abcam

Product datasheet

Anti-Claudin 4 antibody ab53156

★★★★★ 6 Abreviews 34 References 画像数 4

製品の概要

製品名	Anti-Claudin 4 antibody
製品の詳細	Rabbit polyclonal to Claudin 4
由来種	Rabbit
アプリケーション	**適用あり:** IHC-P, ICC/IF, WB
種交差性	**交差種:** Human **交差が予測される動物種:** Mouse, Rat, Pig
免疫原	Synthetic peptide within Human Claudin 4 aa 160-209. The exact sequence is proprietary. Database link: **O14493**
ポジティブ・コントロール	WB: Untreated HeLa cell extracts, Wild-type MCF7, PC-3, LNCaP and SW480 cell lysates. IHC-P: Human colon tissue. ICC/IF: MCF7 cells.
特記事項	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. 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&As

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 50% Glycerol, 0.87% Sodium chloride, PBS Without Mg+2 and Ca+2
精製度	Immunogen affinity purified
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab53156の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (3)	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	★★★★☆ (1)	Use a concentration of 5 µg/ml.
WB		1/500 - 1/1000. Detects a band of approximately 22 kDa (predicted molecular weight: 22 kDa).

ターゲット情報

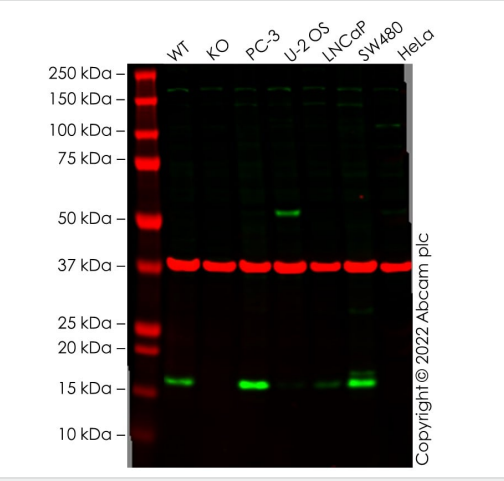
機能 Plays a major role in tight junction-specific obliteration of the intercellular space.

関連疾患 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.

配列類似性 Belongs to the claudin family.

細胞内局在 Cell junction > tight junction. Cell membrane.

画像



Western blot - Anti-Claudin 4 antibody (ab53156)

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

Lane 1 : Wild-type MCF7 cell lysate
Lane 2 : CLDN4 knockout MCF7 cell lysate
Lane 3 : PC-3 cell lysate
Lane 4 : U-2 OS cell lysate
Lane 5 : LNCaP cell lysate
Lane 6 : SW480 cell lysate
Lane 7 : HeLa cell lysate

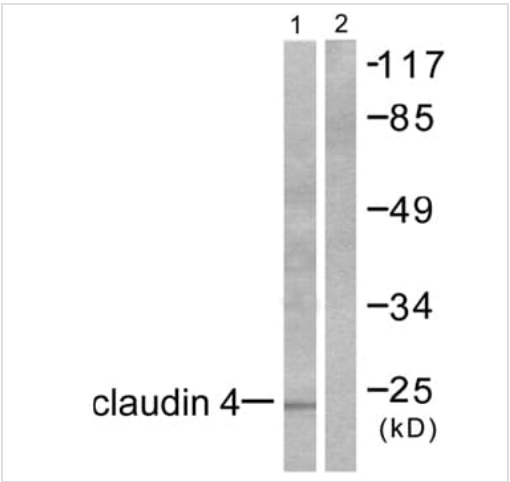
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 22 kDa
Observed band size: 17 kDa

False colour image of Western blot: Anti-Claudin 4 antibody staining at 1/500 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab53156 was shown to bind specifically to Claudin 4. A band was observed at 17 kDa in wild-type MCF7 cell lysates with no signal observed at this size in CLDN4 knockout cell line **ab274946** (knockout cell lysate **ab275004**). To generate this image, wild-type and CLDN4 knockout MCF7 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.

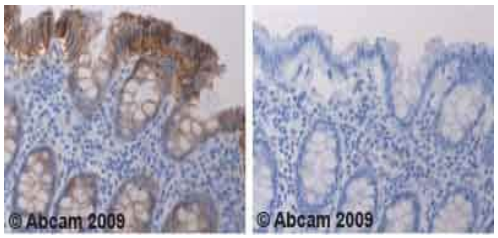


Western blot - Anti-Claudin 4 antibody (ab53156)

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.

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