

CDK6 Antibody

Rabbit Polyclonal Antibody Catalog # ALS17184

Specification

CDK6 Antibody - Product Information

| Application | IHC-P, WB |
|-------------------|---------------|
| Primary Accession | <u>Q00534</u> |
| Other Accession | <u>1021</u> |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | lgG |
| Calculated MW | 36938 |

CDK6 Antibody - Additional Information

Gene ID 1021

Other Names CDK6, CDKN6, Cell division protein kinase 6, Cyclin-dependent kinase 6, Crk2, PLSTIRE

Target/Specificity Human Cdk6

Reconstitution & Storage PBS, pH 7, 1% BSA, 20% Glycerol, 0.01% Thimerosal. Aliquot and freeze at -20° C. Avoid freeze-thaw cycles.

Precautions CDK6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDK6 Antibody - 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:23918663).

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

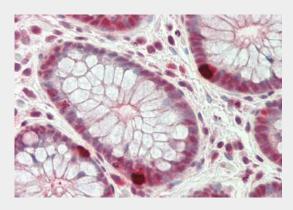
Expressed ubiquitously. Accumulates in squamous cell carcinomas, proliferating hematopoietic progenitor cells, beta- cells of pancreatic islets of Langerhans, and neuroblastomas. Reduced levels in differentiating cells.

Volume 50 μl

CDK6 Antibody - Protocols

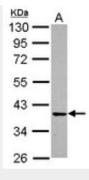
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **CDK6 Antibody Images**



Human Colon: Formalin-Fixed, Paraffin-Embedded (FFPE)





Sample (30 ug of whole cell lysate) A: IMR32 10% SDS PAGE CDK6 antibody diluted at 1:1000

CDK6 Antibody - Background

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 regulates negatively 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.

CDK6 Antibody - References

Meyerson M., et al.EMBO J. 11:2909-2917(1992). Ota T., et al.Nat. Genet. 36:40-45(2004). Hillier L.W., et al.Nature 424:157-164(2003). Scherer S.W., et al.Science 300:767-772(2003). Mural R.J., et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.