

**Anti-CDK4 Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AP53463****Specification**

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**Anti-CDK4 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P11802</a>
Other Accession	<a href="#">NM_000075.2</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Immunogen	<b>Purified recombinant human CDK4 protein expressed in E.coli.</b>
Purification	<b>Affinity purified</b>
Calculated MW	<b>34kDa kDa</b>

**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 mitogenic 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

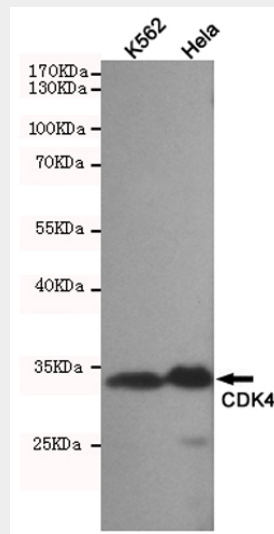
Cytoplasm. Nucleus. Nucleus membrane. Note=Cytoplasmic when non-complexed Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in nucleoli and heterochromatin 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](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [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