

# CDK6 Antibody

Rabbit mAb Catalog # AP90835

## **Product Information**

Application Primary Accession Reactivity Clonality Other Names	WB, IHC, IF, FC, ICC, IHF <u>Q00534</u> Human Monoclonal CDK 6; Cell division protein kinase 6; Crk 2; Cyclin dependent kinase 6; p40; PLSTIRE; STQTL11;
lsotype	Rabbit IgG
Host	Rabbit
Calculated MW	36938

## **Additional Information**

Dilution Purification Immunogen	WB 1:5000~1:20000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:100 Affinity-chromatography A synthesized peptide derived from human CDK6
Description	The cyclin-dependent kinases form complexes with their cyclin partners and with CDK inhibitors. CDK6 and CDK4 associate with the D-type cyclins and target the retinoblastoma protein, allowing passage through the G1/S phase restriction point.
Storage Condition and Buffer	

### **Protein Information**

Name	CDK6
Synonyms	CDKN6
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. May play a role in the centrosome organization during the cell cycle phases (PubMed: <u>23918663</u> ).
Cellular Location	Cytoplasm. Nucleus. Cell projection, ruffle. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Localized to the ruffling edge of spreading fibroblasts. Kinase activity only in nucleus. Localized to the cytosol of neurons and showed prominent staining around either side of the nucleus (By similarity). Present in the cytosol and in the nucleus in interphase cells and at the centrosome during mitosis from prophase to telophase (PubMed:23918663). {ECO:0000250 UniProtKB:Q64261, ECO:0000269 PubMed:23918663}
Tissue Location	Expressed ubiquitously. Accumulates in squamous cell carcinomas, proliferating hematopoietic progenitor cells, beta- cells of pancreatic islets of Langerhans, and neuroblastomas. Reduced levels in differentiating cells.

### Images



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