

For Research Use Only

CDK1 Polyclonal antibody

Catalog Number: 19532-1-AP

Featured Product

220 Publications



Basic Information

Catalog Number:

19532-1-AP

Size:

150ul, Concentration: 550 ug/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:

30-34 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

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

IHC 1:100-1:400

IF/ICC 1:200-1:800

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, monkey

Cited Species:

human, mouse, rat, pig, chicken, 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: 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, mouse liver tissue, rat liver tissue

IF/ICC: 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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

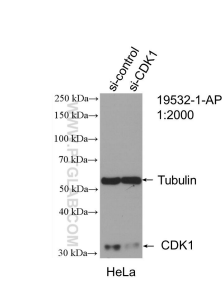
For technical support and original validation data for this product please contact:

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

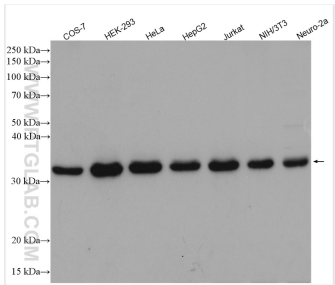
E: proteintech@ptglab.com
W: ptglab.com

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

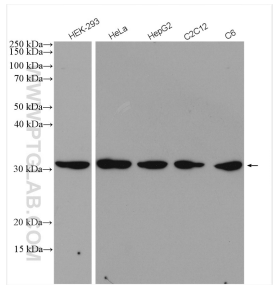
Selected Validation Data



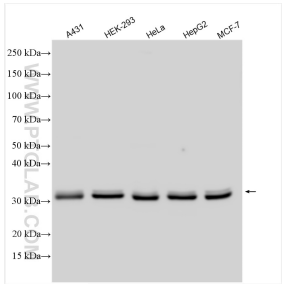
WB result of CDK1-Specific antibody (19532-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CDK1-Specific transfected HeLa cells.



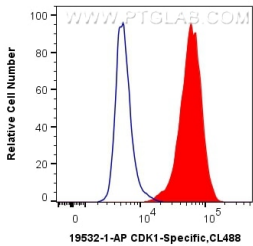
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



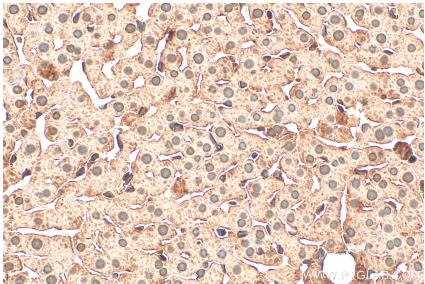
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



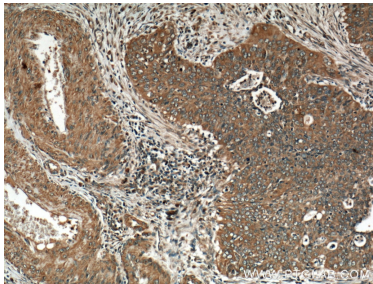
Various lysates were subjected to SDS PAGE followed by western blot with 19532-1-AP (CDK1-Specific antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



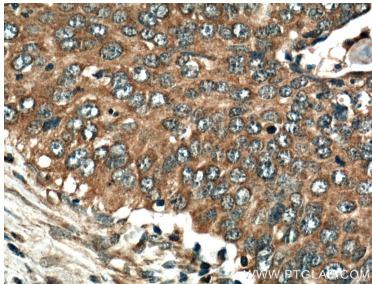
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human CDK1-Specific (19532-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



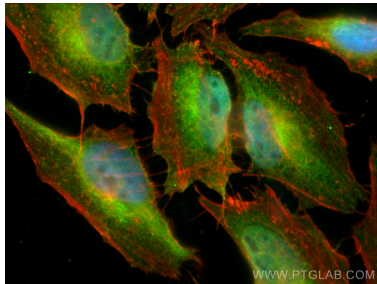
Immunohistochemical analysis of paraffin-embedded rat liver tissue slide using 19532-1-AP (CDK1-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



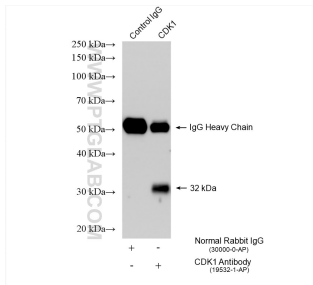
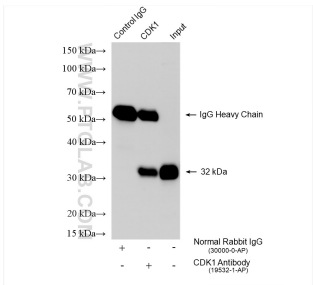
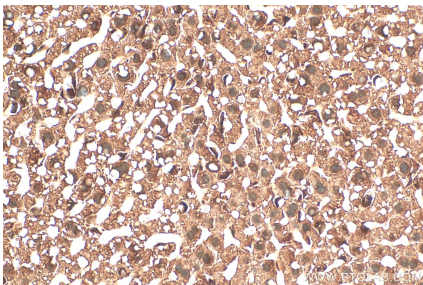
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 19532-1-AP (CDK1-Specific antibody) at dilution of 1:200 (under 10x lens).



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).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 19532-1-AP (CDK1-Specific antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

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.