abcam

Product datasheet

Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] ab155976

Recombinant RabMAb

2 References 6 Images

Overview

Product name	Anti-Cdk7 (phospho T170) antibody [EPR6650(2)]
Description	Rabbit monoclonal [EPR6650(2)] to Cdk7 (phospho T170)
Host species	Rabbit
Tested applications	**Suitable for:** WB **Unsuitable for:** ICC/IF or IHC-P
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, A431, NIH/3T3 and C6 cell lysates and rat spleen tissue lysate.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6650(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab155976 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		1/1000. Predicted molecular weight: 39 kDa. **For unpurified use at 1/1000 - 1/10000.**

Application notes Is unsuitable for ICC/IF or IHC-P.

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.

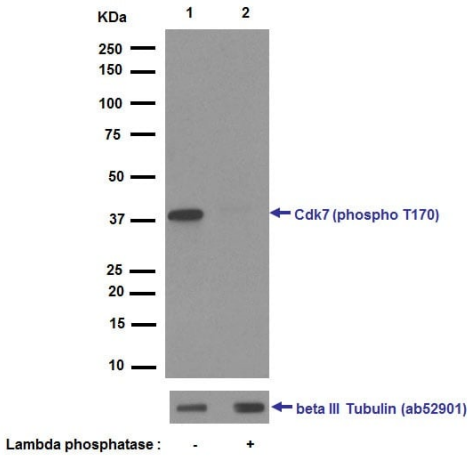
Tissue specificity Ubiquitous.

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



Western blot - Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976)

All lanes : Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976) at 1/1000 dilution (purified)

Lane 1 : HeLa cell lysate (untreated)

Lane 2 : HeLa cell lysate (treated with Lambda phosphatase)

Lysates/proteins at 10 µg per lane.

Secondary

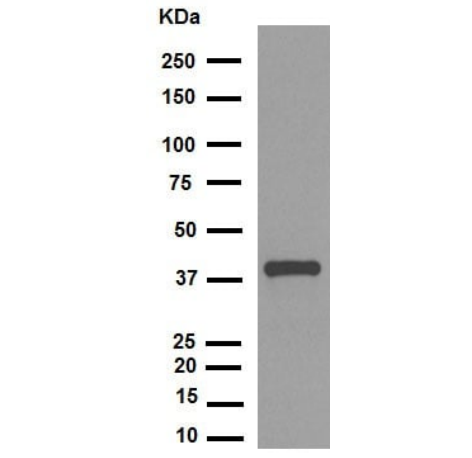
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 39 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



Western blot - Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976)

Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976) at 1/1000 dilution (purified) + A431 cell lysate at 20 µg

Secondary

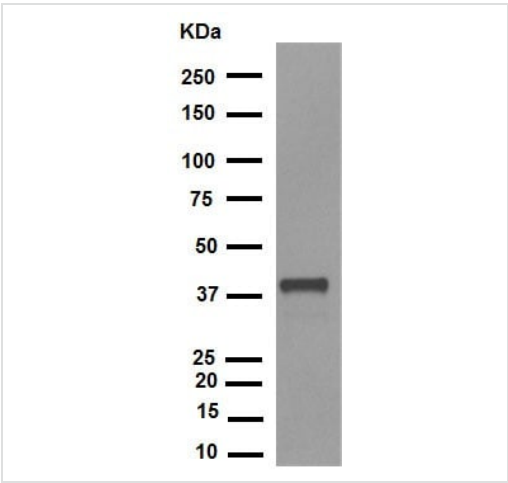
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 39 kDa

Observed band size: 39 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



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Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976) at 1/1000 dilution (purified) + NIH/3T3 cell lysate at 20 µg

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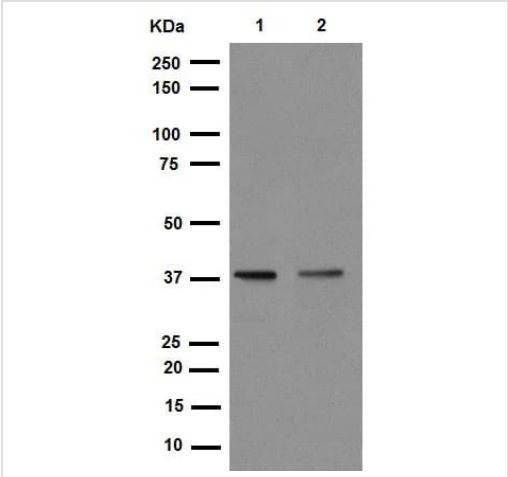

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All lanes : Anti-Cdk7 (phospho T170) antibody [EPR6650(2)] (ab155976) at 1/1000 dilution (purified)

Lane 1 : C6 cell lysate
Lane 2 : Rat spleen tissue lysate

Lysates/proteins at 10 µg per lane.

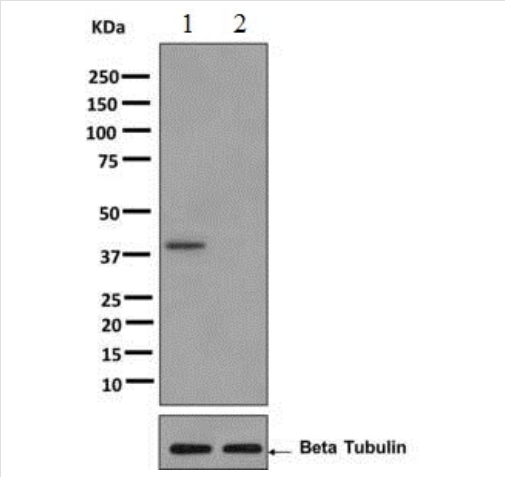
Secondary

All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 39 kDa
Observed band size: 39 kDa

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



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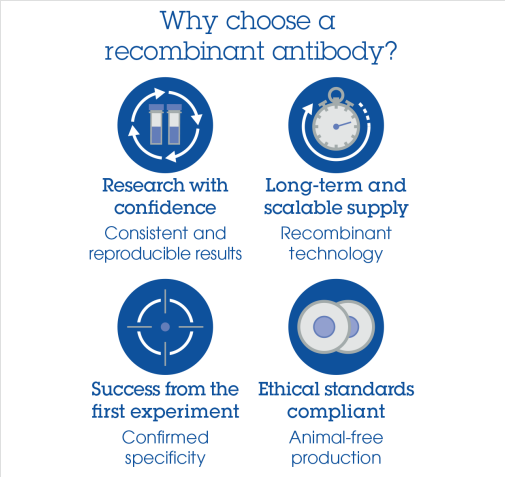
Predicted band size: 39 kDa



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