

CDK4 Monoclonal antibody

Catalog Number: 66950-1-Ig 23 Publications

Basic Information

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

Applications

Tested Applications: FC, IHC, WB, ELISA	Positive Controls:
Cited Applications: WB, IHC	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
Species Specificity: Human, Mouse, Rat	IHC : human breast cancer tissue, human lung cancer tissue
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	

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:

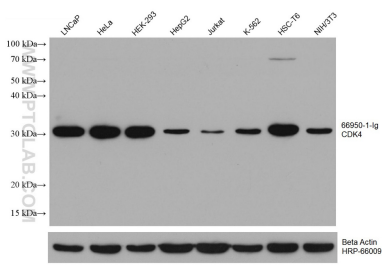
T: 4006900926

E: Proteintech-CN@ptglab.com

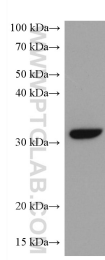
W: ptgcn.com

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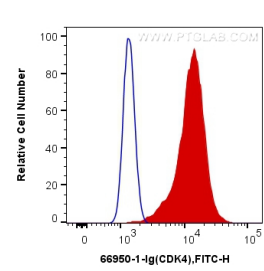
Selected Validation Data



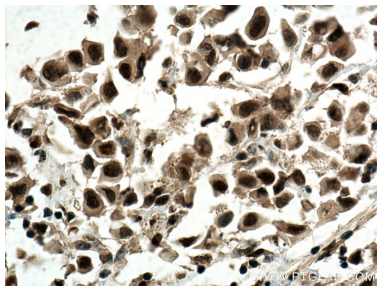
Various lysates were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Beta Actin Monoclonal antibody (HRP-66009) as loading control.



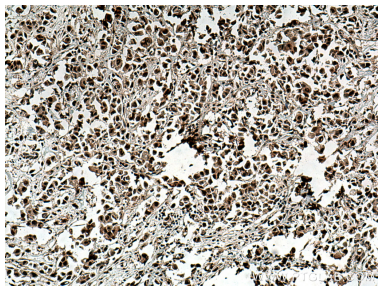
4T1 cells were subjected to SDS PAGE followed by western blot with 66950-1-Ig (CDK4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



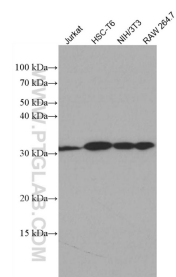
1X10⁶ MCF-7 cells were intracellularly stained with 0.2 ug Anti-Human CDK4 (66950-1-Ig, Clone:1G2C12) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66950-1-Ig (CDK4 antibody) at dilution of 1:200 (under 40x 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 10x 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.