

**CDKN1A Antibody (C-term)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2134b****Specification**

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**CDKN1A Antibody (C-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P38936</a>
Other Accession	<a href="#">NP_000380.1</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Antigen Region	117-146

**CDKN1A Antibody (C-term) - Additional Information****Gene ID** 1026**Other Names**

Cyclin-dependent kinase inhibitor 1, CDK-interacting protein 1, Melanoma differentiation-associated protein 6, MDA-6, p21, CDKN1A, CAP20, CDKN1, CIP1, MDA6, PIC1, SDI1, WAF1

**Target/Specificity**

This CDKN1A antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 117-146 amino acids from the C-terminal region of human CDKN1A.

**Dilution**

WB~~1:500~1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CDKN1A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CDKN1A Antibody (C-term) - Protein Information****Name** CDKN1A ([HGNC:1784](#))**Function** Plays an important role in controlling cell cycle progression and DNA damage-induced

G2 arrest (PubMed:[9106657](#)). Involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage. Also involved in p53-independent DNA damage-induced G2 arrest mediated by CREB3L1 in astrocytes and osteoblasts (By similarity). Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex. Inhibits DNA synthesis by DNA polymerase delta by competing with POLD3 for PCNA binding (PubMed:[11595739](#)).

**Cellular Location**

Cytoplasm. Nucleus

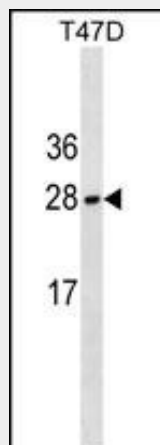
**Tissue Location**

Expressed in all adult tissues, with 5-fold lower levels observed in the brain

**CDKN1A Antibody (C-term) - 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](#)

**CDKN1A Antibody (C-term) - Images**

CDKN1A Antibody (C-term)(Cat. #AM2134b) western blot analysis in T47D cell line lysates (35µg/lane). This demonstrates the CDKN1A antibody detected the CDKN1A protein (arrow).

**CDKN1A Antibody (C-term) - Background**

This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53,

through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Multiple alternatively spliced variants have been found for this gene.

#### **CDKN1A Antibody (C-term) - References**

Hu, F., et al. *Oncogene* 29(40):5464-5474(2010)  
Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010)  
Jiang, P., et al. *Acta Biochim. Biophys. Sin. (Shanghai)* 42(9):671-676(2010)  
Ho-Pun-Cheung, A., et al. *Pharmacogenomics J.* (2010) In press :  
Do Nascimento Borges, B., et al. *In Vivo* 24(4):579-582(2010)

#### **CDKN1A Antibody (C-term) - Citations**

- [Upregulation of microRNA-96 and its oncogenic functions by targeting CDKN1A in bladder cancer.](#)