For Research Use Only

P27; KIP1 Polyclonal antibody

Catalog Number:26714-1-AP Featured Product 8 Publications

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Basic Information

Catalog Number:
26714-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG25083

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
IHC: 1:50-1:500
IF/ICC: 1:50-1:500
FC (Intra): 0.20 ug per 10^6 cells in a 100 ul suspension

Applications

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

Cited Applications:
WB, IHC

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

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
Wei Jia	29568859	Int J Oncol	WB
Wei Zhang	33269376	Biosci Rep	WB
Shih-Hsuan Cheng	42892465	Mitochondrion	

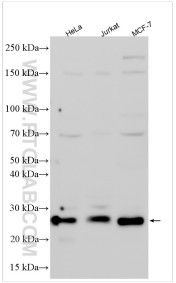
Storage

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

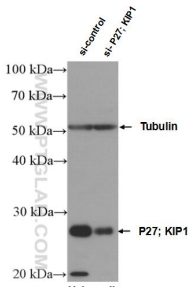
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

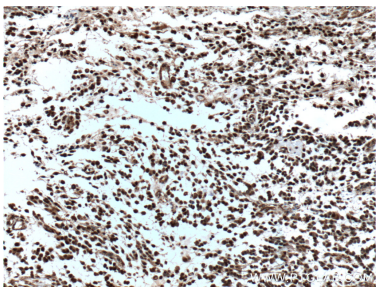
Selected Validation Data



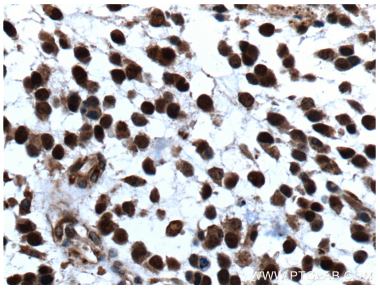
Various lysates were subjected to SDS PAGE followed by western blot with 26714-1-AP (P27; KIP1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



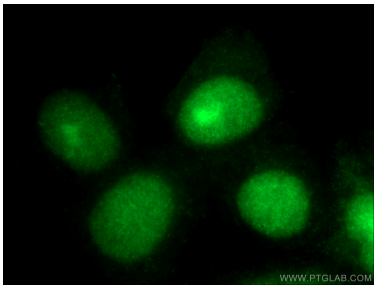
WB result of P27; KIP1 antibody (26714-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-P27; KIP1 transfected HeLa cells.



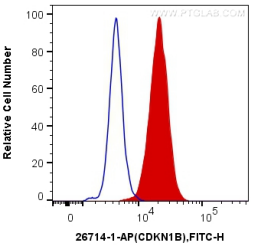
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



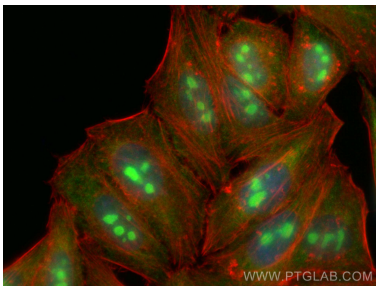
Immunohistochemical analysis of paraffin-embedded human gliomas tissue slide using 26714-1-AP (P27; KIP1 Antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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