

For Research Use Only

# P21 Polyclonal antibody

Catalog Number: 27296-1-AP

24 Publications



## Basic Information

<b>Catalog Number:</b> 27296-1-AP	<b>GenBank Accession Number:</b> BC000275	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 600 µg/ml by Nanodrop and 333 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 1026	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IF 1:200-1:800
<b>Source:</b> Rabbit	<b>Full Name:</b> cyclin-dependent kinase inhibitor 1A (p21, Cip1)	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 18 kDa	
<b>Immunogen Catalog Number:</b> AG26129	<b>Observed MW:</b> 21 kDa	

## Applications

<b>Tested Applications:</b> IF, WB, ELISA	<b>Positive Controls:</b> WB : Neuro-2a cells, C6 cells, NIH/3T3 cells IF : MCF-7 cells,
<b>Cited Applications:</b> IF, IHC, WB	
<b>Species Specificity:</b> mouse, rat	
<b>Cited Species:</b> human, rat, mouse, canine	

## 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

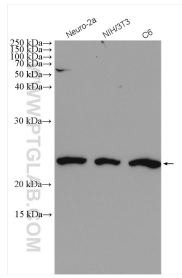
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

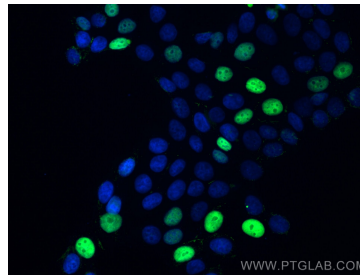
For technical support and original validation data for this product please contact:  
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## Selected Validation Data



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 AffiniPure Goat Anti-Rabbit IgG(H+L).