10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2409

Specification

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	Q00534
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 37 kDa, observed, 35 kDa KDa**
Gene Name	**CDK6**
Aliases	**CDK6; Cyclin Dependent Kinase 6; PLSTIRE; Serine/Threonine-Protein Kinase PLSTIRE; Cell Division Protein Kinase 6; Cyclin-Dependent Kinase 6; EC 2.7.11.22; EC 2.7.11; MCPH12; CDKN6**
Immunogen	**A synthesized peptide derived from human CDK6**

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal 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

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal 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}

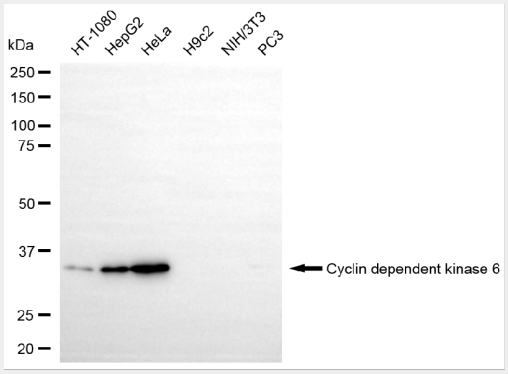
Tissue Location
Expressed ubiquitously. Accumulates in squamous cell carcinomas, proliferating hematopoietic progenitor cells, beta- cells of pancreatic islets of Langerhans, and neuroblastomas. Reduced levels in differentiating cells.

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal Antibody - Protocols

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

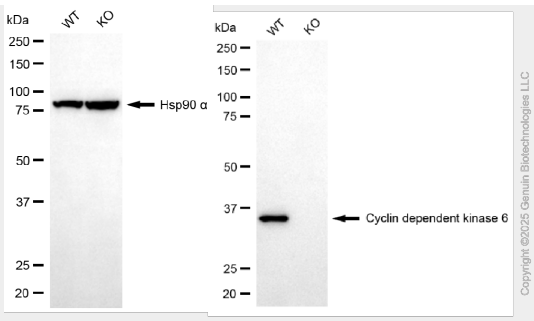
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KO Validated Anti-Cyclin Dependent Kinase 6 Rabbit Monoclonal Antibody - Images

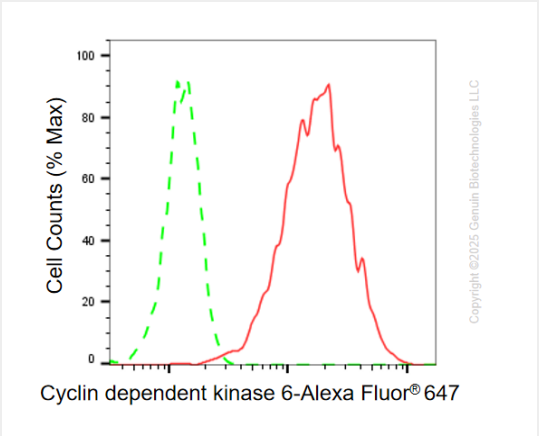


Western blotting analysis using anti-Cyclin dependent kinase 6 antibody (Cat#71144). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Cyclin dependent kinase 6 antibody (Cat#71144, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ™ ECL Substrate Kit (Cat#716).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blotting analysis using anti-cyclin dependent kinase 6 antibody (Cat#71144). Cyclin dependent kinase 6 expression in wild-type (WT) and cyclin dependent kinase 6 (CDK6) knockout (KO) 293T cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-cyclin dependent kinase 6 antibody (Cat#71144, 1:20,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ™ ECL Substrate Kit (Cat#716).



Flow cytometric analysis of Cyclin dependent kinase 6 expression in HAP-1 cells using anti-Cyclin dependent kinase 6 antibody (Cat# 71144, 1:2,000). Green, isotype control; red, Cyclin dependent kinase 6.