

For Research Use Only

p21 Polyclonal antibody

Catalog Number: 28248-1-AP **30 Publications**



Basic Information

Catalog Number:

28248-1-AP

Size:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG28394

GenBank Accession Number:

NM_001111099

GeneID (NCBI):

12575

UNIPROT ID:

P39689

Full Name:

cyclin-dependent kinase inhibitor 1A (P21)

Calculated MW:

18 kDa

Observed MW:

18 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IF 1:50-1:500

Applications

Tested Applications:

IF/ICC, WB, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

mouse, rat

Cited Species:

rat, mouse

Positive Controls:

WB : PC-12 cells, NIH/3T3 cells, DC2.4 cells, HSC-T6 cells, RAW 264.7 cells, Sp2/0 cells, Neuro-2a cells

IF : NIH/3T3 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.

Notable Publications

Author	Pubmed ID	Journal	Application
Jingjing Pan	36152427	Ecotoxicol Environ Saf	WB
Jiying Hou	36077440	Int J Mol Sci	WB
Haowei Fu	36423848	Sci Total Environ	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

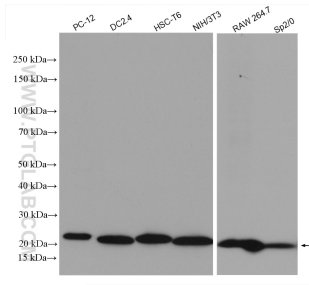
T: 4006900926

E: Proteintech-CN@ptglab.com

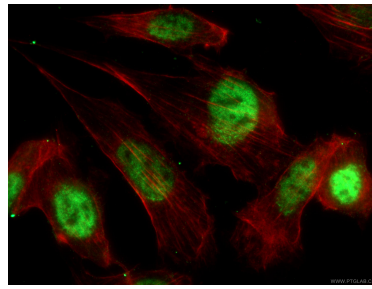
W: ptgcn.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 28248-1-AP (p21 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using 28248-1-AP (p21 antibody), at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). F-actin is stained using CL555-phalloidin (red).