

**CDKN1B Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1397a****Specification**

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**CDKN1B Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P46527</a> |
| Reactivity        | Human                  |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | IgG1                   |
| Calculated MW     | 22kDa KDa              |

**Description**

p27 KIP 1 is a cell cycle regulatory mitotic inhibitor of cdk activity. p27 KIP 1 is a candidate tumor suppressor gene, and has been proposed to function as a possible mediator of TGF beta induced G1 arrest. p27 KIP 1 is up regulated in response to antimitogenic stimuli. The increased protein expression of p27 results in cellular arrest by binding to cyclin/Cdk complexes such as cyclin D1/Cdk4. Decreased levels of p27Kip1, mainly due to proteosomal degradation, are found in various epithelial tumors originating from lung, breast, colon, ovary, esophagus, thyroid and prostate. Tissue specificity: Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

**Immunogen**

Purified recombinant fragment of human CDKN1B expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**CDKN1B Antibody - Additional Information**

**Gene ID** 1027

**Other Names**

Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B, KIP1

**Dilution**

WB~~1/500 - 1/2000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CDKN1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CDKN1B Antibody - Protein Information**

**Name** CDKN1B {ECO:0000303|PubMed:20824794}

#### **Function**

Important regulator of cell cycle progression. Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (PubMed:<a href="http://www.uniprot.org/citations/28666995" target="\_blank">28666995</a>). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichiometry.

#### **Cellular Location**

Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-198, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle progression. Phosphorylation on Ser-10 facilitates nuclear export. Translocates to the nucleus on phosphorylation of Tyr-88 and Tyr-89. Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (By similarity)

#### **Tissue Location**

Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

### **CDKN1B 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](#)

### **CDKN1B Antibody - Images**



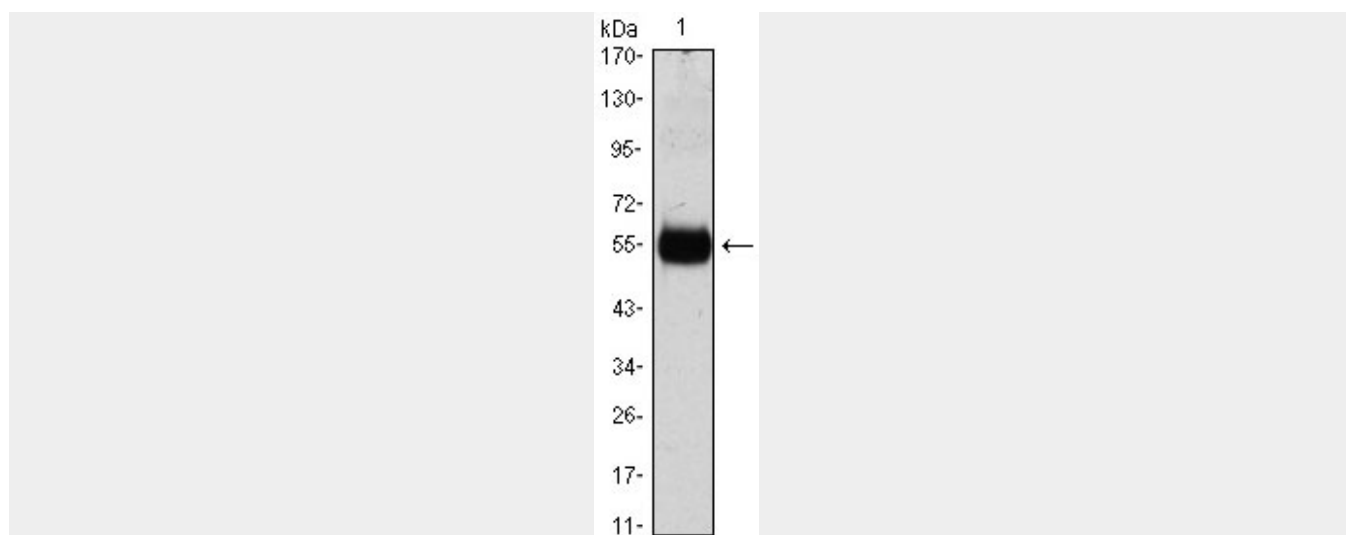


Figure 1: Western blot analysis using CDKN1B mAb against CDKN1B(AA: 1-198)-hIgGFc transfected HEK293 cell lysate.

#### **CDKN1B Antibody - References**

1. Exp Mol Med. 2009 Nov 30;41(11):765-71.
2. Int J Gynecol Pathol. 2010 Jan;29(1):8-18.