

For Research Use Only

# CDK4 Monoclonal antibody

Catalog Number: 66950-1-Ig **23 Publications**



## Basic Information

<b>Catalog Number:</b> 66950-1-Ig	<b>GenBank Accession Number:</b> BC010153	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 1000 µg/ml	<b>GeneID (NCBI):</b> 1019	<b>CloneNo.:</b> 1G2C12
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P11802	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:200-1:1000
<b>Isotype:</b> IgG1	<b>Full Name:</b> cyclin-dependent kinase 4	
<b>Immunogen Catalog Number:</b> AG20538	<b>Calculated MW:</b> 34 kDa	
	<b>Observed MW:</b> 34 kDa	

## Applications

### Tested Applications:

FC, IHC, WB, ELISA

### Cited Applications:

WB, IHC

### Species Specificity:

Human, Mouse, Rat

### Cited Species:

human, mouse

**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** : LNCaP cells, HeLa cells, HEK-293 cells, 4T1 cells, Jurkat cells, MCF-7 cells, HepG2 cells, K-562 cells, HSC-T6 cells, NIH/3T3 cells, RAW 264.7 cells

**IHC** : human breast cancer tissue, human lung cancer tissue

## 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
Li Zhu	34631884	Biomed Res Int	WB
Huan Liu	34491469	Med Oncol	WB
Zhan Wang	36064706	J Transl Med	WB

## 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:

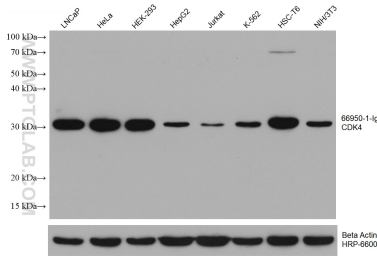
T: 4006900926

E: Proteintech-CN@ptglab.com

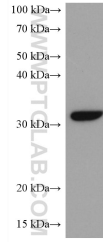
W: ptgcn.com

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

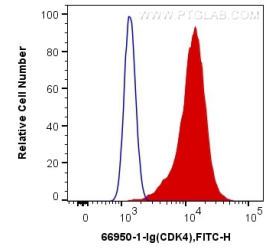
## Selected Validation Data



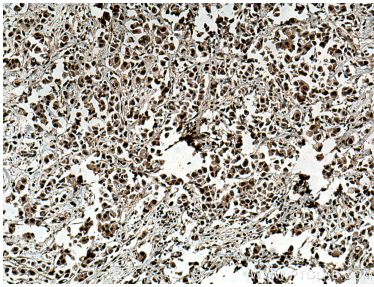
Various lysates were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



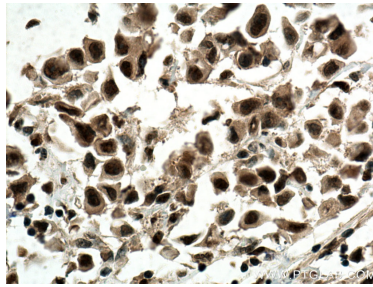
4T1 cells were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



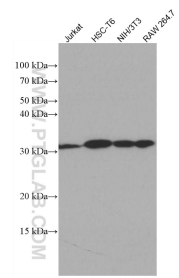
1X10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human CDK4 (66950-1-Ig, Clone:1G2C12) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66950-1-Ig (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 breast cancer tissue slide using 66950-1-Ig (CDK4 antibody) at dilution of 1:200 (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 66950-1-Ig (CDK4 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.