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CDKN2A Antibody
Catalog # ASC10537

Specification

CDKN2A Antibody - Product Information

Application	**IHC**
Primary Accession	P42771
Other Accession	NP_000068, 1029
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 17 kDa** **Observed: 20 kDa KDa**
Application Notes	**CDKN2A antibody can be used for detection of CDKN2A by Western blot at 1 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

CDKN2A Antibody - Additional Information

Gene ID **1029**

Other Names
CDKN2A Antibody: ARF, MLM, P14, P16, P19, CMM2, INK4, MTS1, TP16, CDK4I, CDKN2, INK4A, MTS-1, P14ARF, P19ARF, P16INK4, P16INK4A, P16-INK4A, Cyclin-dependent kinase 4 inhibitor A, cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)

Target/Specificity
CDKN2A antibody was raised against an 18 amino acid synthetic peptide from near the amino terminus of human CDKN2A.

The immunogen is located within the first 50 amino acids of CDKN2A.

Reconstitution & Storage
CDKN2A 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
CDKN2A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDKN2A Antibody - 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

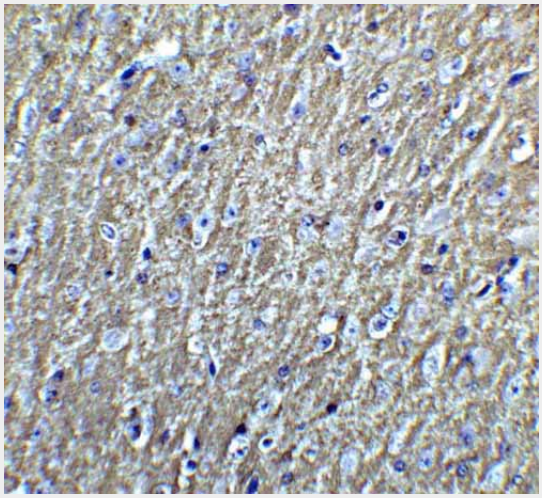
Tissue Location
Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific

CDKN2A Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDKN2A Antibody - Images



Immunohistochemistry of DCLK3 in mouse brain tissue with DCLK3 Antibodyat 5 µg/mL.

CDKN2A Antibody - 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.

CDKN2A Antibody - References

Stone S, Jiang P, Dayananth P, et al. Complex structure and regulation of the p16(MTS1) locus. Cancer Res. 1995; 55:2988-94.
Kamb A, Shattuck-Eidens D, Eeles R, et al. Analysis of the p16 gene (CDKN2) as a candidate for the chromosome 9p melanoma susceptibility locus. Nature Genet. 1994; 8:22-6.
Kratzke RA, Otterson GA, Lincoln CE, et al. Immunohistochemical analysis of the p16 (INK4) cyclin-dependent kinase inhibitor in malignant mesothelioma. J. Nat. Cancer Inst. 1995; 87:1870-5.
Stott FJ,; Bates S, James MC, et al. The alternative product from the human CDKN2A locus, p14(ARF), participates in a regulatory feedback loop with p53 and MDM2. EMBO J. 1998; 17:5001-14.