For Research Use Only

P27; KIP1 Polyclonal antibody

Catalog Number:26714-1-AP Featured Product 2 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
26714-1-AP

Size:
150ul , Concentration: 1000 μg/ml by Nanodrop and 767 μg/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG25083

GenBank Accession Number:
BC001971

GeneID (NCBI):
1027

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 1:2000-1:8000
IHC 1:50-1:500
IF 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, WB,ELISA

Cited Applications:
WB

Species Specificity:
human, mouse

Cited Species:
human

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 : 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

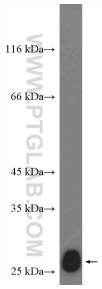
Storage

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

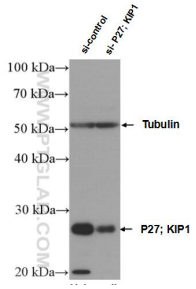
*** 20ul sizes contain 0.1% BSA

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

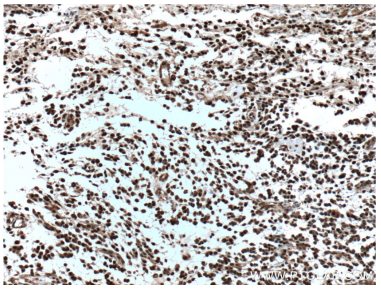
Selected Validation Data



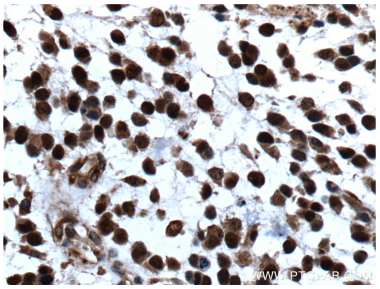
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



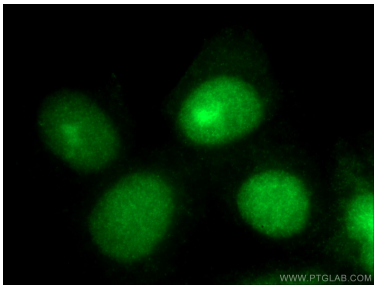
WB result of P27; KIP1 antibody (26714-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P27; KIP1 transfected HeLa cells.



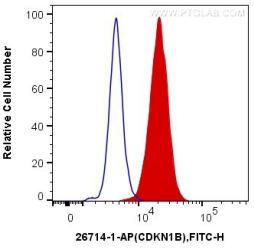
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



1X10^6 MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human P27; KIP1 (26714-1-AP) and CoraLite®488-Conjugated AffiniPure 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).