

CDK6 Antibody
Mouse Monoclonal Antibody
Catalog # ALS14442**Specification**

CDK6 Antibody - Product Information

Application	WB
Primary Accession	Q00534
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	37kDa KDa

CDK6 Antibody - Additional Information**Gene ID** 1021**Other Names**

Cyclin-dependent kinase 6, 2.7.11.22, Cell division protein kinase 6, Serine/threonine-protein kinase PLSTIRE, CDK6, CDKN6

Reconstitution & Storage

Long term: -20°C; Short term: +4°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

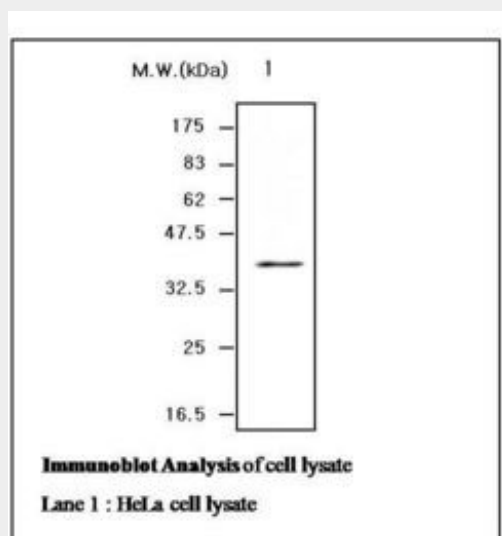
50 µl

CDK6 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CDK6 Antibody - Images



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CDK6 Antibody - Background

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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.