# abcam

## Product datasheet

## Anti-Cdc6 antibody [EPR714(2)] ab109315



#### Overview

**Product name** Anti-Cdc6 antibody [EPR714(2)]

**Description** Rabbit monoclonal [EPR714(2)] to Cdc6

Host species Rabbit

Tested applications Suitable for: ICC/IF, WB, IHC-P

Unsuitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Hela, 293T, HCT116 treated with hydroxyurea and Raji treated with FBS lysates IHC-P:

Human gastric adenocarcinoma, breast carcinoma, thyroid cancer tissue ICC/IF: HeLa

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Mouse: We have preliminary internal testing data to indicate this antibody may not react with this

species. Please contact us for more information.

#### **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 long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity Protein A purified

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Clone number Monoclonal EPR714(2)

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab109315 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
ICC/IF	★★★★☆ (2)	1/100. For unpurified use at 1/250 - 1/500
WB		1/1000 - 1/10000. Detects a band of approximately 62 kDa (predicted molecular weight: 63 kDa).
IHC-P		1/90. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.

**Application notes** Is unsuitable for Flow Cyt (Intra).

## **Target**

**Function** Involved in the initiation of DNA replication. Also participates in checkpoint controls that ensure

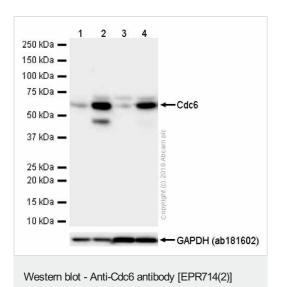
DNA replication is completed before mitosis is initiated.

Sequence similarities Belongs to the CDC6/cdc18 family.

**Cellular localization** Nucleus. Cytoplasm. The protein is nuclear in G1 and cytoplasmic in S-phase cells.

#### **Images**

(ab109315)



**All lanes :** Anti-Cdc6 antibody [EPR714(2)] (ab109315) at 0.5 µg/ml (purified)

Lane 1: 293T (Human embryonic kidney epithelial cell) whole cell

lysates

Lane 2: 293T (Human embryonic kidney epithelial cell) treated with

20mM Hydroxyurea for 24 hours whole cell lysates

Lane 3: HCT116 (Human colorectal carcinoma epithelial cell)

whole cell lysates

Lane 4: HCT116 (Human colorectal carcinoma epithelial cell) treated with 1mM Hydtoxyurea for 16 hours whole cell lysates

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Lysates/proteins at 15 µg per lane.

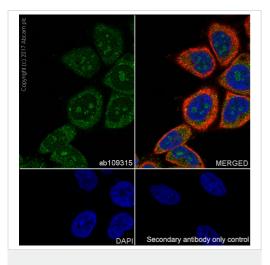
#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 63 kDa

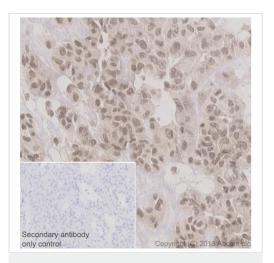
Blocking and diluting buffer: 5% NFDM/TBST.

Hydroxyurea induces Cdc6 expression (PMID:11346650)



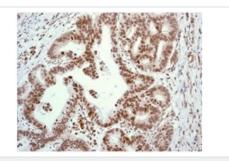
Immunocytochemistry/ Immunofluorescence - Anti-Cdc6 antibody [EPR714(2)] (ab109315)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Cdc6 with Purified ab109315 at 1:100 dilution (9.4 μg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor®594) 1:200 (2.5 μg/ml). Goat anti rabbit lgG (Alexa Fluor®488, ab150077) was used as the secondary antibody at 1:1000 (2 μg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



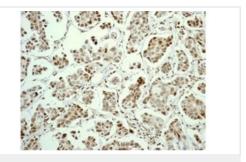
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdc6 antibody
[EPR714(2)] (ab109315)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human thyroid cancer tissue sections labeling Cdc6 with Purified ab109315 at 1:90 dilution (10.4 µg/ml). Heat mediated antigen retrieval was performed using using <a href="mailto:ab93684">ab93684</a> (Tris/EDTA buffer, pH 9.0)ImmunoHistoProbe one step HRP Polymer (ready to use)was used as the secondary antibody.Negative control:PBS instead of the primary antibody.Hematoxylinwas used as a counterstain



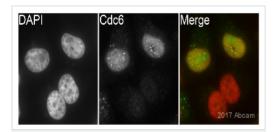
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdc6 antibody
[EPR714(2)] (ab109315)

Immunohistochemical analysis of Cdc6 in paraffin embedded Human gastric adenocarcinoma tissue, using unpurified ab109315 at a 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cdc6 antibody
[EPR714(2)] (ab109315)

Immunohistochemical analysis of Cdc6 in paraffin embedded Human breast carcinoma tissue, using unpurified ab109315 at a 1/1000 dilution.

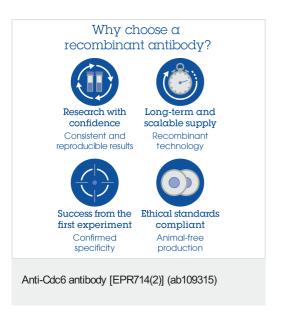


Immunocytochemistry/ Immunofluorescence - Anti-Cdc6 antibody [EPR714(2)] (ab109315)

This image is courtesy of an abreview by Kirk Mcmanus

Unpurified ab109315 staining Cdc6 in the Hela cell line from Human cervix by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. Ab150081 (1/200) was used as the secondary antibody.



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