

## CDK4 mouse mAb

Catalog No: YM1288

**Reactivity:** Human; Mouse; Rat

**Applications:** WB

Target: CDK4

**Fields:** >>Endocrine resistance;>>Cell cycle;>>p53 signaling pathway;>>PI3K-Akt

signaling pathway;>>Cellular senescence;>>Tight junction;>>T cell receptor

signaling pathway;>>AGE-RAGE signaling pathway in diabetic

complications;>>Cushing syndrome;>>Hepatitis C;>>Measles;>>Human

cytomegalovirus infection;>>Influenza A;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi sarcoma-

associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in

cancer;>>Viral carcinogenesis;>>Pancreatic

cancer;>>Glioma;>>Melanoma;>>Bladder cancer;>>Chronic myeloid leukemia;>>Small cell lung cancer;>>Non-small cell lung cancer;>>Breast

cancer;>>Hepatocellular carcinoma

Gene Name: cdk4

Human Gene Id: 1019

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

Immunogen: Purified recombinant human CDK4 protein fragments expressed in E.coli.

**Specificity:** This antibody detects endogenous levels of CDK4 and does not cross-react with

related proteins.

P11802

P30285

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Source:** Monoclonal, Mouse

**Dilution:** wb 1:1000



**Purification:** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using epitope-specific immunogen.

**Concentration:** 1 mg/ml

-15°C to -25°C/1 year(Do not lower than -25°C) Storage Stability:

Observed Band: 33kD

Cell Cycle G1S;Cell Cycle G2M DNA;p53;Tight **Cell Pathway:** 

junction; T Cell Receptor; Pathways in cancer; Pancreatic

cancer;Glioma;Melanoma;Bladder cancer;Chronic myeloid leukemia;Small cell

lung cancer; Non-small cell

cyclin dependent kinase 4(CDK4) Homo sapiens The protein encoded by this **Background:** 

> gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of S. cerevisiae cdc28 and S. pombe cdc2. It is a catalytic subunit 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 RefSeg, Jul 2008],

**Function:** catalytic activity:ATP + a protein = ADP + a phosphoprotein.,disease:CDK4

mutations are involved in tumor formation., disease: Defects in CDK4 are the cause of cutaneous malignant melanoma 3 (CMM3) [MIM:609048, 155600]. Malignant melanoma is a malignant neoplasm of melanocytes, arising de novo or from a preexisting benign nevus, which occurs most often in the skin but also may involve other sites., enzyme regulation: Phosphorylation at Thr-172 is necessary for enzymatic activity., function: Probably involved in the control of the cell cycle., similarity: Belongs to the protein kinase superfamily. CMGC Ser/Thr protein

kinase family. CDC2/CDKX subfamily., similarity: Contains 1 protein kinase domain., subunit: Forms a stable complex with D-type G1 cyclins. Interacts with

SEI1 and ZNF655/VIK.,

Subcellular Cytoplasm . Nucleus . Nucleus membrane . Cytoplasmic when non-complexed. Location:

Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the

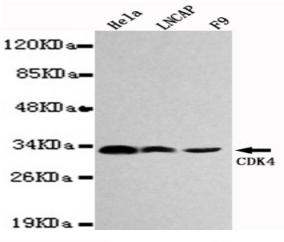
nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus. .

Brain, Muscle, **Expression:** 

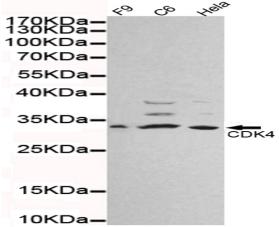
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## **Products Images**



Western blot detection of CDK4 in Hela,Lncap and F9 cell lysates using CDK4 mouse mAb (1:1000 diluted).Predicted band size:34KDa.Observed band size:33KDa.



Western blot detection of CDK4 in Hela,C6 and F9 cell lysates using CDK4 mouse mAb (1:1000 diluted).Predicted band size:34KDa.Observed band size:34KDa.