

For Research Use Only

P27; KIP1 Polyclonal antibody

Catalog Number: 25614-1-AP

Featured Product

226 Publications



Basic Information

Catalog Number:

25614-1-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG22582

GenBank Accession Number:

BC001971

GeneID (NCBI):

1027

UNIPROT ID:

P46527

Full Name:

cyclin-dependent kinase inhibitor 1B (p27, Kip1)

Calculated MW:

198 aa, 22 kDa

Observed MW:

27 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:8000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF-P: 1:200-1:800

IF/ICC: 1:50-1:500

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP, CoIP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, canine, bovine, sheep

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: HeLa cells, NIH/3T3 cells, HepG2 cells, MCF-7 cells, Jurkat cells

IP: NIH/3T3 cells,

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

IF-P: mouse testis tissue,

IF/ICC: HepG2 cells,

FC (Intra): 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
Yong-Li Zhang	34679694	Antioxidants (Basel)	WB
Qian Chen	32997272	J Nat Med	WB
Hai Zhou	36206599	Biochem Biophys Res Commun	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

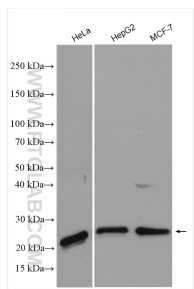
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

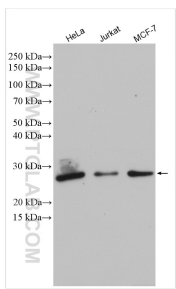
E: proteintech@ptglab.com
W: ptglab.com

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

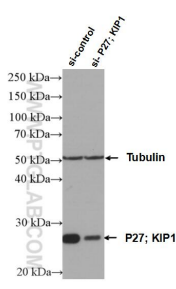
Selected Validation Data



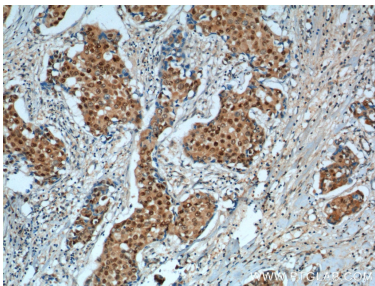
Various lysates were subjected to SDS PAGE followed by western blot with 25614-1-AP (P27; KIP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



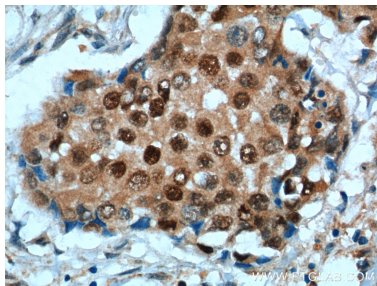
Various lysates were subjected to SDS PAGE followed by western blot with 25614-1-AP (P27; KIP1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



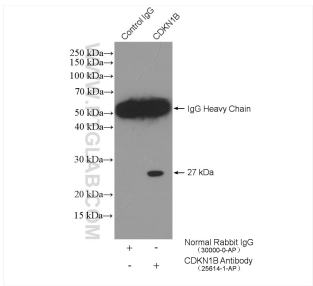
WB result of P27; KIP1 antibody (25614-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P27; KIP1 transfected HeLa cells.



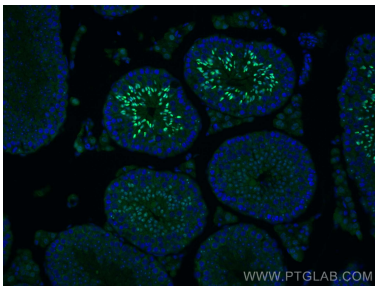
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 25614-1-AP (P27; KIP1 Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



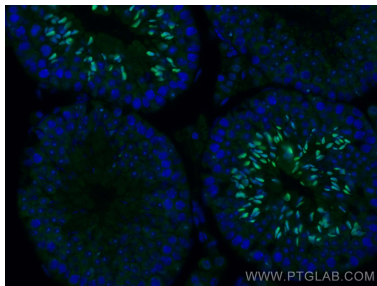
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 25614-1-AP (P27; KIP1 Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



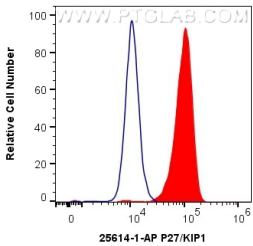
IP result of anti-P27; KIP1 (IP:25614-1-AP, 4ug; Detection:25614-1-AP 1:1000) with NIH/3T3 cells lysate 3440 ug.



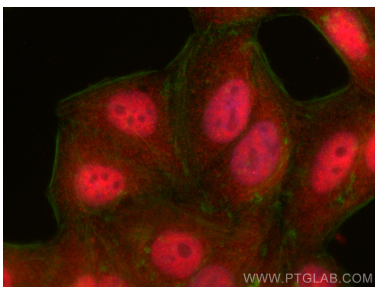
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using P27; KIP1 antibody (25614-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using P27; KIP1 antibody (25614-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10⁶ MCF-7 cells were intracellularly stained with 0.4 ug Anti-Human P27; KIP1 (25614-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 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 (25614-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-Phalloidin (green).