Product datasheet

Anti-Claudin 4 antibody ab15104

Overview

Product name: Anti-Claudin 4 antibody
Description: Rabbit polyclonal to Claudin 4
Host species: Rabbit
Tested applications: Suitable for: WB, IHC-P
Species reactivity: Reacts with: Human
Predicted to work with: Mouse, Pig
Immunogen: Synthetic peptide within Human Claudin 4 aa 150 to the C-terminus. The exact sequence is proprietary.
Database link: O14493

General notes: This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.

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 or -80°C. Avoid freeze / thaw cycle.

Storage buffer: pH: 7.60
Preservative: 0.1% Sodium azide
Constituents: PBS, 1% BSA

Purity: Immunogen affinity purified
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab15104 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.
**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.

### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)
- Anti-Claudin 4 antibody (ab15104)
- Lean QY et al. PLoS One (2015) Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

**Target**

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB</td>
<td>★★★★☆</td>
<td>Use a concentration of 1 µg/ml. Detects a band of approximately 20 kDa (predicted molecular weight: 22 kDa).</td>
</tr>
<tr>
<td>IHC-P</td>
<td>★★★☆☆</td>
<td>1/200. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.</td>
</tr>
</tbody>
</table>

**Images**

Immunohistochemical analysis of healthy and colitis mouse colon sections (untreated and treated with enoxaparin) labeling claudin-4 with ab15104 at 1/200. ab7090, anti-rabbit immunoglobulin G conjugated to horseradish peroxidase (HRP) at 1/300 was used as the secondary antibody. ab64238 at 1/50 was used to develop the histological signal.

Antigen retrieval was performed by incubating the sections for 10 minutes at 97°C in 1 mM EDTA buffer, pH 8.0 or 10 mM citrate buffer, pH 6.0.

Control, C; untreated colitis, DSS; oral enoxaparin, OE; intraperitoneal injection of enoxaparin, IPE.
Anti-Claudin 4 antibody (ab15104) at 1 µg/ml + SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate at 10 µg

**Secondary**
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 22 kDa

**Observed band size:** 20 kDa

*why is the actual band size different from the predicted?*

**Additional bands at:** 125 kDa, 34 kDa, 35 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 30 seconds

Formalin fixed paraffin embedded human tonsil stained with ab15104 (1/200, 10 min at room temperature).

**Please note:** All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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