

## Basic Information

<b>Product Name</b>	Anti-CDK2 Antibody	
<b>Gene Name</b>	CDK2	
<b>Source</b>	Rabbit	
<b>Clonality</b>	Polyclonal	
<b>Isotype</b>	IgG	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, IHC, ICC/IF	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Cdk2 recombinant protein (Position: E81-L298). Human Cdk2 shares 98.6% amino acid (aa) sequence identity with rat Cdk2.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	Immunogen affinity purified.	
<b>Observed MW</b>	30 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

## Storage

12 months from date of receipt, -20°C as supplied.

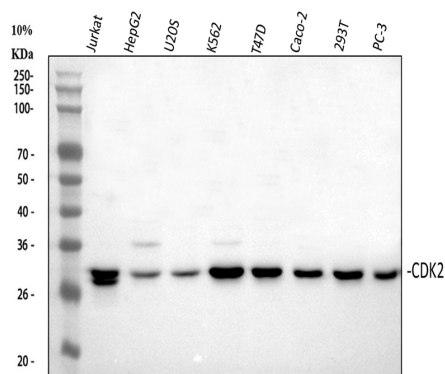
## Background Information

CDK2, Cyclin-Dependent Kinase2, is also known as P33. The CDK2 protein was highly homologous to p34(CDC2) kinase and more significantly homologous to Xenopus Eg1 kinase, suggesting that CDK2 is the human homolog of Eg1. The CDK2 gene is mapped to 12q13, the same region to which the CDK4 gene maps. Human cyclin A binds independently to 2 kinases, p34(cdc2) or p33. In adenovirus-transformed cells, the viral E1A oncoprotein seems to associate with p33/cyclin A but not with p34(cdc2)/cyclin A. The gene for p33 shares 65% sequence identity with p34(cdc2). P33(cdk2) plays a unique role in cell cycle regulation of vertebrate cells.

## Reference

Anti-CDK2 Antibody 被引用在13文献中。

## Selected Validation Data



Western blot analysis of CDK2 using anti-CDK2 antibody (PB9534).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Jurkat whole cell lysates,

Lane 2: human HepG2 whole cell lysates,

Lane 3: human U2OS whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: human T-47D whole cell lysates,

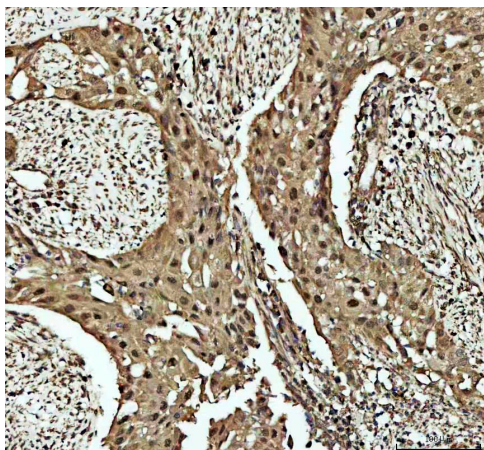
Lane 6: human Caco-2 whole cell lysates,

Lane 7: human 293T whole cell lysates,

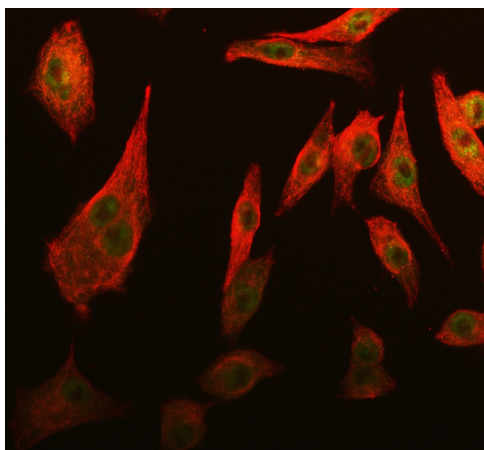
Lane 8: human PC-3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-CDK2 antigen affinity purified polyclonal antibody (PB9534) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for CDK2 at approximately 30 kDa. The expected band size for CDK2 is at 30,34 kDa.



IHC analysis of CDK2 using anti-CDK2 antibody (PB9534) .  
CDK2 was detected in a paraffin-embedded section of human invasive urothelial carcinoma of the bladder with squamous differentiation tissue. The tissue section was incubated with rabbit anti-CDK2 Antibody (PB9534) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



ICC/IF analysis of CDK2 using anti-CDK2 antibody (PB9534) and anti-Beta Tubulin antibody (M01857-3).  
CDK2 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-CDK2 Antibody (PB9534) at a dilution of 1:100. Fluoro488-conjugated Anti-rabbit IgG Secondary Antibody (green)(Catalog#BA1127) and Fluoro594-conjugated Anti-mouse IgG Secondary Antibody (red)(Catalog#BA1141) were used as secondary antibody.