

# Mouse Cdk4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16073b

## **Specification**

# Mouse Cdk4 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P30285

Other Accession <u>P35426</u>, <u>NP 034000.1</u>

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rat
Rabbit
Rabbit
Rabbit
Polyclonal
Rabbit IgG
219-246

# Mouse Cdk4 Antibody (C-term) - Additional Information

#### **Gene ID 12567**

### **Other Names**

Cyclin-dependent kinase 4, CRK3, Cell division protein kinase 4, PSK-J3, Cdk4, Crk3

### Target/Specificity

This Mouse Cdk4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 219-246 amino acids from the C-terminal region of mouse Cdk4.

## **Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Mouse Cdk4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# Mouse Cdk4 Antibody (C-term) - Protein Information

#### Name Cdk4



# Synonyms Crk3

**Function** Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex (By similarity).

#### **Cellular Location**

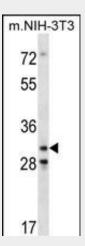
Cytoplasm {ECO:0000250|UniProtKB:P11802}. Nucleus {ECO:0000250|UniProtKB:P11802}. Nucleus membrane {ECO:0000250|UniProtKB:P11802}. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and 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 (By similarity). {ECO:0000250|UniProtKB:P11802}

### Mouse Cdk4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

# Mouse Cdk4 Antibody (C-term) - Images



Mouse Cdk4 Antibody (C-term) (Cat. #AP16073b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the Cdk4 antibody detected the Cdk4 protein (arrow).

## Mouse Cdk4 Antibody (C-term) - Background



Cdk4 is probably involved in the control of the cell cycle.

# Mouse Cdk4 Antibody (C-term) - References

Trivedi, C.M., et al. Dev. Cell 19(3):450-459(2010)
Beilke, S., et al. Oncogene 29(28):4058-4067(2010)
Puyol, M., et al. Cancer Cell 18(1):63-73(2010)
Wiedemeyer, W.R., et al. Proc. Natl. Acad. Sci. U.S.A. 107(25):11501-11506(2010)
Michaud, K., et al. Cancer Res. 70(8):3228-3238(2010)