For Research Use Only

CoraLite® Plus 488-conjugated P21 Recombinant antibody



Purification Method:

Catalog Number: CL488-82669-2

Basic Information

Catalog Number: GenBank Accession Number:

CL488-82669-2 BC000275 Protein A purification

GeneID (NCBI): CloneNo.: 100ul , Concentration: 1000 $\mu g/ml$ by 1026 3N14

Nanodrop: **UNIPROT ID:** Excitation/Emission maxima

P38936 wavelengths: 493 nm / 522 nm Rabbit Full Name:

Isotype: cyclin-dependent kinase inhibitor 1A

IgG (p21, Cip1) Immunogen Catalog Number: Calculated MW: 18 kDa AG0368

> Observed MW: 21 kDa

Applications

Tested Applications:

FC (Intra)

Species Specificity:

Human, mouse

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.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

Selected Validation Data

1X10^6 MCF-7 cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human P21 (CL488-82669-2, Clone:3N14) (red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-3000, Clone:) (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.