10320 Camino Santa Fe, Suite G
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Human P16 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1110a

Specification

Human P16 Antibody - Product Information

Application	**WB, IHC, E**
Primary Accession	P42771
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.

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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 Cytomety
- Cell Culture

Human P16 Antibody - Images

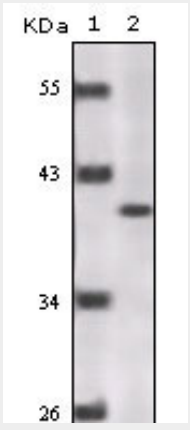

Figure 1: Western blot analysis using P16 mouse mAb against truncated P16 recombinant protein.

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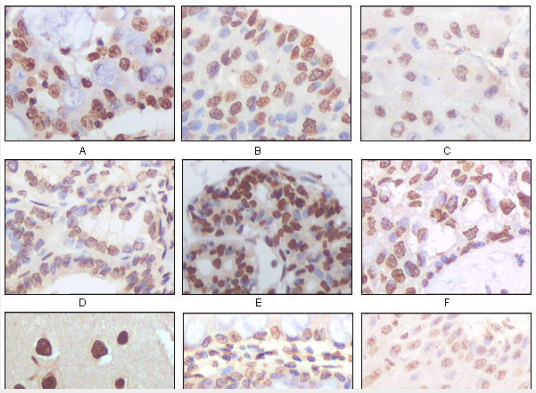

Figure 2: Immunohistochemical analysis of paraffin-embedded human lung adenocarcinoma (A), esophageal squamous cell carcinoma (B), hepatic cell carcinoma (C), thyroid tumor (D), breast adenofibroma (E), breast infiltrating ductal carcinoma (F), normal cerebrum tissue (G), normal colon tissue (H), normal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

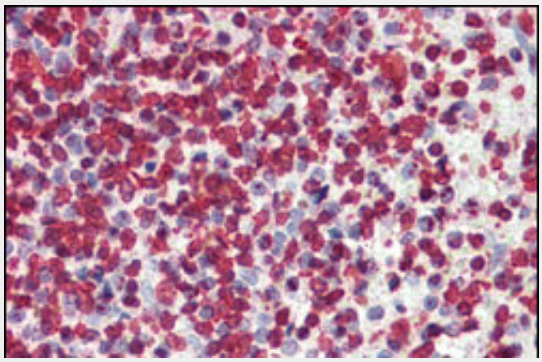

Figure 3: Immunohistochemical analysis of paraffin-embedded human spleen tissues using P16 mouse mAb.

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.