275	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1026	<b>CloneNo.:</b> 3N14
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P38936	<b>Recommended Dilutions:</b> IF/ICC 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase inhibitor 1A (p21, Cip1)	<b>Excitation/Emission maxima wavelengths:</b> 493 nm / 522 nm
<b>Immunogen Catalog Number:</b> AG0368	<b>Calculated MW:</b> 18 kDa	
	<b>Observed MW:</b> 21 kDa	

## Applications

<b>Tested Applications:</b> IF/ICC, FC (Intra)	<b>Positive Controls:</b> IF/ICC : MCF-7 cells,
<b>Species Specificity:</b> human	

## 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.

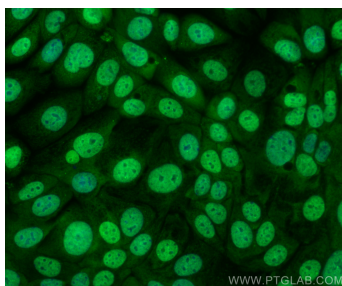
## Storage

**Storage:**  
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.  
Aliquoting is unnecessary for -20°C storage

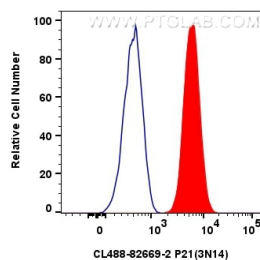
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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CoraLite® Plus 488 P21 antibody (CL488-82669-2, Clone: 3N14 ) at dilution of 1:200.



1x10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488-conjugated P21 Recombinant antibody (CL488-82669-2, Clone:3N14)(red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-30000) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).