

# p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone SPM308]

Catalog # AH11019

### **Specification**

## p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Product Information

Application IHC, IF, FC
Primary Accession P49918
Other Accession 1028, 1060

Other Accession
Reactivity
Host
Host

1028, 106070
Human, Mouse
Mouse

Clonality Monoclonal

Isotype Mouse / IgG2b, kappa

Calculated MW 57kDa KDa

## p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Additional Information

### **Gene ID 1028**

### **Other Names**

Cyclin-dependent kinase inhibitor 1C, Cyclin-dependent kinase inhibitor p57, p57Kip2, CDKN1C, KIP2

### **Application Note**

<span class ="dilution\_IHC">IHC~~1:100~500</span><br \> <span class ="dilution\_IF">IF~~1:50~200</span><br \> <span class = "dilution\_FC">FC~~1:10~50</span>

### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Protein Information

### Name CDKN1C

### Synonyms KIP2

#### **Function**

Potent tight-binding inhibitor of several G1 cyclin/CDK complexes (cyclin E-CDK2, cyclin D2-CDK4, and cyclin A-CDK2) and, to lesser extent, of the mitotic cyclin B-CDC2. Negative regulator of cell proliferation. May play a role in maintenance of the non-proliferative state throughout life.





**Cellular Location** Nucleus.

#### **Tissue Location**

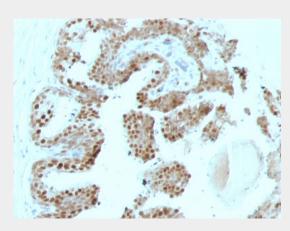
Expressed in the heart, brain, lung, skeletal muscle, kidney, pancreas and testis. Expressed in the eye. High levels are seen in the placenta while low levels are seen in the liver

### p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Protocols

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

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

p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Prostate Carcinoma stained with p57 Monoclonal Antibody (SPM308).

# p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide - Background

Recognizes a protein of 57kDa, identified as p57Kip2. It shows no cross-reaction with p27Kip1. p57Kip2 is a potent tight-binding inhibitor of several G1 cyclin complexes, and is a negative regulator of cell proliferation. Anti-p57 has been used as an aide in identification of complete hydatidiform mole (CHM) (no nuclear labeling of cytotrophoblasts and stromal cells) from partial hydatidiform mole (PHM) in which both cytotrophoblasts and stromal cells stain. The histological differentiation of complete mole, partial mole, and hydropic spontaneous abortion is problematic. Most complete hydatidiform moles are diploid, whereas most partial moles are triploid. Ploidy studies will identify partial moles, but will not differentiate complete moles from non-molar gestations. Complete moles carry a high risk of persistent disease and choriocarcinoma, while partial moles have a very low risk. In normal placenta, many cytotrophoblast nuclei and stromal cells are labeled with this antibody. Similar findings apply to PHM and hydropic abortus tissues. Intervillous trophoblastic islands (IVTIs) demonstrate nuclear labeling in all three entities and serve as an internal control.





### p57Kip2 (Mitotic Inhibitor/Suppressor Protein) Antibody - With BSA and Azide -References

Lee, M.-H., et al. 1995. Cloning of p57, a cyclin-dependent kinase inhibitor with unique domain structure and tissue distribution. Genes Dev. 9: 639-649.