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**Product Name: CDK2 Mouse Monoclonal Antibody****Catalog #: AMM81108**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC,ELISA,FC
<b>Reactivity</b>	Human,Mouse
<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>	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	33.9kDa

**Antigen Information**

<b>Gene Name</b>	CDK2
<b>Alternative Names</b>	p33
<b>Gene ID</b>	1017.0
<b>SwissProt ID</b>	P24941
<b>Immunogen</b>	Purified recombinant fragment of human CDK2 expressed in E. Coli.

**Background**

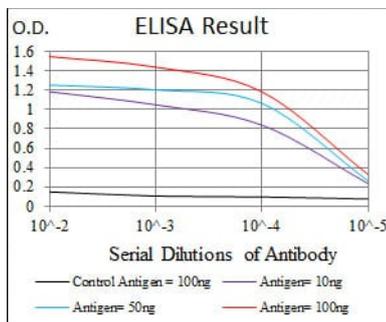
The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of *S. cerevisiae* cdc28, and *S. pombe* cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates

with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported.

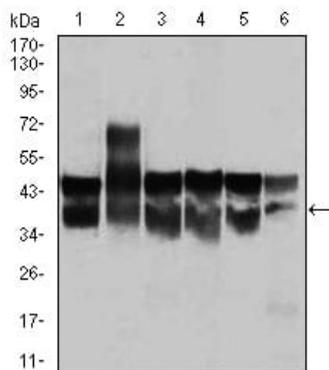
## Research Area

PI3K-Akt signaling pathway, mTOR signaling pathway

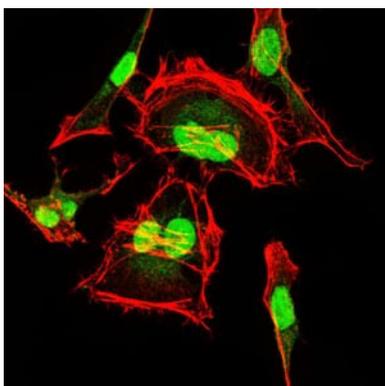
## Image Data



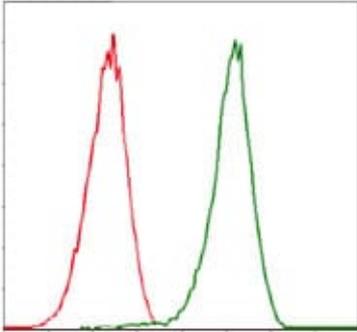
Black line: Control Antigen (100 ng); Purple line: Antigen(10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng);



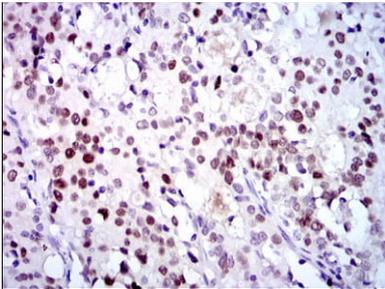
Western blot analysis using CDK2 mouse mAb against Jurkat (1), HL-60 (2), K562(3), A431(4), HeLa(5), and NIH3T3 (6) cell lysate.



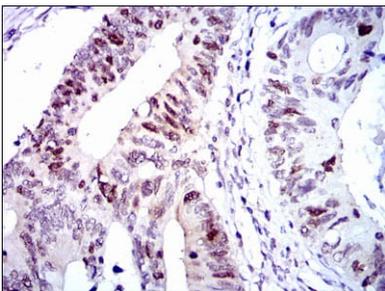
Immunofluorescence analysis of HeLa cells using CDK2 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of Jurkat cells using CDK2 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissues using CDK2 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissues using CDK2 mouse mAb with DAB staining.