

## Mouse p27Kip1 Antibody (C-term T197)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20325b

## **Specification**

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

Application WB.E **Primary Accession** P46414 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

E~~Use at an assay dependent concentration.

### **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:<u>12972555</u>, PubMed:<u>8033213</u>). Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2





Tel: 858.875.1900 Fax: 858.875.1999

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 stoichometry.

#### **Cellular Location**

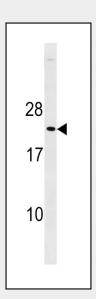
Nucleus. Cytoplasm. Endosome. Note=Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-197, binds 14-3-3, translocates to the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm 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.

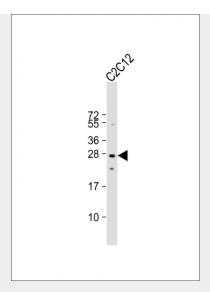
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



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).





Anti-Mouse p27Kip1 Antibody (C-term T197) at 1:1000 dilution + C2C12 whole cell lysate Lysates/proteins at 20  $\mu$ g 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) - 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 stoichometry.