# abcam

## Product datasheet

## Anti-Claudin 3 antibody [EPR19971] ab214487



重组 RabMAb

★★★★★ 3 Abreviews 5 References 9图像

#### 概述

产品名称 Anti-Claudin 3抗体[EPR19971]

描述 兔单克隆抗体[EPR19971] to Claudin 3

宿主 Rabbit

经测试应用 适用于: WB, IHC-P, ICC/IF, IP, Flow Cyt (Intra)

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: SW480, MCF7 and Caco-2 whole cell lysates; human breast cancer, pancreas, ovary cancer

and fetal kidney lysates. IHC-P: Human pancreas, prostate and breast cancer tissues. ICC/IF:

MCF7 cells. Flow Cyt (intra): MCF7 cells. IP: MCF7 whole cell lysate.

常规说明 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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

### 性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 EPR19971

同种型 lgG

## 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab214487于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	<b>★</b> ★ ★ ★ ★ (1)	1/1000. Detects a band of approximately 20 kDa (predicted molecular weight: 23 kDa).
IHC-P	**** <u>(2)</u>	1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/30.
Flow Cyt (Intra)		1/50.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

靶	砅

功能 Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-

independent cell-adhesion activity.

疾病相关 Note=CLDN3 is located in the Williams-Beuren syndrome (WBS) critical region. WBS results

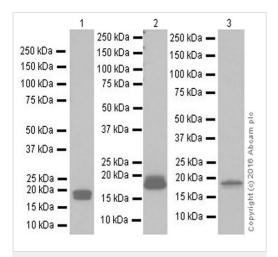
from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-copy repeat sequences

flanking the deleted region.

序列相似性 Belongs to the claudin family.

细胞定位 Cell junction > tight junction. Cell membrane.

图片



Western blot - Anti-Claudin 3 antibody [EPR19971] (ab214487)

**All lanes :** Anti-Claudin 3 antibody [EPR19971] (ab214487) at 1/1000 dilution

**Lane 1 :** SW480 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lane 2 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

**Lane 3 :** Caco-2 (Human colorectal adenocarcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

### **Secondary**

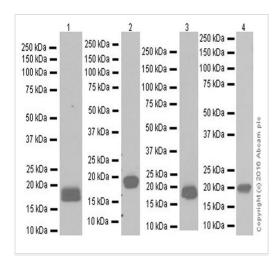
**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 23 kDa **Observed band size:** 20 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.

Doublet bands observed correspond to full length and processed forms of the claudin-3 protein. This is consistent with what has been described in the literature (PMID: 26170992).



Western blot - Anti-Claudin 3 antibody [EPR19971] (ab214487)

**All lanes :** Anti-Claudin 3 antibody [EPR19971] (ab214487) at 1/1000 dilution

Lane 1 : Human breast cancer lysate

Lane 2: Human pancreas lysate

Lane 3: Human ovary cancer lysate

Lane 4: Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/5000 dilution

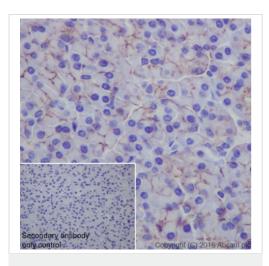
**Predicted band size:** 23 kDa **Observed band size:** 20 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1/2: 1 minute; Lane 3: 3 seconds; Lane 4: 3

minutes.

Doublet bands observed correspond to full length and processed forms of the claudin-3 protein. This is consistent with what has been described in the literature (PMID: 26170992).

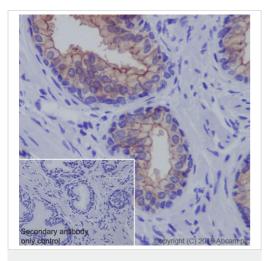


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Claudin 3 antibody
[EPR19971] (ab214487)

Immunohistochemical analysis of paraffin-embedded human pancreas tissue labeling Claudin 3 with ab214487 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on the pancreatic acinar cells of human pancreas is observed. Counter stained with Hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

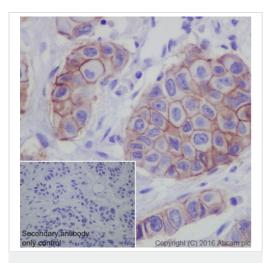


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Claudin 3 antibody
[EPR19971] (ab214487)

Immunohistochemical analysis of paraffin-embedded human prostate tissue labeling Claudin 3 with ab214487 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on the epithelium of human benign prostatic hyperplasia is observed. Counter stained with Hematoxylin.

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

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

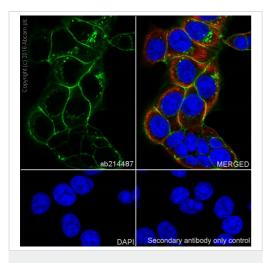


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Claudin 3 antibody
[EPR19971] (ab214487)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling Claudin 3 with ab214487 at 1/250 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on the tumor 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 lgG H&L (HRP) (ab97051) at 1/500 dilution.

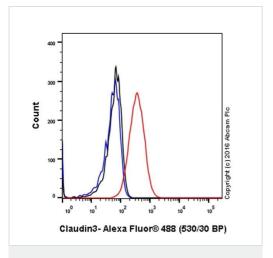
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-Claudin 3 antibody [EPR19971] (ab214487)

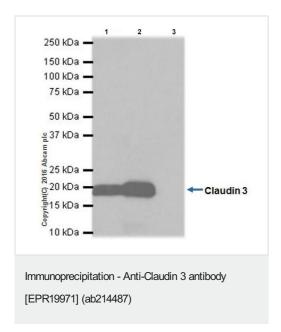
Immunofluorescent analysis of 100% methanol-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling Claudin 3 with ab214487 at 1/100 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing membrane staining on MCF7 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) ab195889) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-Claudin 3 antibody [EPR19971] (ab214487)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling Claudin 3with ab214487 at 1/50 dilution (red) compared withRabbit lgG, monoclonal [EPR25A] - Isotype Control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat Anti-Rabbit lgG (Alexa Fluor® 488) at 1/2000 dilution was used as the secondary antibody.



Claudin 3 was immunoprecipitated from 0.35 mg of MCF7 (Human breast adenocarcinoma cell line) whole cell lysate with ab214487 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab214487 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10,000 dilution

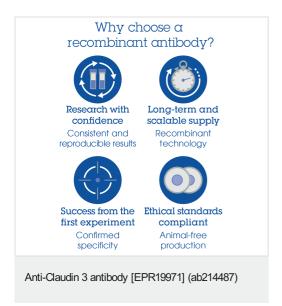
Lane 1: MCF7 whole cell lysate 10µg (Input).

Lane 2: ab214487 IP in MCF7 whole cell lysate.

Lane 3:Rabbit IgG, monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab214487 in MCF7 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 seconds.



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