

For Research Use Only

# CDK4 Monoclonal antibody

Catalog Number: 66950-1-Ig **37 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> 150ul , Concentration: 1000 ug/ml by Nanodrop;	<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 FC (Intra): 0.20 ug per 10 <sup>6</sup> cells in a 100 µl suspension
<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

<b>Tested Applications:</b> WB, IHC, FC (Intra), ELISA	<b>Positive Controls:</b>  <b>WB :</b> 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 <b>IHC :</b> human breast cancer tissue, human lung cancer tissue <b>FC (Intra) :</b> MCF-7 cells,
<b>Cited Applications:</b> WB, IHC	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

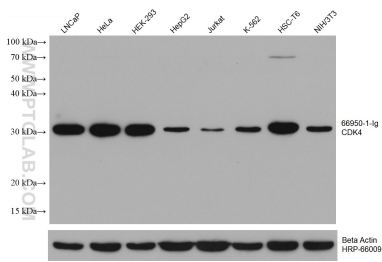
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

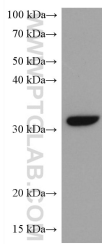
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

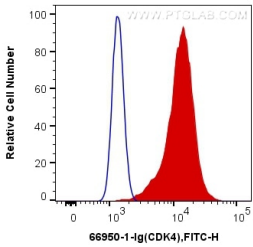
Selected Validation Data



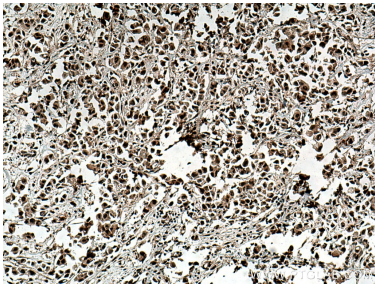
Various lysates were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



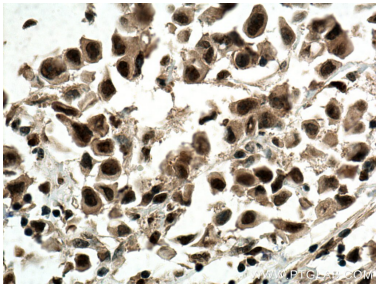
4T1 cells were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



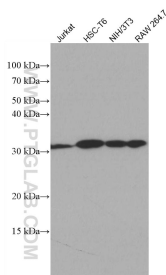
1X10<sup>6</sup> MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human CDK4 (66950-1-Ig, Clone:1G2C12) and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit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