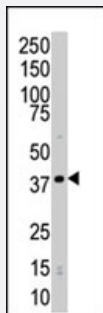


CDK4 polyclonal antibody

Catalog # PAB2914

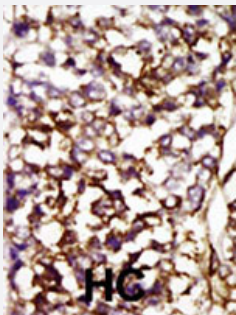
Size 400 uL

Applications



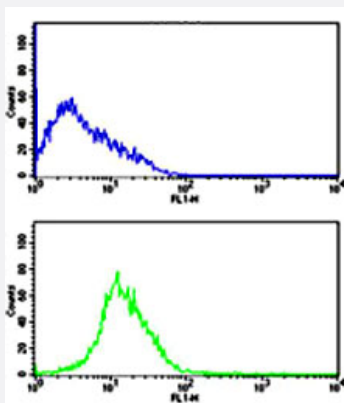
Western Blot (Cell lysate)

Western blot analysis of CDK4 polyclonal antibody (Cat # PAB2914) in HL-60 cell lysate. CDK4 (arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with CDK4 polyclonal antibody (Cat # PAB2914), which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.



Flow Cytometry

Flow cytometric analysis of HL-60 cells using CDK4 polyclonal antibody (Cat # PAB2914) (bottom histogram) compared to a negative control cell (top histogram).

FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Specification

Product Description

Rabbit polyclonal antibody raised against synthetic peptide of CDK4.

Immunogen	A synthetic peptide (conjugated with KLH) corresponding to amino acids 273-305 at C-terminus of human CDK4.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification
Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) Flow cytometry (1:10-50) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of CDK4 polyclonal antibody (Cat # PAB2914) in HL-60 cell lysate. CDK4 (arrow) was detected using purified polyclonal antibody. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

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Gene Info — CDK4

Entrez GeneID [1019](#)

Protein Accession# [P11802](#)

Gene Name	CDK4
Gene Alias	CMM3, MGC14458, PSK-J3
Gene Description	cyclin-dependent kinase 4
Omim ID	123829 609048
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of <i>S. cerevisiae</i> cdc28 and <i>S. pombe</i> cdc2. It is a catalytic sub unit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported. [provided by RefSeq]
Other Designations	cell division kinase 4 melanoma cutaneous malignant, 3

Publication Reference

- [Absence of R24C mutation of the CDK4 gene in leukemias and solid tumors.](#)

Mori N, Yang R, Kawamata N, Miller CW, Mizoguchi H, Koeffler HP.

International Journal of Hematology 2003 Apr; 77(3):259.

Application: WB-Tr, Insect, sf9 cell

- [Cyclins and cyclin-dependent kinases: comparative study of hepatocellular carcinoma versus cirrhosis.](#)

Masaki T, Shiratori Y, Rengifo W, Igarashi K, Yamagata M, Kurokohchi K, Uchida N, Miyauchi Y, Yoshiji H, Watanabe S, Omata M, Kuriyama S.

Hepatology 2003 Mar; 37(3):534.

Application: WB-Ti, Human, Human livers

- [Phosphorylation of p16INK4A correlates with Cdk4 association.](#)

Gump J, Stokoe D, McCormick F.

The Journal of Biological Chemistry 2003 Feb; 278(9):6619.

Application: IP, Human, WI-38, U2OS cells

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Glioma](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)

Disease

- [Adenocarcinoma](#)
- [Birth Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Head and Neck Neoplasms](#)

- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precancerous Conditions](#)
- [Pulmonary Disease](#)
- [Retinoblastoma](#)
- [Skin Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Werner syndrome](#)