

OriGene Technologies, Inc.

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Product datasheet for TA500036

p16INK4A (CDKN2A) Mouse Monoclonal Antibody [Clone ID: OTI4C11]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI4C11
Applications: IF, IHC, WB

Recommend Dilution: WB 1:1000, IF 1:100, IHC 1:150

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human CDKN2A (NP_000068) produced in E.coli.

Formulation: PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

Concentration: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 16.4 kDa

Gene Name: cyclin dependent kinase inhibitor 2A

Database Link: NP 000068 Entrez Gene 1029 Human

Background: P16 gene generates several transcript variants which differ in their first exons. At least three

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

alternatively spliced variants encoding distinct proteins have been reported, two of which

wide variety of tumors, and is known to be an important tumor suppressor gene.



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Synonyms: ARF; CDK4I; CDKN2; CMM2; INK4; INK4A; MLM; MTS-1; MTS1; P14; P14ARF; P16; P16-INK4A;

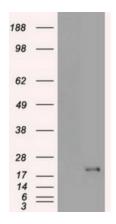
P16INK4

Protein Families: Druggable Genome

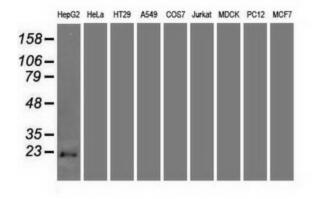
Protein Pathways: Bladder cancer, Cell cycle, Chronic myeloid leukemia, Glioma, Melanoma, Non-small cell lung

cancer, p53 signaling pathway, Pancreatic cancer, Pathways in cancer

Product images:

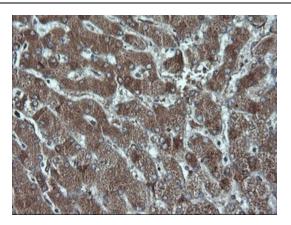


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY P16 ([RC220937], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-P16. Positive lysates [LY400022] (100ug) and [LC400022] (20ug) can be purchased separately from OriGene.

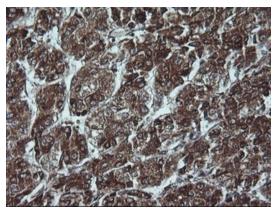


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-P16 monoclonal antibody.

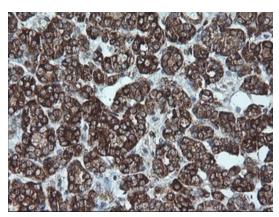




Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-P16 mouse monoclonal antibody. (TA500036)



Immunohistochemical staining of paraffinembedded Carcinoma of Human liver tissue using anti-P16 mouse monoclonal antibody. (TA500036)

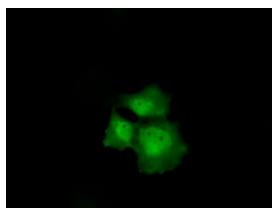


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-P16 mouse monoclonal antibody. (TA500036)

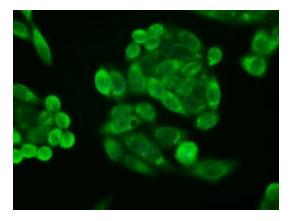




Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-P16 mouse monoclonal antibody. (TA500036)

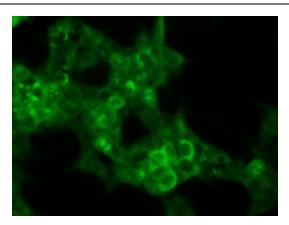


Anti-P16 mouse monoclonal antibody (TA500036) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY P16 ([RC220937]).



Immunofluorescent staining of HeLa cells using anti-P16 mouse monoclonal antibody (TA500036).





Immunofluorescent staining of HepG2 cells using anti-P16 mouse monoclonal antibody (TA500036).