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**Product Name: CDKN1A Mouse Monoclonal Antibody****Catalog #: AMM82656**

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 1:25-1:200,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	18.1kDa

**Antigen Information**

<b>Gene Name</b>	CDKN1A
<b>Alternative Names</b>	P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1
<b>Gene ID</b>	1026.0
<b>SwissProt ID</b>	P38936
<b>Immunogen</b>	Purified recombinant fragment of human CDKN1A (AA: 1-164) expressed in E. Coli.

**Background**

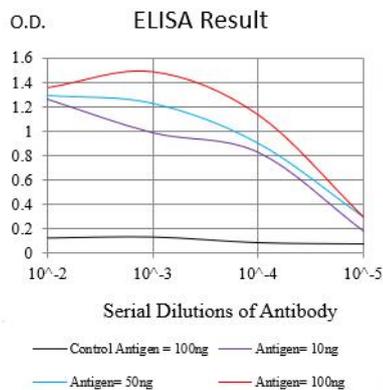
This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein

mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Multiple alternatively spliced variants have been found for this gene.

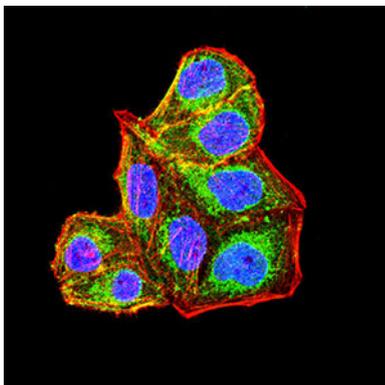
## Research Area

PI3K-Akt signaling pathway

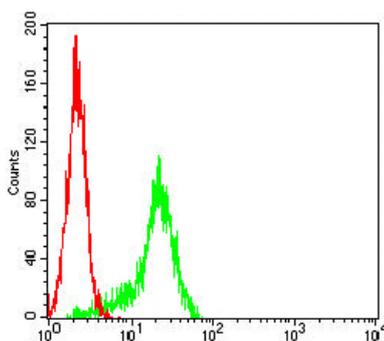
## Image Data



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 CDKN1A 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 CDKN1A mouse mAb (green) and negative control (red).