

For Research Use Only

CDK2 Polyclonal antibody

Catalog Number: 22060-1-AP

Featured Product

5 Publications



Basic Information

Catalog Number:

22060-1-AP

Size:

150ul, Concentration: 700 ug/ml by Nanodrop and 373 ug/ml by Bradford method using BSA as the standard;

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 ug 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

*** 20ul sizes contain 0.1% BSA

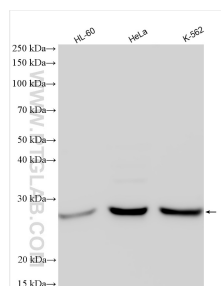
For technical support and original validation data for this product please contact:

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

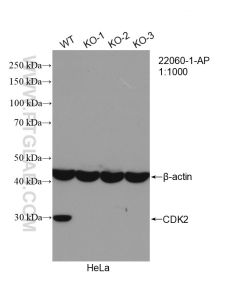
E: proteintech@ptglab.com
W: ptglab.com

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

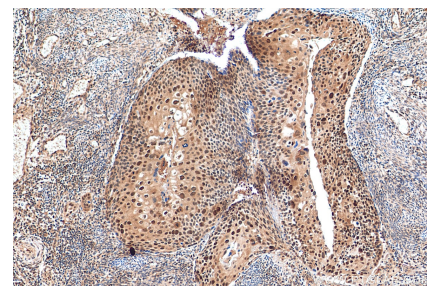
Selected Validation Data



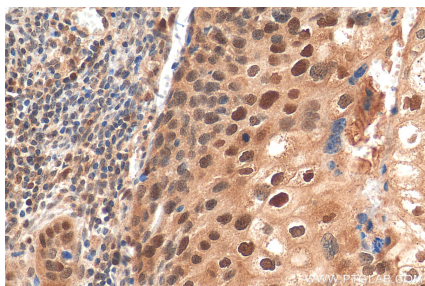
Various lysates were subjected to SDS PAGE followed by western blot with 22060-1-AP (CDK2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



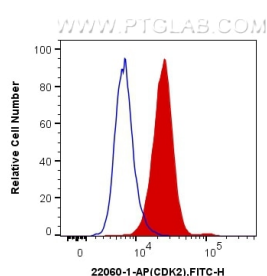
WB result of CDK2 antibody (22060-1-AP; 1:600; room temperature for 1.5 hours) with wild-type and CDK2 knockout HeLa cells.



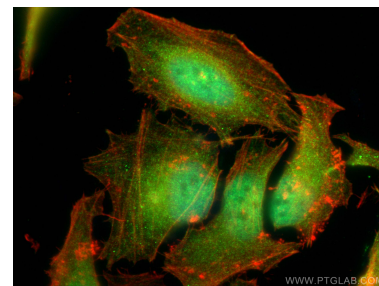
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 22060-1-AP (CDK2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



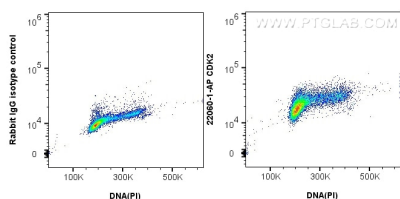
Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 22060-1-AP (CDK2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



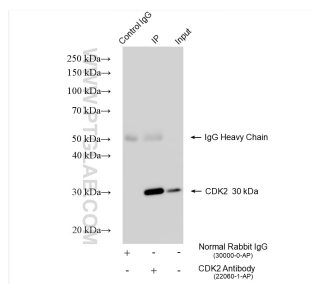
1X10⁶ HeLa cells were intracellularly stained with 0.4 ug Anti-Human CDK2 (22060-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug x. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



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



1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human CDK2 (22060-1-AP) and CoraLite®488-Conjugated 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.