

For Research Use Only

CDK4 Polyclonal antibody

Catalog Number: 11026-1-AP

Featured Product

451 Publications



Basic Information

Catalog Number:

11026-1-AP

Size:

150ul, Concentration: 450 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG1505

GenBank Accession Number:

BC010153

GeneID (NCBI):

1019

UNIPROT ID:

P11802

Full Name:

cyclin-dependent kinase 4

Calculated MW:

34 kDa

Observed MW:

30-34 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:8000

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

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

FC (Intra): 0.80 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

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

Cited Applications:

WB, IHC, IF, IP, CoIP, RIP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, canine, zebrafish, 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: HeLa cells, rat pancreas tissue, HepG2 cells, MCF-7 cells, NIH/3T3 cells

IP: HeLa cells,

IHC: human lung cancer tissue, human breast cancer tissue

IF/ICC: MCF-7 cells,

FC (Intra): MCF-7 cells,

Background Information

Cyclin-dependent kinase-4 (CDK4) is a protein-serine kinase involved in the cell cycle. It is essential for the G1- to S-phase transition during the cell cycle and its expression is primarily controlled at the transcriptional level (PMID:17253961). CCND1-CDK4 axis is not only critical in glial tumor cells but also in stromal-derived cells in the surrounding tumor microenvironment that are vital to sustain tumor outgrowth (PMID:21844184).

Notable Publications

Author	Pubmed ID	Journal	Application
Yuan Yuan Bai	36213833	J Oncol	WB
Taiwei Wang	36169181	Oncol Rep	WB
Yue Wang	27690088	Nutrients	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

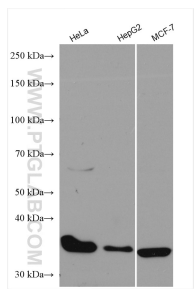
For technical support and original validation data for this product please contact:

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

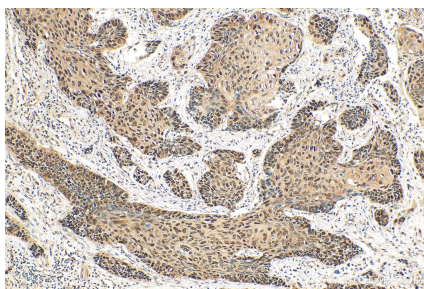
E: proteintech@ptglab.com
W: ptglab.com

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

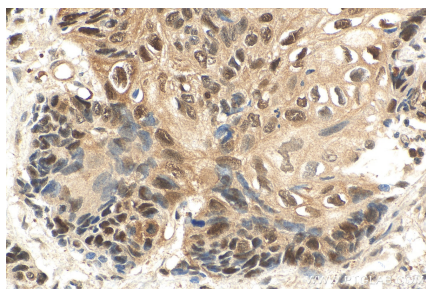
Selected Validation Data



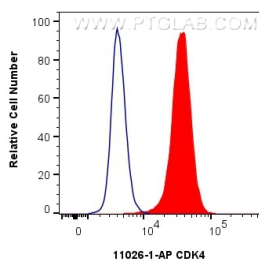
Various lysates were subjected to SDS PAGE followed by western blot with 11026-1-AP (CDK4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



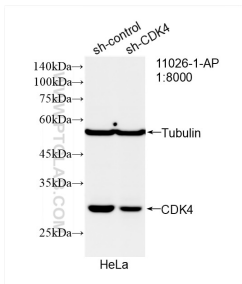
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11026-1-AP (CDK4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



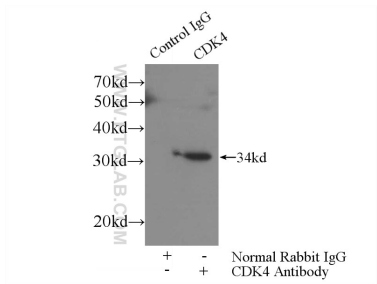
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 11026-1-AP (CDK4 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



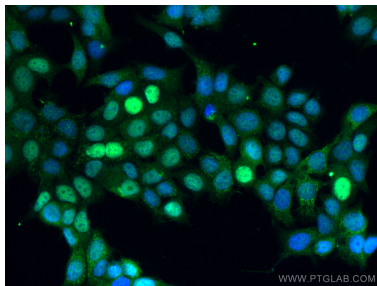
1x10⁶ MCF-7 cells were intracellularly stained with 0.8 ug CDK4 Polyclonal antibody (11026-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



WB result of CDK4 antibody (11026-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CDK4 transfected HeLa cells.



IP result of anti-CDK4 (IP:11026-1-AP, 3ug; Detection:11026-1-AP 1:1000) with HeLa cells lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using CDK4 antibody (11026-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).