

### p27 KIP1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52854

# **Specification**

### p27 KIP1 Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Isotype
Calculated MW

WB
P46527
Human, Mouse
Mouse
Monoclonal
IgG1
27 KDa

# p27 KIP1 Antibody - Additional Information

**Gene ID 1027** 

# **Other Names**

AA408329;AI843786;Cdki1b;CDKN 1B;CDKN

4;CDKN1B;CDKN4;CDKN4;CDN1B\_HUMAN;Cyclin Dependent Kinase Inhibitor 1B;Cyclin Dependent Kinase Inhibitor 1B;Cyclin dependent kinase inhibitor p27;Cyclin dependent kinase inhibitor p27;Cyclin-dependent kinase inhibitor 1B (p27, Kip1);Cyclin-dependent kinase inhibitor 1B;Cyclin-dependent kinase inhibitor p27;Cyclin-dependent kinase inhibitor p27 Kip1;KIP 1;KIP1;MEN1B;MEN4;OTTHUMP00000195098;OTTHUMP00000195099;p27;p27 Kip1;P27-like cyclin-dependent kinase inhibitor;P27KIP1

#### **Dilution**

WB~~1:1000

#### **Format**

Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.

#### Storage

Store at -20 °C. Stable for 12 months from date of receipt

## p27 KIP1 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**

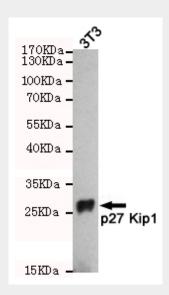
Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all tissues tested (PubMed:8033212) Highest levels in skeletal muscle, lowest in liver and kidney (PubMed:8033212).

## p27 KIP1 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 Cytomety
- Cell Culture

# p27 KIP1 Antibody - Images



Western blot detection of p27 Kip1 in 3T3 cell lysates using p27 Kip1 mouse mAb (1:1000 diluted). Predicted band size: 27KDa. Observed band size: 27KDa.

## p27 KIP1 Antibody - 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 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.

# p27 KIP1 Antibody - References

Polyak K., et al. Cell 78:59-66(1994). Pietenpol J.A., et al. Cancer Res. 55:1206-1210(1995). Kalnine 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).