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CDKN1C Antibody

Catalog # ASC11538

Product Information

Application	WB, IF, E
Primary Accession	P49918
Other Accession	NP_000067, 4557441
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	32177
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	CDKN1C antibody can be used for detection of CDKN1C by Western blot at 1 - 2 □g/mL. For immunofluorescence start at 20 □g/mL.

Additional Information

Gene ID	1028
Other Names	Cyclin-dependent kinase inhibitor 1C, Cyclin-dependent kinase inhibitor p57, p57Kip2, CDKN1C, KIP2
Target/Specificity	CDKN1C; At least three isoforms of CDKN1C are known to exist; this antibody will detect all three isoforms. Despite its predicted molecular weight, CDKN1C often migrates at 57kDa in SDS-PAGE. CDKN1C antibody is predicted to not cross react with other CIP/KIP proteins.
Reconstitution & Storage	CDKN1C antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	CDKN1C Antibody 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

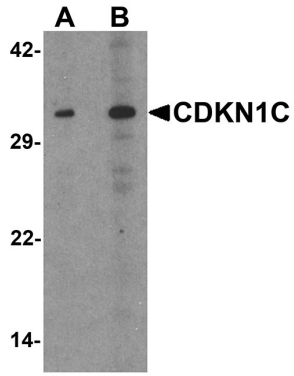
Background

CDKN1C Antibody: The cyclin-dependent kinase inhibitor 1C (CDKN1C), also known as p57KIP2, is a tight-binding, strong inhibitor of several G1 cyclin/CDK complexes and a negative regulator of cell proliferation. Mutations in this gene are implicated in sporadic cancers and Beckwith-Wiedemann syndrome, a cancer-predisposing syndrome, suggesting that this gene is a tumor suppressor candidate. CDKN1C is widely expressed during organogenesis with its expression declining after maturity. It is part of the CIP/KIP family of cyclin-dependent inhibitors (CKIs) which also includes CDKN1A and CDKN1B.

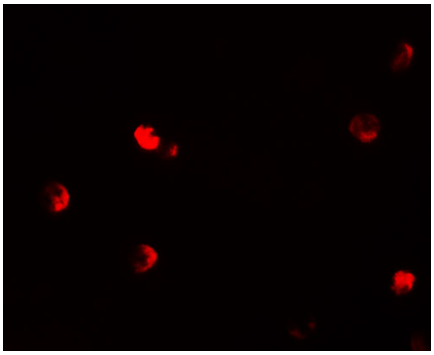
References

Lee MH, Reynisdottir I, and Massague J. Cloning of p57KIP2, a cyclin-dependent kinase inhibitor with unique domain structure and tissue distribution. Genes Dev. 1995; 9:639-49.
Pateras IS, Apostolopoulou K, Niforou K, et al. p57KIP2: “Kip"ing the cell under control. Mol. Cancer Res. 2009; 1902-19
Hatada I, Ohashi H, Fukushima Y, et al. An imprinted p57KIP2 is mutated in Beckwith-Wiedemann syndrome. Nat. Genet. 1996; 14:171-3.

Images



Western blot analysis of CDKN1C in 293 cell lysate with CDKN1C antibody at (A) 1 and (B) 2 µg/mL.



Immunofluorescence of CDKN1C in 293 cells with CDKN1C antibody at 20 µg/mL.