



Cdk4 Monoclonal Antibody

Catalog No	YP-mAb-16791
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	CDK4
Immunogen	The antiserum was produced against synthesized peptide derived from the N-terminal region of human CDK4. AA range:1-50
Specificity	Cdk4 Monoclonal Antibody detects endogenous levels of Cdk4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Cell division protein kinase 4;CMM3;cyclin dependent kinase 4;Cyclin-dependent kinase 4;EC:2.7.11.22;Cdk4;PSK-J3
Observed Band	35kD
Calculated Molecular Weight	35kD
Cell Pathway	Cytoplasm . Nucleus . Nucleus membrane . Cytoplasmic when non-complexed. 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. .
Tissue Specificity	Brain,Muscle,
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.,

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],

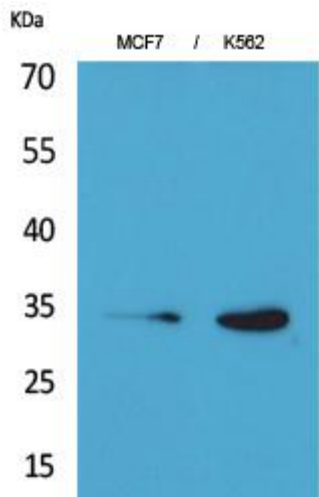
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Cdk4 Monoclonal Antibody