Product Name: CDKN1A Mouse Monoclonal Antibody
Catalog #: AMM82580
For research use only.

Summary

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

Application

Dilution Ratio	IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
Molecular Weight	18.1kDa

Antigen Information

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

Background

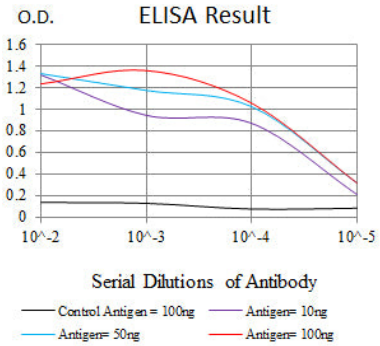
This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled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

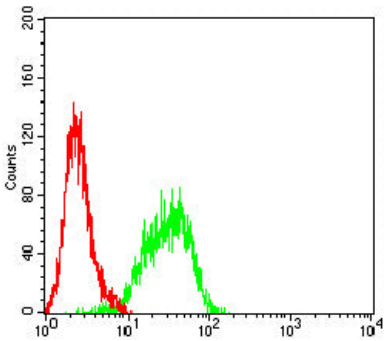
Research Area

PI3K-Akt signaling pathway

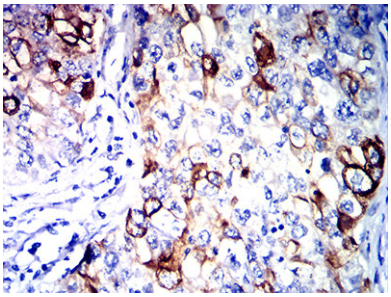
Image Data



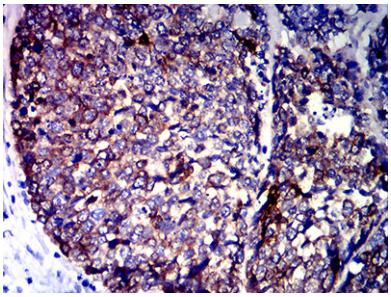
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Flow cytometric analysis of K562 cells using CDKN1A mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissues using CDKN1A mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human esophageal cancer tissues using CDKN1A mouse mAb with DAB staining.