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**Product Name: CDKN2A/P16 Mouse Monoclonal Antibody****Catalog #: AMM82396**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	ICC,ELISA,FC
<b>Reactivity</b>	Human
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	Mouse IgG1
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Purified antibody in PBS with 0.05% sodium azide
<b>Purification</b>	Affinity Purification

**Application**

<b>Dilution Ratio</b>	ICC 1:500-1:2000,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	16.5kDa

**Antigen Information**

<b>Gene Name</b>	CDKN2A/P16
<b>Alternative Names</b>	ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A
<b>Gene ID</b>	1029.0
<b>SwissProt ID</b>	P42771
<b>Immunogen</b>	Purified recombinant fragment of human CDKN2A/P16 (AA: 1-156) expressed in E. Coli.

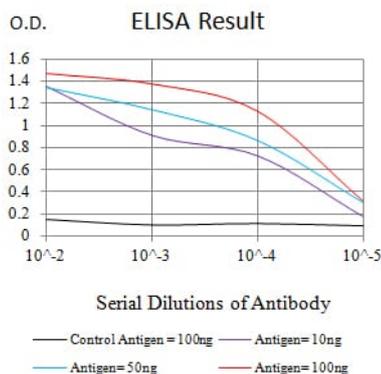
**Background**

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

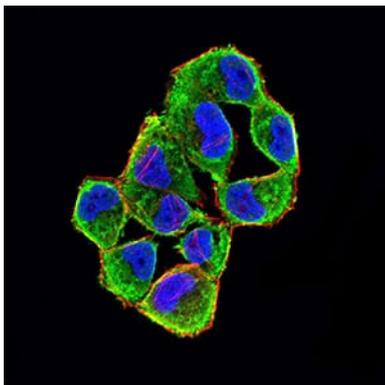
inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, the E3 ubiquitin-protein ligase MDM2, 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.

## Research Area

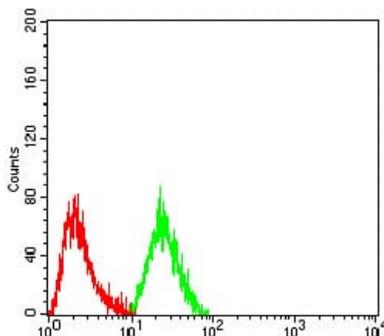
## Image Data



Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Immunofluorescence analysis of HeLa cells using CDKN2A/P16 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin.



Flow cytometric analysis of HeLa cells using CDKN2A/P16 mouse mAb (green) and negative control (red).

