**Product datasheet**

**Anti-Claudin 4 antibody [EPRR17575] ab210796**

<table>
<thead>
<tr>
<th>Overview</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Anti-Claudin 4 antibody [EPRR17575]</td>
</tr>
<tr>
<td>Description</td>
<td>Rabbit monoclonal [EPRR17575] to Claudin 4</td>
</tr>
<tr>
<td>Host species</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Tested applications</td>
<td>Suitable for: IHC-P, WB, IP</td>
</tr>
<tr>
<td>Species reactivity</td>
<td>Reacts with: Human</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Synthetic peptide (the amino acid sequence is considered to be commercially sensitive) within Human Claudin 4 aa 150 to the C-terminus. The exact sequence is proprietary. Database link: O14493</td>
</tr>
</tbody>
</table>

**General notes**

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMab® patents](#).

This product is a recombinant rabbit monoclonal antibody.

**Properties**

<table>
<thead>
<tr>
<th>Form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage buffer</td>
<td>Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</td>
</tr>
<tr>
<td>Purity</td>
<td>Protein A purified</td>
</tr>
<tr>
<td>Clonality</td>
<td>Monoclonal</td>
</tr>
<tr>
<td>Clone number</td>
<td>EPRR17575</td>
</tr>
<tr>
<td>Isotype</td>
<td>IgG</td>
</tr>
</tbody>
</table>
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.

Applications

Our Abpromise guarantee covers the use of ab210796 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.</td>
</tr>
<tr>
<td>WB</td>
<td></td>
<td>1/1000. Detects a band of approximately 18 kDa (predicted molecular weight: 22 kDa).</td>
</tr>
<tr>
<td>IP</td>
<td></td>
<td>1/30.</td>
</tr>
</tbody>
</table>

Images

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane and staining on epithelial cells of human colon is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Lanes 1-2: Anti-Claudin 4 antibody [EPRR17575] (ab210796) at 1/2000 dilution
Lanes 3-6: Anti-Claudin 4 antibody [EPRR17575] (ab210796) at 1/1000 dilution

Lane 1: LNCaP (Human prostate cancer cell line) whole cell lysate
Lane 2: PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate
Lane 3: SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate
Lane 4: MCF7 (Human breast adenocarcinoma cell line) whole cell lysate
Lane 5: SK-OV-3 (Human ovarian cancer cell line) whole cell lysate
Lane 6: NIH:OVCAR-3 (Human ovary adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 22 kDa
Observed band size: 18 kDa
why is the actual band size different from the predicted?

Blocking/Dilution buffer: 5% NFDM/TBST.
Exposure time: Lane 1/2/3/6: 1 minute; Lane 4: 30 seconds; Lane 5: 3 minutes.
Immunohistochemical analysis of paraffin-embedded human endometrium tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on epithelial cells of human endometrium is observed.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Weak membrane staining on biliary epithelium of human liver is observed.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.
Immunohistochemical analysis of paraffin-embedded human cholangiocarcinoma tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on human cholangiocarcinoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Negative staining on human hepatocellular carcinoma. Counter stained with Hematoxylin.
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling Claudin 4 with ab210796 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Membrane staining on epithelial cells of human breast cancer is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Claudin 4 was immunoprecipitated from 1mg of SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate with ab210796 at 1/30 dilution.

Western blot was performed from the immunoprecipitate using ab210796 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: SW480 whole cell lysate 10µg (Input).
Lane 2: ab210796 IP in SW480 whole cell lysate.
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab210796 in SW480 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.
Exposure time: 30 seconds.

Please note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”

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