

**Mouse p27Kip1 Antibody (C-term T197)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20325b**

## Specification

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### Mouse p27Kip1 Antibody (C-term T197) - Product Information

Application	WB,E
Primary Accession	<a href="#">P46414</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	22193
Antigen Region	175-197

### Mouse p27Kip1 Antibody (C-term T197) - Additional Information

**Gene ID** 12576

#### Other Names

Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, Cdkn1b

#### Target/Specificity

This Mouse p27Kip1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 175-197 amino acids from the C-terminal region of mouse p27Kip1.

#### 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

Mouse p27Kip1 Antibody (C-term T197) is for research use only and not for use in diagnostic or therapeutic procedures.

### Mouse p27Kip1 Antibody (C-term T197) - Protein Information

**Name** Cdkn1b

**Function** Important regulator of cell cycle progression (PubMed:[8033213](#), PubMed:[12972555](#)). Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (By similarity). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin

A-CDK2 complexes (PubMed:[8033213](#)). 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

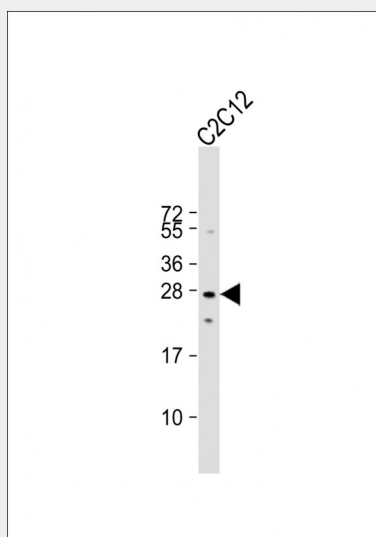
Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-197, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell cycle progression Phosphorylation on Ser-10 facilitates nuclear export. Translocates to the nucleus on phosphorylation of Tyr-88 and Tyr-89 (By similarity) Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (PubMed:20228253). {ECO:0000250, ECO:0000269|PubMed:20228253}

#### Mouse p27Kip1 Antibody (C-term T197) - Protocols

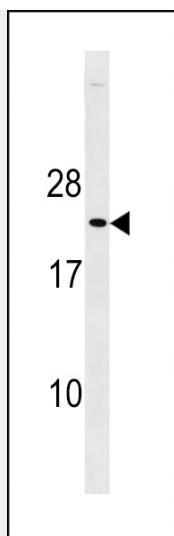
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### Mouse p27Kip1 Antibody (C-term T197) - Images



Anti-Mouse p27Kip1 Antibody (C-term T197) at 1:1000 dilution + C2C12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 22 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Mouse p27Kip1 Antibody (C-term T197) (Cat. #AP20325b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the (mouse) p27Kip1 antibody detected the (mouse) p27Kip1 protein (arrow).

#### **Mouse p27Kip1 Antibody (C-term T197) - Background**

Important regulator of cell cycle progression. 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 cyclin D-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.