abcam

Product datasheet

Anti-Claudin 4 antibody ab53156

6 Abreviews 13 References 3 Images

Overview

Product name	Anti-Claudin 4 antibody
Description	Rabbit polyclonal to Claudin 4
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, ICC/IF, WB, ELISA
Species reactivity	**Reacts with:** Human **Predicted to work with:** Mouse, Rat, Pig
Immunogen	Synthetic peptide within Human Claudin 4 aa 160-209. The exact sequence is proprietary. Database link: O14493
Positive control	WB: HeLa cell extracts. IHC-P: Human colon tissue. ICC/IF: MCF7 cells.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS Without Mg+2 and Ca+2
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab53156** 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

Application	Abreviews	Notes
IHC-P	★★★★★	Use a concentration of 4 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	★★★★☆	Use a concentration of 5 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa).
ELISA		1/5000.

Target

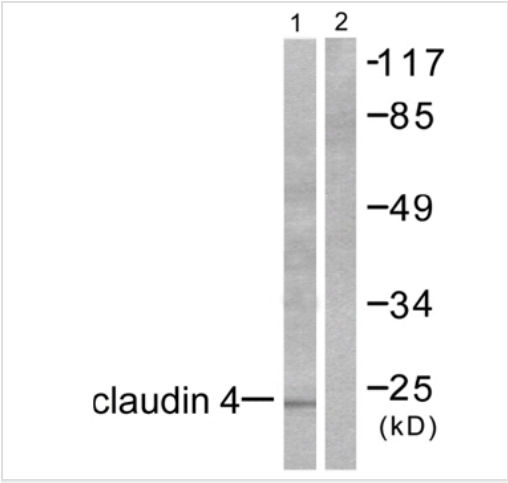
Function Plays a major role in tight junction-specific obliteration of the intercellular space.

Involvement in disease Note=CLDN4 is located in the Williams-Beuren syndrome (WBS) critical region. WBS results from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences flanking the deleted region.

Sequence similarities Belongs to the claudin family.

Cellular localization Cell junction > tight junction. Cell membrane.

Images



Western blot - Anti-Claudin 4 antibody (ab53156)

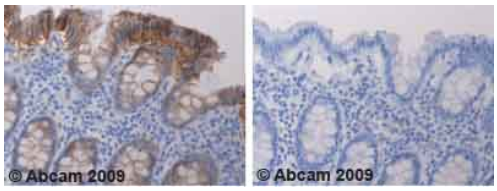
All lanes : Anti-Claudin 4 antibody (ab53156) at 1/500 dilution

Lane 1 : Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extracts

Lane 2 : HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extracts with immunizing peptide

Predicted band size: 22 kDa

Observed band size: 22 kDa



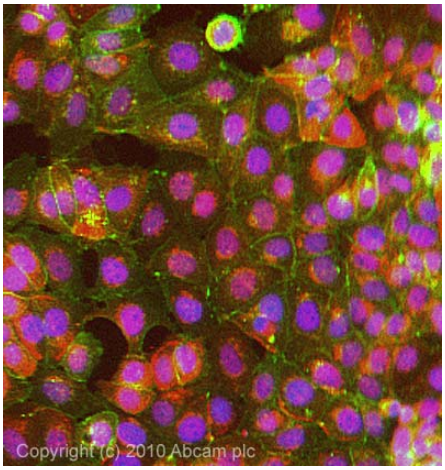
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Claudin 4 antibody (ab53156)

ab53156 staining Claudin 4 in human colon tissue. Staining is localized to the cell membrane.

Left panel: ab53156 at 4 µg/ml.

Right panel: Isotype control.

Sections were stained using an automated system at room temperature. Sections were rehydrated and antigen retrieved with EDTA pH 9.0. Slides were blocked in 3% H_2O_2 in methanol for 10 minutes. They were then blocked again for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with hematoxylin and coverslipped. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.



Immunocytochemistry/ Immunofluorescence - Anti-Claudin 4 antibody (ab53156)

ICC/IF image of ab53156 staining Claudin 4 (green) in MCF7 (Human breast adenocarcinoma cell line) cells. The cells were fixed in 4% formaldehyde (10 minutes) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab53156, 5 µg/ml) overnight at +4°C. The secondary antibody was an Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1 hour. An Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.

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