

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

Mouse Monoclonal Antibody [Clone 57P06] Catalog # AH11028

Product Information

ApplicationIHC, IF, FCPrimary AccessionP49918Other Accession1028, 106070ReactivityHuman, Mouse

Host Mouse Clonality Monoclonal

Isotype Mouse / IgG2b, kappa

Clone Names 57P06 Calculated MW 32177

Additional Information

Gene ID 1028

Other Names Cyclin-dependent kinase inhibitor 1C, Cyclin-dependent kinase inhibitor p57,

p57Kip2, CDKN1C, KIP2

Application Note IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

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.

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

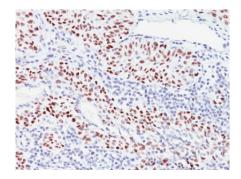
Background

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.

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.

Images



Formalin-fixed, paraffin-embedded human Bladder Carcinoma stained with p57 Monoclonal Antibody (57P06).

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