

**Anti-Cdk6 Antibody**  
Catalog # ABO11432**Specification****Anti-Cdk6 Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q64261</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Cyclin-dependent kinase 6(CDK6) detection. Tested with WB in Human;Rat;Mouse.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Cdk6 Antibody - Additional Information**

Gene ID 12571

**Other Names**

Cyclin-dependent kinase 6, 2.7.11.22, CR2 protein kinase, CRK2, Cell division protein kinase 6, Serine/threonine-protein kinase PLSTIRE, Cdk6, Cdkn6, Crk2

**Calculated MW**

37028 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

**Subcellular Localization**

Cytoplasm . Nucleus . Cell projection, ruffle . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . 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. .

**Tissue Specificity**

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. .

**Protein Name**

Cyclin-dependent kinase 6

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

### Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of mouse Cdk6(291-310aa AYGALNHPYFQDLERYKDNL), identical to the related rat sequence, and different from the related human sequence by four amino acids.

### Purification

Immunogen affinity purified.

### Cross Reactivity

No cross reactivity with other proteins

### Storage

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

### Sequence Similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.

## Anti-Cdk6 Antibody - 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

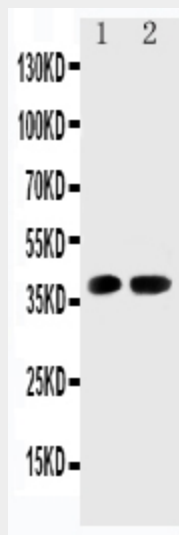
Expressed in subgranular zone (SGZ) of the hippocampal dentate gyrus (DG) and the subventricular zone (SVZ) of the lateral ventricles whose neural precursor cells (NPC) give rise to dentate granule neurons and olfactory bulb (OB) interneurons, respectively. Expressed in the neuroepithelium of the cerebral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

### Anti-Cdk6 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-Cdk6 Antibody - Images



Anti-Cdk6 antibody, ABO11432, Western blotting Lane 1: Rat Testis Tissue Lysate Lane 2: Rat Lung Tissue Lysate

### Anti-Cdk6 Antibody - Background

Cell division protein kinase 6, also called Plstire, is an enzyme that in humans is encoded by the CDK6 gene. The protein encoded by this gene is a member of the cyclin-dependent protein kinase (CDK) family. Radiation hybrid analysis and inclusion within a mapped clone place the CDK6 gene at 7q21. Serine/threonine-protein kinase involved in the control of the cell cycle and differentiation and promotes G1/S transition. This gene also involved in initiation and maintenance of cell cycle exit during cell differentiation. It prevents cell proliferation and regulates negatively cell differentiation, but is required for the proliferation of specific cell types. CDK6 also plays a role in promoting the proliferation of beta-cells in pancreatic islets of Langerhans.