For Research Use Only

# CoraLite® Plus 488-conjugated P21 Polyclonal antibody

Catalog Number: CL488-10355

Featured Product

1 Publications



**Basic Information** 

Catalog Number: CL488-10355 Concentration: 1000 ug/ml Source:

Rabbit Isotype:

Immunogen Catalog Number:

AG0368

**Tested Applications:** 

FC (Intra)

human Cited Species: human

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 10^6 cells in a

100 µl suspension

Excitation/Emission maxima

wavelengths: 493 nm / 522 nm

**Applications** 

IF/ICC, FC (Intra) **Cited Applications:** 

Species Specificity:

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
Xiang Li	39382426	Cardiovasc Res	FC (Intra)

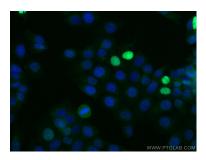
### Storage

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

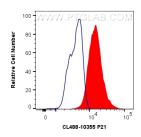
PBS with 50% glycerol, 0.05% Proclin300, 0.5% BSA, pH7.3

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CoraLite® Plus 488 P21 antibody (CL488-10355) at dilution of 1:100.



1X10^6 MCF-7 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human P21 (CL488-10355) (red), or 0.8 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).