

For Research Use Only

# CDK2 Polyclonal antibody

Catalog Number: 22060-1-AP

Featured Product

5 Publications



## Basic Information

### Catalog Number:

22060-1-AP

### Size:

700 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG17133

### GenBank Accession Number:

BC003065

### GeneID (NCBI):

1017

### UNIPROT ID:

P24941

### Full Name:

cyclin-dependent kinase 2

### Calculated MW:

298 aa, 34 kDa

### Observed MW:

30 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

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

IHC 1:200-1:800

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

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

### Cited Applications:

WB, IF

### Species Specificity:

human

### Cited Species:

human, mouse, rat

**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: HL-60 cells, HeLa cells, K-562 cells

IP: HeLa cells,

IHC: human cervical cancer tissue,

IF/ICC: HeLa cells,

## Background Information

CDK2 (Cyclin-dependent kinase 2) is also named as CDKN2 and belongs to the protein kinase superfamily. It is dispensable for myelination but is important for adult oligodendrocyte progenitor cell renewal, and could be one of the underlying mechanisms that drive adult progenitors to differentiate and thus regenerate myelin (PMID:21502361). G2 phase CCNA1/CDK2 controls the timing of entry into mitosis by controlling the subsequent activation of CCNB/CDK1, but also has an unexpected role in coordinating the activation of CCNB/CDK1 at the centrosome and in the nucleus (PMID:18372919). It has 2 isoforms produced by alternative splicing with the molecular weight of 34 kDa and 30 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jinhang Hu	33811836	Eur J Pharmacol	IF
Chen Su	36031658	Biomark Res	WB, IF
Andrew Kodani	26297806	Elife	IF

## 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:

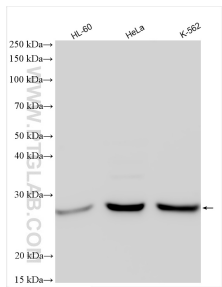
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

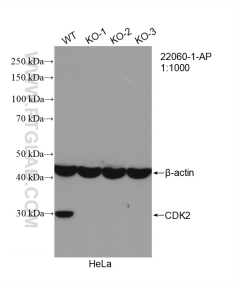
W: [ptgcn.com](http://ptgcn.com)

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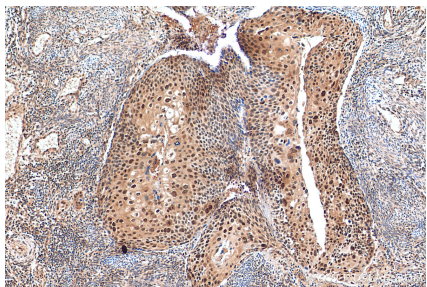
Selected Validation Data



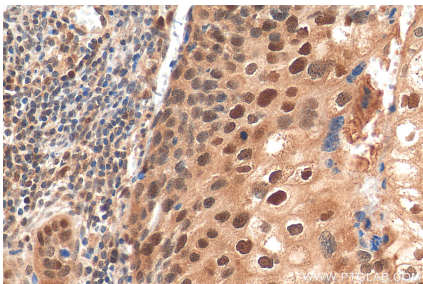
Various lysates were subjected to SDS PAGE followed by western blot with 22060-1-AP (CDK2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



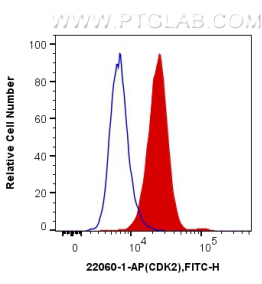
WB result of CDK2 antibody (22060-1-AP; 1:600; room temperature for 1.5 hours) with wild-type and CDK2 knockout HeLa cells.



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 22060-1-AP (CDK2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



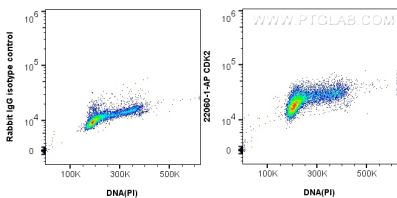
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 22060-1-AP (CDK2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



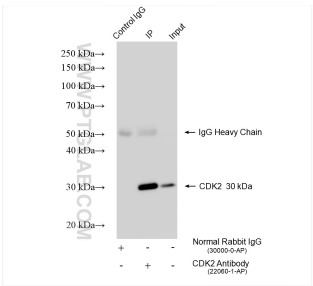
1X10<sup>6</sup> HeLa cells were intracellularly stained with 0.4 ug Anti-Human CDK2 (22060-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK2 antibody (22060-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



1X10<sup>6</sup> HepG2 cells were intracellularly stained with 0.4 ug Anti-Human CDK2 (22060-1-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).



IP result of anti-CDK2 (IP:22060-1-AP, 4ug; Detection:22060-1-AP 1:1000) with HeLa cells lysate 1200 ug.