

**Human P16 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1110a****Specification**

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**Human P16 Antibody - Product Information**

Application	WB, IHC, E
Primary Accession	<a href="#">P42771</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

**Description**

p16 (cyclin-dependent kinase inhibitor 2A, INK4a) is a tumor suppressor protein. It is a specific inhibitor of Cdk 4 / Cdk 6, and a tumor suppressor involved in the pathogenesis of a variety of malignancies. Recent analyses of the p16 INK4a gene revealed homozygous deletions, nonsense, missense, or frameshift mutations in several human cancers. Although the frequency of p16 INK4a abnormalities is higher in tumor derived cell lines than in unselected primary tumors, significant subsets of clinical cases with aberrant p16 INK4a gene have been reported among melanomas, gliomas, esophageal, pancreatic, lung, and urinary bladder carcinomas, and some types of leukemia.

**Immunogen**

Purified recombinant fragment of P16 expressed in E. Coli.

**Formulation**

Ascitic fluid containing 0.03% sodium azide.

**Human P16 Antibody - 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-INK4, p16INK4A, CDKN2A, CDKN2, MTS1

**Dilution**

WB~~1/500 - 1/2000

IHC~~1/500 - 1/2000

E~~N/A

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Human P16 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Human P16 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

## Human P16 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 Cytometry](#)
- [Cell Culture](#)

## Human P16 Antibody - Images

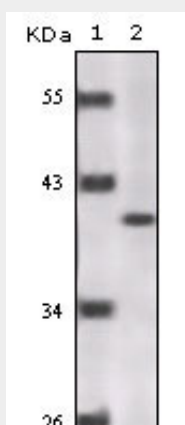


Figure 1: Western blot analysis using P16 mouse mAb against truncated P16 recombinant protein.

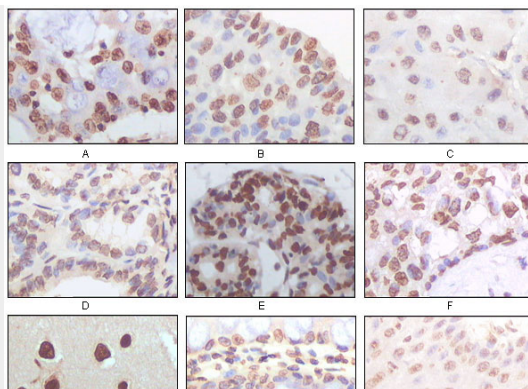


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma (A), esophageal squamous cell carcinoma (B), hepatic cell carcinoma (C), thyroid tumor (D), breast adenofibroma (E), breast infiltrating ductal carcinoma (F), normal cerebrum tissue (G), normal colon tissue (H), normal esophageal tissue (I), showing nuclear localization using P16 mouse mAb with DAB staining.

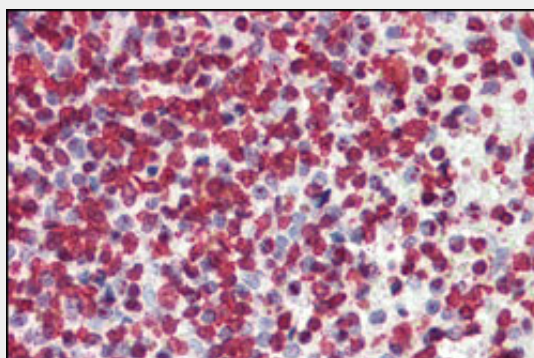


Figure 3: Immunohistochemical analysis of paraffin-embedded human spleen tissues using P16 mouse mAb.

#### Human P16 Antibody - References

1. Bai, F. et al. Mol. Cell. Biol.2003 23, 1269-1277. 2. Lowe, S.W. and Sherr, C.J. Curr. Opin. Genet.2003 Dev.13, 77-83.3. Sherr, C.J. Nat. Rev. Mol. Cell Biol.2001 2, 731-737.