

**Mouse Cdk4 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16073b****Specification**

---

**Mouse Cdk4 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P30285](#)**Mouse Cdk4 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 12567**Other Names**

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

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Mouse Cdk4 Antibody (C-term) Blocking Peptide - 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 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 (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) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **Mouse Cdk4 Antibody (C-term) Blocking Peptide - Images**

### **Mouse Cdk4 Antibody (C-term) Blocking Peptide - Background**

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

### **Mouse Cdk4 Antibody (C-term) Blocking Peptide - 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)