

For Research Use Only

# P27; KIP1 Polyclonal antibody

Catalog Number: 26714-1-AP

Featured Product

3 Publications



## Basic Information

<b>Catalog Number:</b> 26714-1-AP	<b>GenBank Accession Number:</b> BC001971	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop and 767 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 1027	<b>Recommended Dilutions:</b> WB 1:2000-1:8000 IHC 1:50-1:500 IF/ICC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P46527	
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase inhibitor 1B (p27, Kip1)	
<b>Immunogen Catalog Number:</b> AG25083	<b>Calculated MW:</b> 198 aa, 22 kDa	
	<b>Observed MW:</b> 27 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Cited Applications:**  
WB

**Species Specificity:**  
human, mouse

**Cited Species:**  
human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

WB: NIH/3T3 cells, MCF-7 cells, HeLa cells

IHC: human gliomas tissue, human tonsillitis tissue, human lung cancer tissue, human breast cancer tissue, human colon cancer tissue, human ovary tumor tissue

IF/ICC: HepG2 cells, MCF-7 cells

## Background Information

CDKN1B, also named as P27 or KIP1, is a cyclin-dependent kinase inhibitor, which shares a limited similarity with CDK inhibitor CDKN1A/p21. P27 binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controlling cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. Downregulation of P27 has been implicated in the progression of several malignancies, including lung cancer, hepatocellular carcinoma, salivary cancer, oral squamous cell carcinomas, and gastric cancer.

## Notable Publications

Author	Pubmed ID	Journal	Application
Wei Jia	29568859	Int J Oncol	WB
Wei Zhang	33269376	Biosci Rep	WB
Alessia Schirripa	39898030	iScience	WB

## Storage

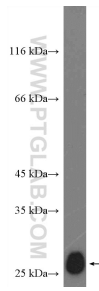
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

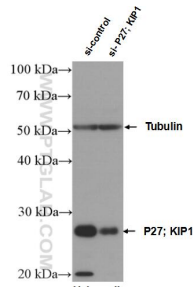
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

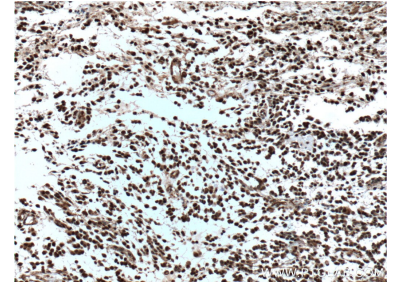
## Selected Validation Data



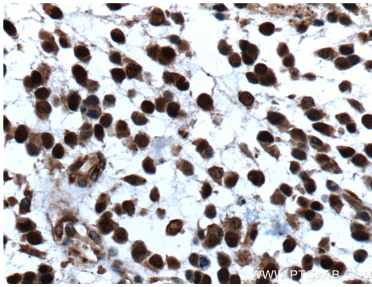
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



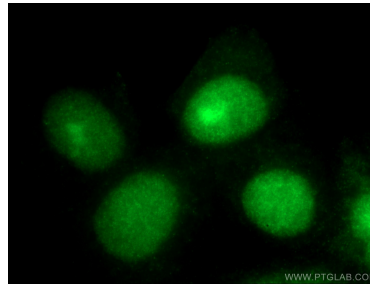
WB result of P27; KIP1 antibody (26714-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P27; KIP1 transfected HeLa cells.



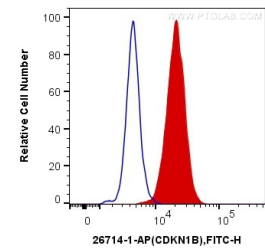
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



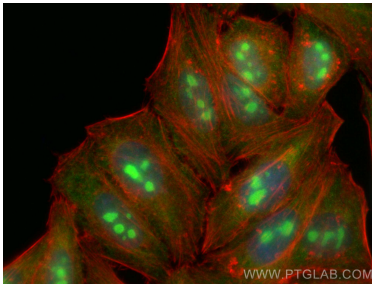
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using 26714-1-AP (P27; KIP1 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).



$1 \times 10^6$  MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human P27; KIP1 (26714-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using P27; KIP1 antibody (26714-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).