

For Research Use Only

# P21 Recombinant antibody, PBS Only

Catalog Number: 82669-2-PBS



## Basic Information

<b>Catalog Number:</b> 82669-2-PBS	<b>GenBank Accession Number:</b> BC000275	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug, Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1026	<b>CloneNo.:</b> 3N14
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P38936	
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase inhibitor 1A (p21, Cip1)	
<b>Immunogen Catalog Number:</b> AG0368	<b>Calculated MW:</b> 18 kDa	
	<b>Observed MW:</b> 21 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, IP, Indirect ELISA

**Species Specificity:**  
human

## 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

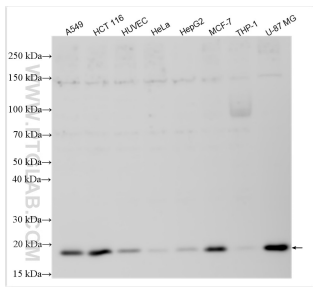
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only

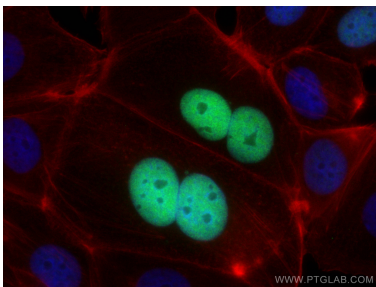
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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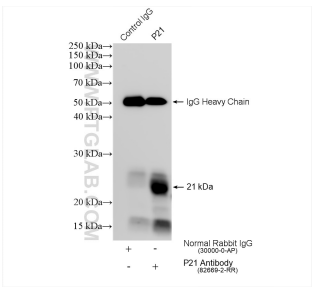
## Selected Validation Data



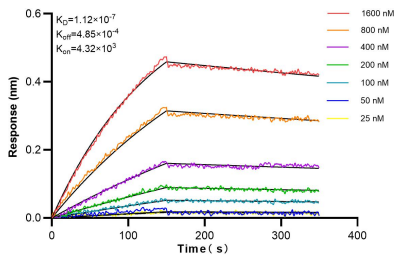
Various lysates were subjected to SDS PAGE followed by western blot with 82669-2-RR (P21 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82669-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using P21 antibody (82669-2-RR, Clone: 3N14 ) at dilution of 1:2000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 82669-2-PBS in a different storage buffer formulation.



IP result of anti-P21 (IP:82669-2-RR, 4ug; Detection:82669-2-RR 1:800) with MCF-7 cells lysate 760 ug. This data was developed using the same antibody clone with 82669-2-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 82669-2-RR against Human P21 were performed. The affinity constant is 112 nM.