10320 Camino Santa Fe, Suite G
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CDK6 Antibody (clone 8H4)

Mouse Monoclonal Antibody
Catalog # ALS14032

Specification

CDK6 Antibody (clone 8H4) - Product Information

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

CDK6 Antibody (clone 8H4) - 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

Target/Specificity
Human Cdk6

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
CDK6 Antibody (clone 8H4) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK6 Antibody (clone 8H4) - 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}

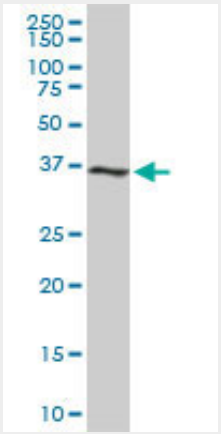
Tissue Location
Expressed ubiquitously. Accumulates in squamous cell carcinomas, proliferating hematopoietic progenitor cells, beta- cells of pancreatic islets of Langerhans, and neuroblastomas. Reduced levels in differentiating cells.

CDK6 Antibody (clone 8H4) - Protocols

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

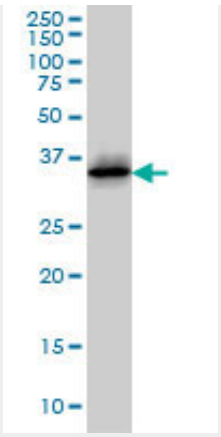
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDK6 Antibody (clone 8H4) - Images

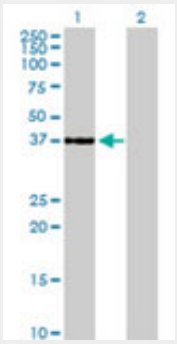


CDK6 monoclonal antibody (M01), clone 8H4. Western blot of CDK6 expression in PC-12.

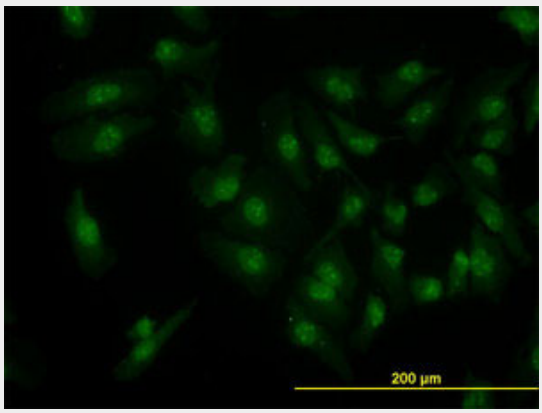
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CDK6 monoclonal antibody (M01), clone 8H4 Western blot of CDK6 expression in Jurkat.



Western blot of CDK6 expression in transfected 293T cell line by CDK6 monoclonal antibody (M01),...



Immunofluorescence of monoclonal antibody to CDK6 on HeLa cell. [antibody concentration 10 ug/ml]

CDK6 Antibody (clone 8H4) - Background

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CDK6 Antibody (clone 8H4) - 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.