

For Research Use Only

# CDK1-Specific Polyclonal antibody

Catalog Number: 19532-1-AP

Featured Product

170 Publications



## Basic Information

### Catalog Number:

19532-1-AP

### Size:

150ul, Concentration: 550 µg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### GenBank Accession Number:

NM\_001786

### GeneID (NCBI):

983

### UNIPROT ID:

P06493

### Full Name:

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

### Calculated MW:

34 kDa

### Observed MW:

34 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:100-1:400

IF 1:200-1:800

## Applications

### Tested Applications:

WB, IP, IF, FC, IHC, ELISA

### Cited Applications:

WB, IF, IHC

### Species Specificity:

human, mouse, rat, monkey

### Cited Species:

human, chicken, rat, sheep, mouse, pig

**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**: A431 cells, HeLa cells, HEK-293 cells, COS-7 cells, HepG2 cells, C2C12 cells, C6 cells, Jurkat cells, NIH/3T3 cells, Neuro-2a cells, MCF-7 cells

**IP**: HeLa cells, HEK-293 cells

**IHC**: human cervical cancer tissue,

**IF**: 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Xiaoman Chen	30207732	Mol Pharm	WB
Hui-Ting Liu	34667869	Laryngoscope Investig Otolaryngol	WB
Hongxia Li	34558311	Epigenomics	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

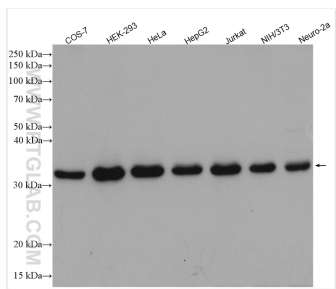
For technical support and original validation data for this product please contact:

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

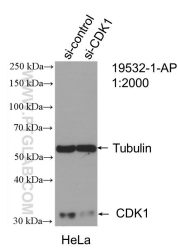
E: proteintech@ptglab.com  
W: ptglab.com

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

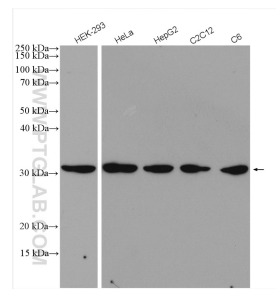
Selected Validation Data



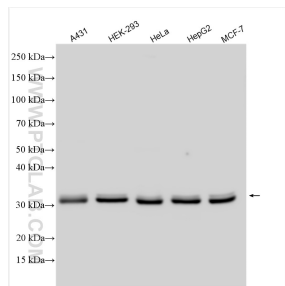
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



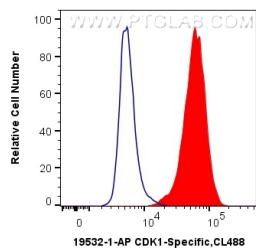
WB result of CDK1-Specific antibody (19532-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CDK1-Specific transfected HeLa cells.



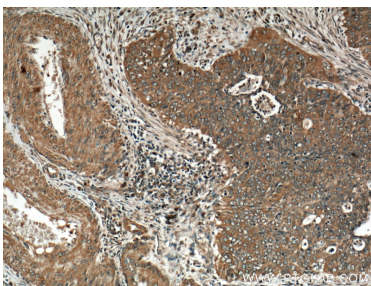
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



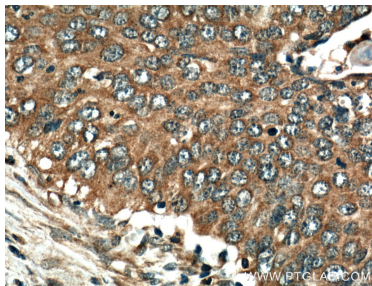
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



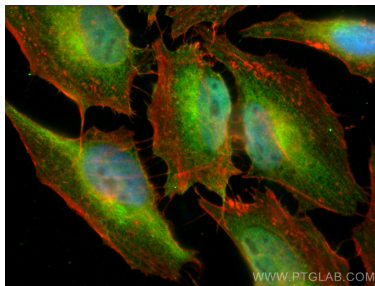
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human CDK1-Specific (19532-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



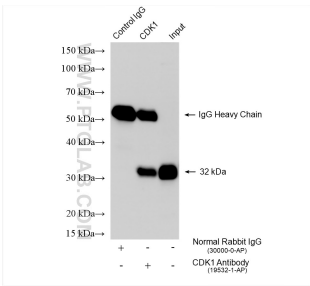
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 19532-1-AP (CDK1-Specific antibody at dilution of 1:200 (under 10x lens).



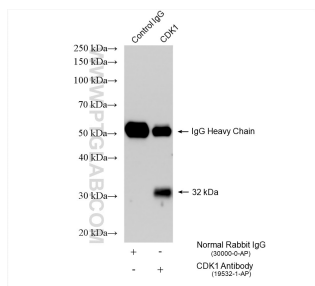
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 19532-1-AP (CDK1-Specific antibody at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK1-Specific antibody (19532-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-CDK1-Specific (IP:19532-1-AP, 4ug; Detection:19532-1-AP 1:5000) with HeLa cells lysate 1600 ug.



IP result of anti-CDK1-Specific (IP:19532-1-AP, 4ug;  
Detection:19532-1-AP 1:5000) with HEK-293 cells  
lysate 1200 ug.