

CDK4 (PT0399R) PT® Rabbit mAb

Catalog No: YM8244

Reactivity: Human; Mouse; Rat;

Applications: WB;IHC;IF;IP;ELISA

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

Protein Name: Cyclin-dependent kinase 4

Human Gene Id: 1019

Human Swiss Prot

P11802

No:

Mouse Gene ld: 12567

Mouse Swiss Prot

P30285

No:

Rat Gene ld: 94201

Rat Swiss Prot No: P35426

Specificity: endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA



Source : Monoclonal, rabbit, IgG, Kappa

Dilution : WB 1:1000-1:5000;IF 1:200-1:1000;ELISA 1:5000-1:20000;IP 1:50-1:200;

Purification: Protein A

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

Molecularweight: 34kD

Observed Band: 34kD

Cell Pathway: Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;p53;Tight

junction;T_Cell_Receptor;Pathways in cancer;Pancreatic

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

lung cancer; Non-small cell

Background: cyclin dependent kinase 4(CDK4) Homo sapiens 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 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 RefSeq, 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 Location:

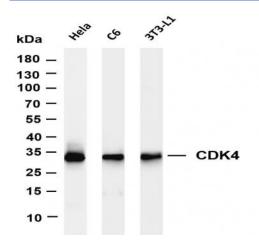
Cytoplasm, Nucleus

Expression : Brain, Muscle,

2/3



Products Images



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-CDK4 (PT0399R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C6 Lane 3: 3T3-L1 Predicted band size: 34kDa Observed band size: 34kDa