

# p27 KIP1 Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP52854

## Product Information

|                   |                        |
|-------------------|------------------------|
| Primary Accession | <a href="#">P46527</a> |
| Host              | Mouse                  |
| Clonality         | Monoclonal             |
| Isotype           | IgG1                   |
| Calculated MW     | 22073                  |

## Additional Information

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID     | 1027                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Other Names | AA408329;AI843786;Cdk1b;CDKN 1B;CDKN 4;CDKN1B;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 |
| Format      | Purified mouse monoclonal antibody in PBS(pH 7.4) containing with 0.09% (W/V) sodium azide and 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Storage     | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                              |

## 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="#">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 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).

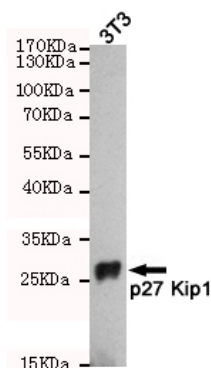
## Background

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 stoichiometry.

## 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).

## 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.