

# Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody

**Catalog # ABO13962** 

### **Specification**

## Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC, IP, FC

Primary Accession
Host
Rabbit
Isotype
Reactivity
Clonality
Format
Rabbit IgG
Rat, Human
Monoclonal
Liquid

**Description** 

Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Rat.

### Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody - Additional Information

**Gene ID** 1027

#### **Other Names**

Cyclin-dependent kinase inhibitor 1B, Cyclin-dependent kinase inhibitor p27, p27Kip1, CDKN1B {ECO:0000303|PubMed:20824794}

Calculated MW 22073 MW KDa

### **Application Details**

WB 1:500-1:2000<br/>br>IHC 1:50-1:200<br/>br>ICC/IF 1:50-1:200<br/>br>IP 1:50<br/>br>FC 1:50

### **Subcellular Localization**

Nucleus. Cytoplasm. Endosome. 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 Specificity**

Expressed in all tissues tested. Highest levels in skeletal muscle, lowest in liver and kidney.

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### **Immunogen**

A synthesized peptide derived from human p27 KIP 1

#### **Purification**



Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal 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 stoichometry.

#### **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).

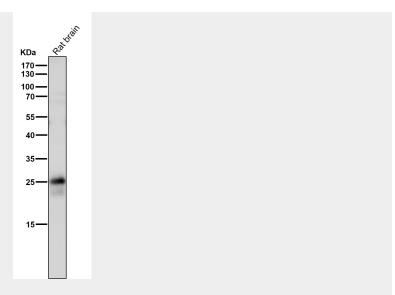
### Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody - Protocols

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

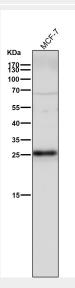
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Anti-p27 KIP 1 CDKN1B Rabbit Monoclonal Antibody - Images

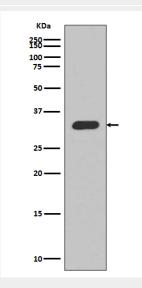




All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

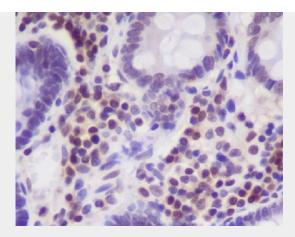


All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.

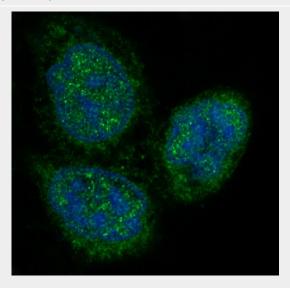


Western blot analysis of p27 KIP 1 expression in MCF-7 cell lysate.





Immunohistochemical analysis of paraffin-embedded human colon, using p27 KIP 1 Antibody.



Immunofluorescent analysis of Hela cells, using p27 KIP 1 Antibody.