

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

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:

Antigen affinity purification

Recommended Dilutions:

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

Applications

Tested Applications:

IF/ICC, FC (Intra)

Cited Applications:

FC (Intra)

Species Specificity:

human

Cited Species:

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
Xiang Li	39382426	Cardiovasc Res	FC (Intra)

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

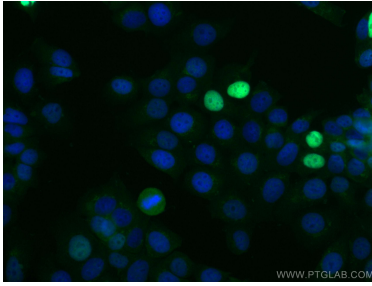
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

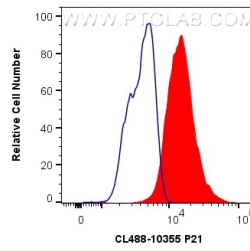
E: proteintech@ptglab.com
W: ptglab.com

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® Plus 488 P21 antibody (CL488-10355) at dilution of 1:100.



1X10⁶ 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).