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**Product Name: CDK4 Mouse Monoclonal Antibody****Catalog #: AMM80808**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,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,ELISA 1:5000-1:20000,FC 1:200-1:400
<b>Molecular Weight</b>	33.7kDa

**Antigen Information**

<b>Gene Name</b>	CDK4
<b>Alternative Names</b>	CMM3; PSK-J3
<b>Gene ID</b>	1019.0
<b>SwissProt ID</b>	P11802
<b>Immunogen</b>	Purified recombinant fragment of human CDK4 expressed in E. Coli.

**Background**

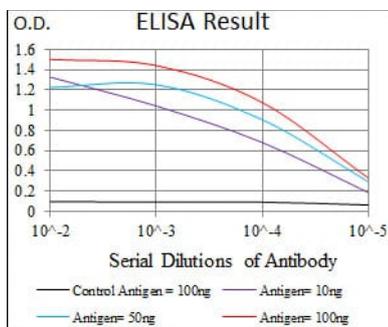
The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is highly similar to the gene products of *S. cerevisiae* cdc28 and *S. pombe* cdc2. It is a catalytic subunit of the protein kinase complex that is important for cell cycle G1 phase progression. The activity of this kinase is restricted to the G1-S phase, which is controlled by the regulatory

subunits D-type cyclins and CDK inhibitor p16(INK4a). This kinase was shown to be responsible for the phosphorylation of retinoblastoma gene product (Rb). Mutations in this gene as well as in its related proteins including D-type cyclins, p16(INK4a) and Rb were all found to be associated with tumorigenesis of a variety of cancers. Multiple polyadenylation sites of this gene have been reported.

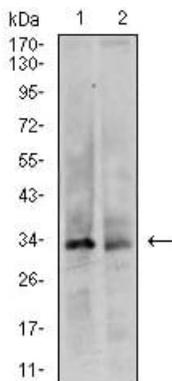
## Research Area

PI3K-Akt signaling pathway

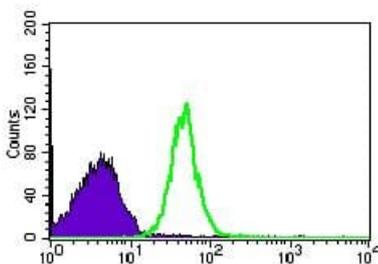
## Image Data



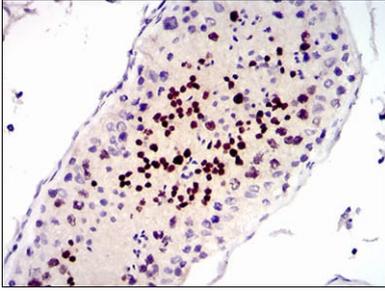
Red: Control Antigen (100ng); Purple: Antigen (10ng); Green: Antigen (50ng); Blue: Antigen (100ng);



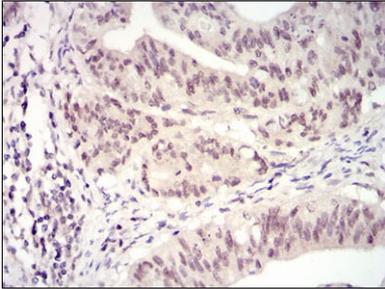
Western blot analysis using CDK4 mouse mAb against HeLa (1) and F9 (2) cell lysate.



Flow cytometric analysis of HeLa cells using CDK4 mouse mAb (green) and negative control (purple).



Immunohistochemical analysis of paraffin-embedded human testis tissues using CDK4 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human rectum cancer tissues using CDK4 mouse mAb with DAB staining.