

# **Anti-CDK4 Antibody**

Mouse Monoclonal Antibody Catalog # AP53463

## **Specification**

# **Anti-CDK4 Antibody - Product Information**

Application WB
Primary Accession P11802
Other Accession NM\_000075.2
Reactivity Human
Host Mouse
Clonality Monoclonal

lsotype lgG1

Immunogen Purified recombinant human CDK4 protein

expressed in E.coli.

Purification Affinity purified Calculated MW 34kDa KDa

# **Anti-CDK4 Antibody - Additional Information**

#### **Gene ID 1019**

# **Other Names**

Cdk4;cdk4;CDK4protein;CDK4\_HUMAN;Celldivisionkinase4;Celldivisionproteinkinase4;CMM3;CMM3;Crk3;Cyclindependentkinase4;Cyclin-dependentkinase4;Melanomacutaneousmalignant3;MGC14458;p34cdk4;PSKJ3;PSK-J3.

#### **Dilution**

WB~~1:500

#### **Format**

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

## **Anti-CDK4 Antibody - Protein Information**

#### Name CDK4

# **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.

#### **Cellular Location**

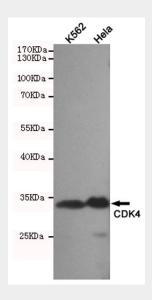
Cytoplasm. Nucleus. Nucleus membrane. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus.

#### **Anti-CDK4 Antibody - 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 Cytomety
- Cell Culture

# Anti-CDK4 Antibody - Images



Western blot detection of CDK4 in Hela and K562 cell lysates using CDK4 mouse mAb (1:500 diluted). Predicted band size: 34KDa. Observed band size: 34KDa.

## Anti-CDK4 Antibody - Background

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