

For Research Use Only

P21 Polyclonal antibody

Catalog Number: 27296-1-AP

31 Publications



Basic Information

Catalog Number:

27296-1-AP

Concentration:

600 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG26129

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:

WB: 1:500-1:1000

IF/ICC: 1:200-1:800

Applications

Tested Applications:

WB, IF, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

mouse, rat

Cited Species:

human, mouse, rat, canine

Positive Controls:

WB: Neuro-2a cells, C6 cells, NIH/3T3 cells

IF/ICC: 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
Hui-Hui Wang	36233264	Int J Mol Sci	WB
Hongzhu Li	34779492	Int J Mol Med	WB
Yuanyuan Li	36343723	Brain Res	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

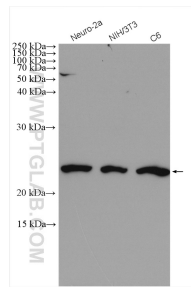
T: 4006900926

E: Proteintech-CN@ptglab.com

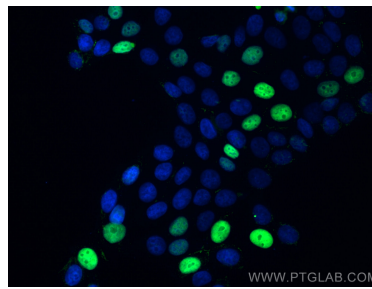
W: ptgcn.com

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Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 27296-1-AP (P21 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using P21 antibody (27296-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).