

hp16-INK4A Antibody (N-term S7)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19167a

Specification

hp16-INK4A Antibody (N-term S7) - Product Information

Application WB,E **Primary Accession** P42771 NP 000068.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 16533 Antigen Region 1-30

hp16-INK4A Antibody (N-term S7) - Additional Information

Gene ID 1029

Other Names

Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3, Cyclin-dependent kinase 4 inhibitor A, CDK4I, Multiple tumor suppressor 1, MTS-1, p16-INK4a, p16-INK4A, p16INK4A, CDKN2A, CDKN2, MTS1

Target/Specificity

This hp16-INK4A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human hp16-INK4A.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

hp16-INK4A Antibody (N-term S7) is for research use only and not for use in diagnostic or therapeutic procedures.

hp16-INK4A Antibody (N-term S7) - 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

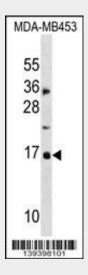
Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific

hp16-INK4A Antibody (N-term S7) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

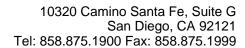
hp16-INK4A Antibody (N-term S7) - Images



hp16-INK4A Antibody (S7) (Cat. #AP19167a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the CDKN2A antibody detected the CDKN2A protein (arrow).

hp16-INK4A Antibody (N-term S7) - Background

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame





(ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, MDM1, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

hp16-INK4A Antibody (N-term S7) - References

Kovacs, E., et al. Proc. Natl. Acad. Sci. U.S.A. 107(12):5429-5434(2010) Irvine, M., et al. Cell Cycle 9(4):829-839(2010) Zhang, H.J., et al. J. Cell. Biochem. 106(3):464-472(2009) Ivanchuk, S.M., et al. Cell Cycle 7(12):1836-1850(2008) Bandyopadhyay, K., et al. Biochemistry 46(49):14325-14334(2007)