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

Mouse Monoclonal Antibody [Clone KP10 + KIP2/880]
Catalog # AH11025

Product Information

Application	IHC, IF, FC
Primary Accession	P49918
Other Accession	1028, 106070
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG's
Clone Names	KP10 + KIP2/880
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

levels are seen in the liver

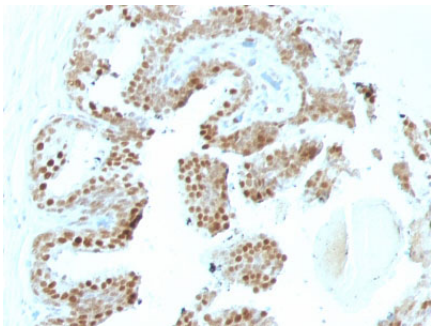
Background

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 Prostate Carcinoma stained with p57 Monoclonal Antibody (KP10+KIP2/880).