

For Research Use Only

P21 Polyclonal antibody

Catalog Number: 27296-1-AP

28 Publications



Basic Information

Catalog Number:

27296-1-AP

Size:

150ul, Concentration: 600 µg/ml by Nanodrop and 333 µg/ml by Bradford method using BSA as the standard;

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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

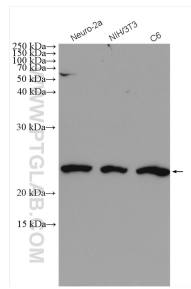
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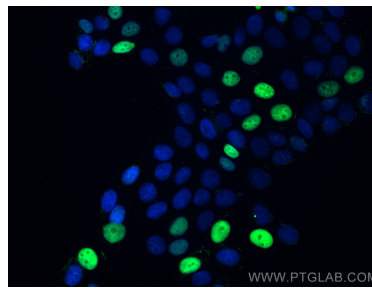
E: proteintech@ptglab.com
W: ptglab.com

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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).