

**p27Kip1(S10) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22396a**

## Specification

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### p27Kip1(S10) Antibody - Product Information

Application	WB,E
Primary Accession	<a href="#">P46527</a>
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	22073

### p27Kip1(S10) Antibody - Additional Information

**Gene ID** 1027

#### Other Names

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

#### Target/Specificity

This p27Kip1(S10) antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between amino acids from the human region of human p27Kip1(S10).

#### Dilution

WB~~1:1000

#### Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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

p27Kip1(S10) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### p27Kip1(S10) 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:[28666995](#)). 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

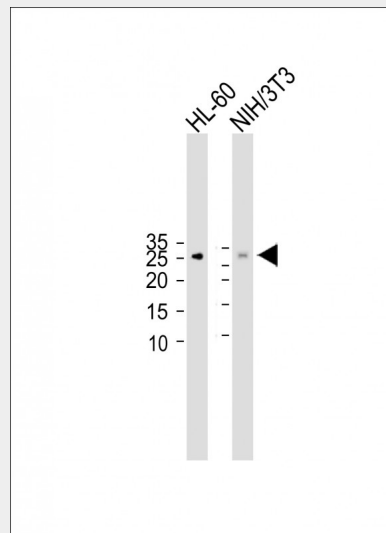
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

### p27Kip1(S10) 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](#)

### p27Kip1(S10) Antibody - Images



All lanes : Anti-p27Kip1(S10) Antibody 1:1000 dilution Lane 1:HL-60 whole cel lysate Lane 2: NIH-3T3 whole cel lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 25kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### p27Kip1(S10) Antibody - Background

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:28666995). 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.

#### **p27Kip1(S10) Antibody - References**

- Polyak K., et al. Cell 78:59-66(1994).  
Pietenpol J.A., et al. Cancer Res. 55:1206-1210(1995).  
Kalnina N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Montagnoli A., et al. Genes Dev. 13:1181-1189(1999).  
Ishida N., et al. J. Biol. Chem. 275:25146-25154(2000).