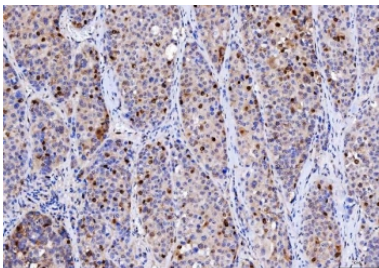


## CDK2 Antibody [clone 5B12D1] (RQ6965)

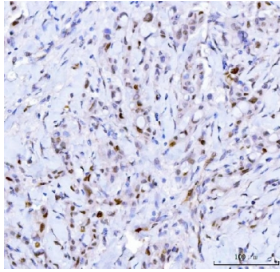
Catalog No.	Formulation	Size
RQ6965	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### Bulk quote request

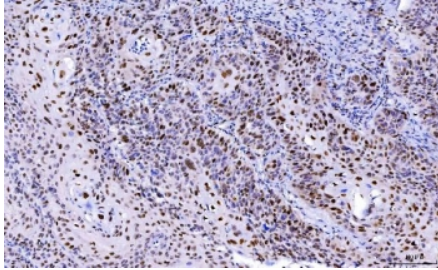
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human, Mouse, Rat
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal (mouse origin)
<b>Isotype</b>	Mouse IgG2a
<b>Clone Name</b>	5B12D1
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	P24941
<b>Localization</b>	Nuclear, cytoplasmic
<b>Applications</b>	Western Blot : 0.5-1 ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Flow Cytometry : 1-3ug/million
<b>Limitations</b>	This CDK2 antibody is available for research use only.



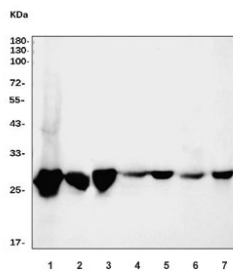
IHC staining of FFPE human liver cancer tissue with CDK2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



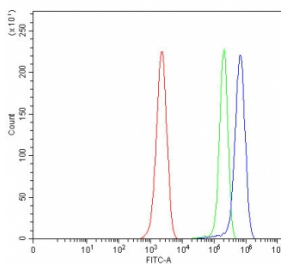
IHC staining of FFPE human breast cancer tissue with CDK2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human laryngeal squamous cell carcinoma tissue with CDK2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human Jurkat, 2) human HepG2, 3) human K562, 4) rat heart, 5) rat L6, 6) mouse heart and 7) mouse C2C12 cell lysate with CDK2 antibody. Predicted molecular weight: 30-33 kDa.



Flow cytometry testing of mouse ANA-1 cells with CDK2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= CDK2 antibody.

## Description

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.

## Application Notes

Optimal dilution of the CDK2 antibody should be determined by the researcher.

## Immunogen

Recombinant human protein (amino acids E81-L298) was used as the immunogen for the CDK2 antibody.

## Storage

After reconstitution, the CDK2 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at

-20oC. Avoid repeated freezing and thawing.