# abcam

## Product datasheet

## Anti-CCT2 antibody [EPR4084] ab92746



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#### Overview

Product name Anti-CCT2 antibody [EPR4084]

**Description** Rabbit monoclonal [EPR4084] to CCT2

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human CCT2 aa 500-600 (C terminal). The exact sequence is

proprietary.

Positive control WB: HeLa, MCF-7 and Daudi cell lysates. Human, mouse, and rat bratin lysates; IHC-P: Human

colon, lung and kidney tissue, Mouse and rat kidney tissue; ICC/IF: HeLa and MCF7 cells; Flow

Cyt (intra): HeLa cells. IP: HeLa whole cell 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<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**.

#### **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 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR4084

1

**Isotype** IgG

### **Applications**

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab92746 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  |
|------------------|-----------------|--|
| Flow Cyt (Intra) |                 | 1/10 - 1/100.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.   |
| WB               | **** <u>(1)</u> | 1/10000 - 1/50000. Predicted molecular weight: 57 kDa.   |
| IP               |                 | 1/10 - 1/100.  |
| IHC-P            |                 | 1/100 - 1/250. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> . |
| ICC/IF           | **** (1)        | 1/500. For unpurified use at 1/100 - 1/250   |

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**Function** Molecular chaperone; assists the folding of proteins upon ATP hydrolysis. As part of the

 $\ensuremath{\mathsf{BBS/CCT}}$  complex may play a role in the assembly of  $\ensuremath{\mathsf{BBSome}},$  a complex involved in

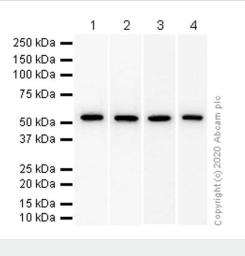
ciliogenesis regulating transports vesicles to the cilia. Known to play a role, in vitro, in the folding

of actin and tubulin.

**Sequence similarities** Belongs to the TCP-1 chaperonin family.

Cellular localization Cytoplasm.

## **Images**



Western blot - Anti-CCT2 antibody [EPR4084] (ab92746)

**All lanes :** Anti-CCT2 antibody [EPR4084] (ab92746) at 1/10000 dilution (Purified)

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

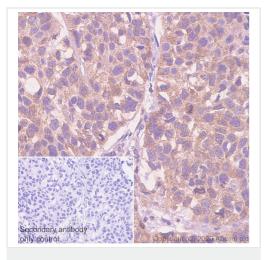
Lane 2 : Human brain lysate
Lane 3 : Mouse brain lysate
Lane 4 : Rat brain lysate

Lysates/proteins at 15 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

**Predicted band size:** 57 kDa **Observed band size:** 57 kDa

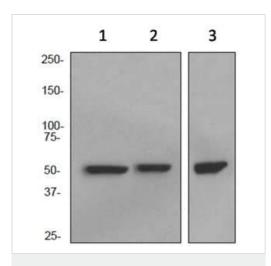


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CCT2 antibody
[EPR4084] (ab92746)

**Blocking/Diluting buffer:** 5% NFDM/TBST

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue sections labeling CCT2 with purified ab92746 at 1/24000 dilution (0.012 µg/mL). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

The immunostaining was performed on a Leica Biosystems  $\mathsf{BOND}^{\circledR}\mathsf{RX}$  instrument.



Western blot - Anti-CCT2 antibody [EPR4084] (ab92746)

**All lanes :** Anti-CCT2 antibody [EPR4084] (ab92746) at 1/10000 dilution (unpurified)

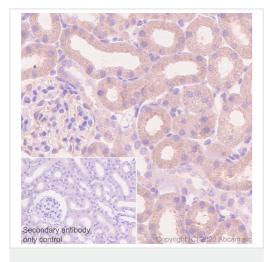
Lane 1 : HeLa cell lysate
Lane 2 : MCF-7 cell lysate
Lane 3 : Daudi cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

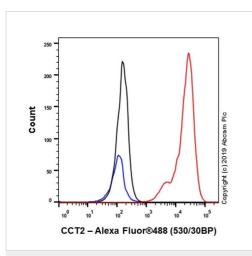
Predicted band size: 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CCT2 antibody
[EPR4084] (ab92746)

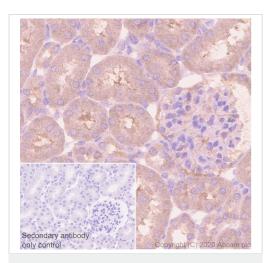
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat kidney tissue sections labeling CCT2 with purified ab92746 at 1/24000 dilution (0.012 µg/mL). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

The immunostaining was performed on a Leica Biosystems  $\mathsf{BOND}^{\$}$  RX instrument.



Flow Cytometry (Intracellular) - Anti-CCT2 antibody [EPR4084] (ab92746)

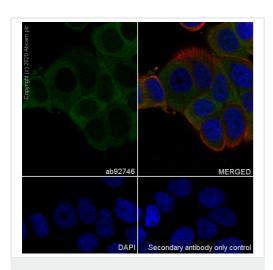
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells, labeling CCT2 with Purified ab92746 at 1/30 dilution (10µg/mL) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluorr<sup>®</sup> 488, <u>ab150077</u>) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CCT2 antibody
[EPR4084] (ab92746)

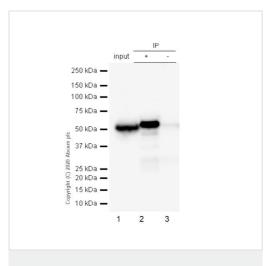
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling CCT2 with purified ab92746 at 1/24000 dilution (0.012 µg/mL). Heat mediated antigen retrieval was performed using Bond™ Epitope Retrieval Solution 1 (pH 6.0). Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunocytochemistry/ Immunofluorescence - Anti-CCT2 antibody [EPR4084] (ab92746)

Immunocytochemistry/Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling CCT2 with Purified ab92746 at 1:500 dilution (0.6  $\mu$ g/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  $\mu$ g/mL). Goat anti rabbit lgG (Alexa Fluor® 488, <u>ab150077</u>) was used as the secondary antibody at 1:1000 (2  $\mu$ g/mL) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-CCT2 antibody [EPR4084] (ab92746)

Purified ab92746 at 1:30 dilution (2 $\mu$ g) immunoprecipitating CCT2 in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

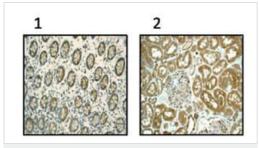
Lane 2 (+): ab92746 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab92746 in HeLa whole cell lysate.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

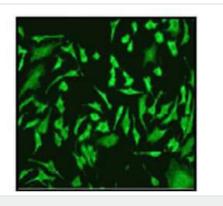
Observed band size: 57 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-CCT2 antibody
[EPR4084] (ab92746)

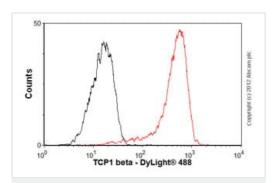
ab92746, unpurified, at a 1/100 dilution, staining CCT2 in formalin fixed, paraffin embedded (1) Human colon tissue and (2) Human kidney tissue by Immunohistochemistry. Detection: DAB staining.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



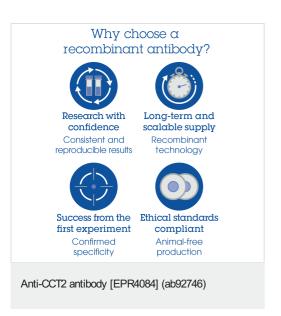
Immunocytochemistry/ Immunofluorescence - Anti-CCT2 antibody [EPR4084] (ab92746)

ab92746, unpurified, at a 1/100 dilution, staining CCT2 in HeLa cells by Immunofluorescence.



Flow Cytometry (Intracellular) - Anti-CCT2 antibody [EPR4084] (ab92746)

Overlay histogram showing HeLa cells stained with ab92746, unpurified, (red line), unpurified. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab92746, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit lgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monclonal) (1 $\mu$ g/1x106 cells) used under the same conditions. Acquisition of >5,000 events was performed.



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