For Research Use Only

CDK1 Polyclonal antibody

Catalog Number:10762-1-AP Featured Product 76 Publications

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Basic Information

Catalog Number:
10762-1-AP

Concentration:
400 ug/ml

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

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

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. This antibody may have cross reaction with CDK2.

Notable Publications

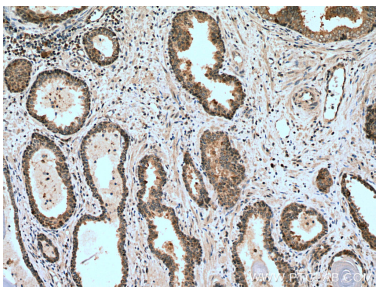
Author	Pubmed ID	Journal	Application
Zilu Zhang	34570444	Cancer Biol Med	WB
Qin Zhang	36083512	Mol Cell Biochem	WB
Huan Ma	33573708	Oncol Res	WB

Storage

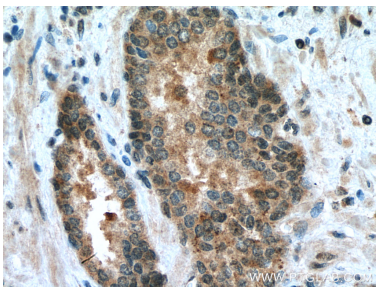
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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

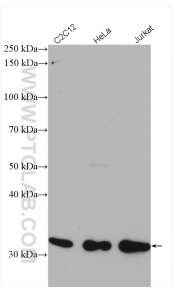
Selected Validation Data



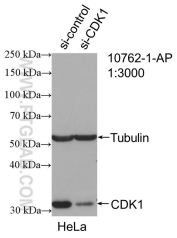
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10762-1-AP (CDK1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



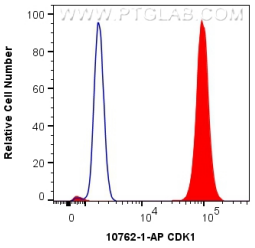
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 10762-1-AP (CDK1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



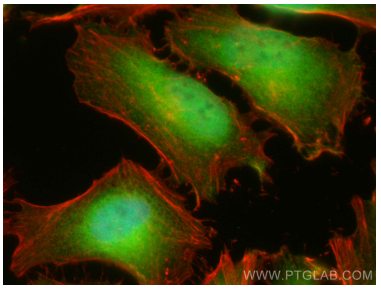
Various lysates were subjected to SDS PAGE followed by western blot with 10762-1-AP (CDK1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.



1X10^6 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).



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).