

#### Mouse Cdk6 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP19011b

### Specification

# Mouse Cdk6 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

### <u>Q64261</u>

## Mouse Cdk6 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 12571

**Other Names** Cyclin-dependent kinase 6, CR2 protein kinase, CRK2, Cell division protein kinase 6, Serine/threonine-protein kinase PLSTIRE, Cdk6, Cdkn6, Crk2

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 Cdk6 Antibody (C-term) Blocking Peptide - Protein Information

Name Cdk6

Synonyms Cdkn6, Crk2

#### Function

Serine/threonine-protein kinase involved in the control of the cell cycle and differentiation; promotes G1/S transition. Phosphorylates pRB/RB1 and NPM1. Interacts with D-type G1 cyclins during interphase at G1 to form a pRB/RB1 kinase and controls the entrance into the cell cycle. Involved in initiation and maintenance of cell cycle exit during cell differentiation; prevents cell proliferation and negatively regulates cell differentiation, but is required for the proliferation of specific cell types (e.g. erythroid and hematopoietic cells). Essential for cell proliferation within the dentate gyrus of the hippocampus and the subventricular zone of the lateral ventricles. Required during thymocyte development. Promotes the production of newborn neurons, probably by modulating G1 length. Promotes, at least in astrocytes, changes in patterns of gene expression, changes in the actin cytoskeleton including loss of stress fibers, and enhanced motility during cell differentiation. Prevents myeloid differentiation by interfering with RUNX1 and reducing its transcription transactivation activity, but promotes proliferation of normal myeloid progenitors. Delays senescence. Promotes the proliferation of beta-cells in pancreatic islets of Langerhans (By similarity). May play a role in the centrosome organization during the cell cycle phases.



#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:Q00534}. Nucleus {ECO:0000250|UniProtKB:Q00534}. Cell projection, ruffle {ECO:0000250|UniProtKB:Q00534}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome {ECO:0000250|UniProtKB:Q00534} Note=Localized to the ruffling edge of spreading fibroblasts. Kinase activity only in nucleus (By similarity). Present in the cytosol and in the nucleus in interphase cells and at the centrosome during mitosis from prophase to telophase (By similarity). Localized to the cytosol of neurons and showed prominent staining around either side of the nucleus. {ECO:0000250|UniProtKB:Q00534, ECO:0000269|PubMed:23918663}

#### **Tissue Location**

Expressed in subgranular zone (SGZ) of the hippocampal dentate gyrus (DG) and the subventricular zone (SVZ) of the lateral ventricles whose neural precursor cells (NPC) give rise to dentate granule neurons and olfactory bulb (OB) interneurons, respectively. Expressed in the neuroepithelium of the cerebral cortex of the developing brain.

## Mouse Cdk6 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

## Mouse Cdk6 Antibody (C-term) Blocking Peptide - Images

## Mouse Cdk6 Antibody (C-term) Blocking Peptide - Background

Cdk6 probably involved in the control of the cell cycle. Interacts with D-type G1 cyclins (By similarity).

### Mouse Cdk6 Antibody (C-term) Blocking Peptide - References

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)Rivadeneira, D.B., et al. Gastroenterology 138(5):1920-1930(2010)Michaud, K., et al. Cancer Res. 70(8):3228-3238(2010)Choe, K.S., et al. J. Biol. Chem. 285(5):3044-3052(2010)