

For Research Use Only

# CDK1 Polyclonal antibody

Catalog Number: 10762-1-AP

Featured Product

80 Publications



## Basic Information

### Catalog Number:

10762-1-AP

### Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1183

### GenBank Accession Number:

BC014563

### GeneID (NCBI):

983

### UNIPROT ID:

P06493

### Full Name:

cell division cycle 2, G1 to S and G2 to M

### Calculated MW:

25 kDa

### Observed MW:

30-34 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:4000

IHC: 1:250-1:1000

IF/ICC: 1:200-1:800

FC (Intra): 0.40 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse, pig, chicken, goat

**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: C2C12 cell, HeLa cells, C2C12 cells, Jurkat cells

IHC: human prostate cancer tissue, human breast cancer tissue, human paracancerous tissue of skin

IF/ICC: HeLa cells,

FC (Intra): HeLa cells,

## Background Information

CDK1, also named as CDC2, belongs to the protein kinase superfamily, CMGC Ser/Thr protein kinase family and CDC2/CDKX subfamily. CDK1 plays a key role in the control of the eukaryotic cell cycle. It is required in higher cells for entry into S-phase and mitosis. CDK1 is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. It is a component of the kinase complex that phosphorylates the repetitive C-terminus of RNA polymerase II. Mitotic cyclins stably associate with CDK1 and function as regulatory subunits. CDK1 has 2 isoforms produced by alternative splicing with the molecular mass of 34 kDa and 27 kDa. This antibody may have cross reaction with CDK2.

## Notable Publications

Author	Pubmed ID	Journal	Application
Zilu Zhang	34570444	Cancer Biol Med	WB
Qin Zhang	36083512	Mol Cell Biochem	WB
Huan Ma	33573708	Oncol Res	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

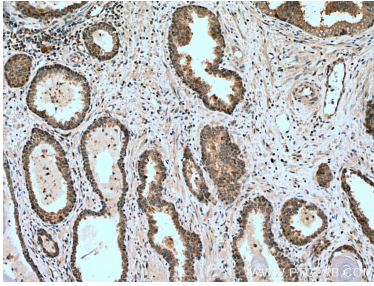
For technical support and original validation data for this product please contact:

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

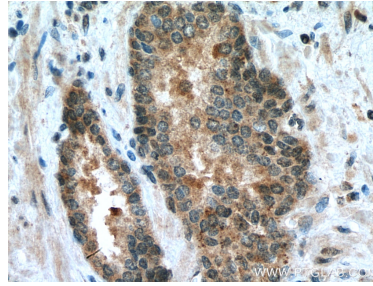
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

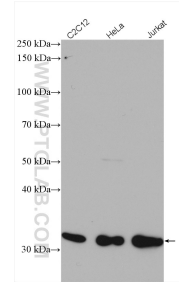
## Selected Validation Data



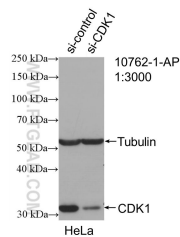
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10762-1-AP (CDK1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



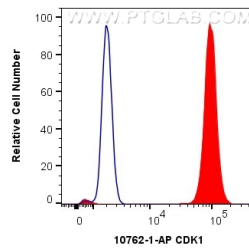
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10762-1-AP (CDK1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



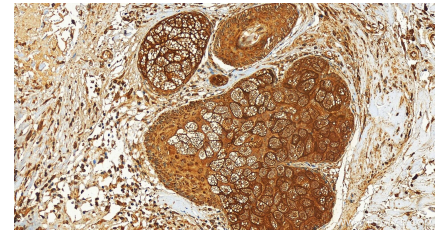
Various lysates were subjected to SDS PAGE followed by western blot with 10762-1-AP (CDK1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



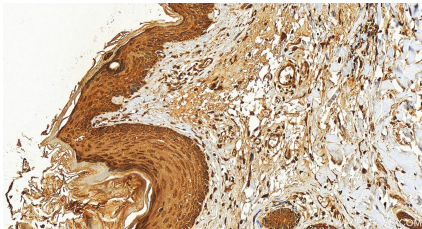
WB result of CDK1 antibody (10762-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CDK1 transfected HeLa cells.



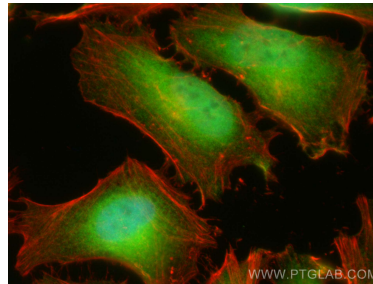
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human CDK1 (10762-1-AP) and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human paracancerous tissue of skin slide using 10762-1-AP (CDK1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human paracancerous tissue of skin slide using 10762-1-AP (CDK1 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK1 antibody (10762-1-AP) at dilution of 1:400 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).