

Anti-Cdk6 Antibody

Catalog # ABO11432

Product Information

Application	WB
Primary Accession	Q64261
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.

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
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. .
Source	Eukaryota
Protein Name	Cyclin-dependent kinase 6
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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 r° Constitution, 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.

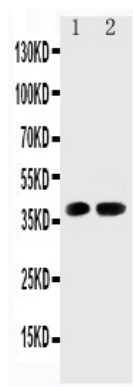
Protein Information

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.

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.

Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.