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CDKN2A Antibody

Catalog # ASC12187

Product Information

Application	WB, IHC-P, E
Primary Accession	P42771
Other Accession	NP_000068
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Clone Names	CDKN2A
Calculated MW	16533

Additional Information

Gene ID	1029
Alias Symbol	CDKN2A
Other Names	CDKN2A Antibody: ARF, MLM, P14, P16, P19, CMM2, INK4, MTS1, TP16, CDK4I, CDKN2, INK4A, MTS-1, P19ARF, P16INK4, P16INK4A, P16-INK4A, Cyclin-dependent kinase 4 inhibitor A
Reconstitution & Storage	CDKN2A antibody can be stored at 4˚C for three months and -20˚C, 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	CDKN2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CDKN2A (HGNC:1787)
Synonyms	CDKN2, MTS1
Function	Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.
Cellular Location	Cytoplasm. Nucleus
Tissue Location	Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific

Background

CDKN2A Antibody: The CDKN2A locus gives rise to 2 distinct transcripts from different promoters. The transcripts have been designated p16(INK4A) and p14(ARF). This chromosomal region undergoes a number of inversions, translocations, heterozygous deletions, and homozygous deletions in a variety of malignant cell lines including those from glioma, non-small cell lung cancer, leukemia, and melanoma. Deletion of the region containing CDKN2A is found in more than half of all melanoma cell lines. Conversely, transfection of CDKN2A suppressed the growth of two independent mesothelioma cell lines, suggesting that inactivation of the CDKN2 gene is an essential step in the etiology of malignant mesotheliomas. CDKN2A induces a G1 cell cycle arrest by inhibiting the phosphorylation of the Rb protein by the cyclin-dependent kinases CDK4 and CDK6. CDKN2A is expressed as at least three distinct isoforms.

References

Stone et al. Cancer Res. 1995; 55:2988-94. Kamb et al. Nature Genet. 1994; 8:22-6. Kratzke et al. J. Nat. Cancer Inst. 1995; 87:1870-5.Stott et al. EMBO J. 1998; 17:5001-14.