



### Anti-Cdk7 antibody ab167565

[2 Images](#)

#### Overview

<b>Product name</b>	Anti-Cdk7 antibody
<b>Description</b>	Mouse polyclonal to Cdk7
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein within Human Cdk7 aa 1-350. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please <b><a href="#">contact</a></b> our Scientific Support team to discuss your requirements.
	<div>  <a href="#">Run BLAST with</a> </div> <div>  <a href="#">Run BLAST with</a> </div>
<b>Positive control</b>	Cdk7 transfected 293T cell lysate; HeLa cells.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
<b>Storage buffer</b>	pH: 7.4 Constituent: 99% PBS
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab167565 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Predicted molecular weight: 39 kDa.
ICC/IF		Use a concentration of 10 µg/ml.

## Target

### Function

Cyclin-dependent kinases (CDKs) are activated by the binding to a cyclin and mediate the progression through the cell cycle. Each different complex controls a specific transition between two subsequent phases in the cell cycle. CDK7 is the catalytic subunit of the CDK-activating kinase (CAK) complex, a serine-threonine kinase. CAK activates the cyclin-associated kinases CDK1, CDK2, CDK4 and CDK6 by threonine phosphorylation. CAK complexed to the core-TFIIH basal transcription factor activates RNA polymerase II by serine phosphorylation of the repetitive C-terminus domain (CTD) of its large subunit (POLR2A), allowing its escape from the promoter and elongation of the transcripts. Involved in cell cycle control and in RNA transcription by RNA polymerase II. Its expression and activity are constant throughout the cell cycle.

### Tissue specificity

Ubiquitous.

### Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.

Contains 1 protein kinase domain.

### Post-translational modifications

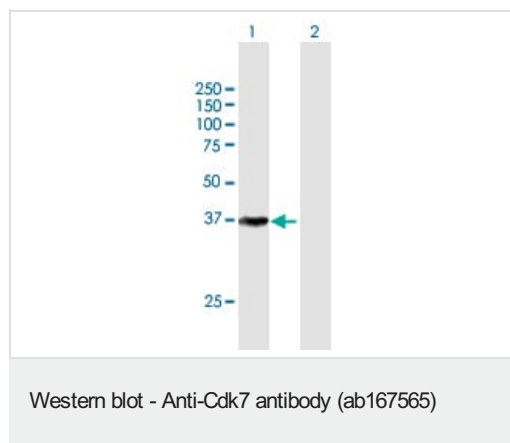
Phosphorylation of Ser-164 during mitosis inactivates the enzyme.

Phosphorylation of Thr-170 is required for activity.

### Cellular localization

Nucleus.

## Images



**All lanes :** Anti-Cdk7 antibody (ab167565) at 1 µg/ml

**Lane 1 :** Cdk7 transfected 293T cell lysate

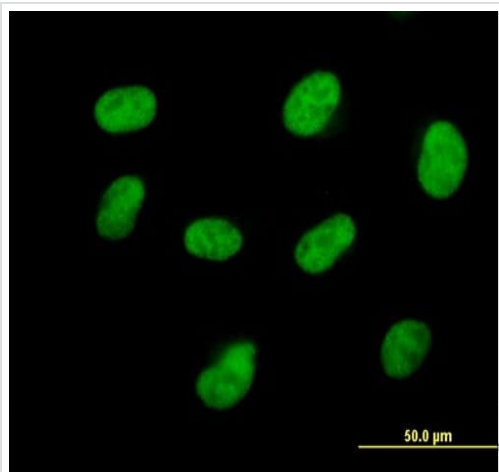
**Lane 2 :** Non-transfected 293T cell lysate

Lysates/proteins at 15 µl per lane.

### Secondary

**All lanes :** Goat Anti-Mouse IgG (H&L)-HRP at 1/2500 dilution

**Predicted band size:** 39 kDa



Immunofluorescent analysis of HeLa cells labeling Cdk7 with ab167565 at 10µg/ml.

Immunocytochemistry/ Immunofluorescence - Anti-Cdk7 antibody (ab167565)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors