

## Product datasheet

### Anti-Claudin 3 antibody ab52231

★★★★★ [5 Abreviews](#) [6 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-Claudin 3 antibody
<b>Description</b>	Rabbit polyclonal to Claudin 3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, IP, WB, ICC/IF, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide derived from within amino acids 181 and 220 of Human Claudin-3
<b>General notes</b>	<p>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.</p> <p>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&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituents: PBS, 0.87% Sodium chloride, 50% Glycerol (glycerin, glycerine)</p>
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

#### Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab52231 in the following tested applications.

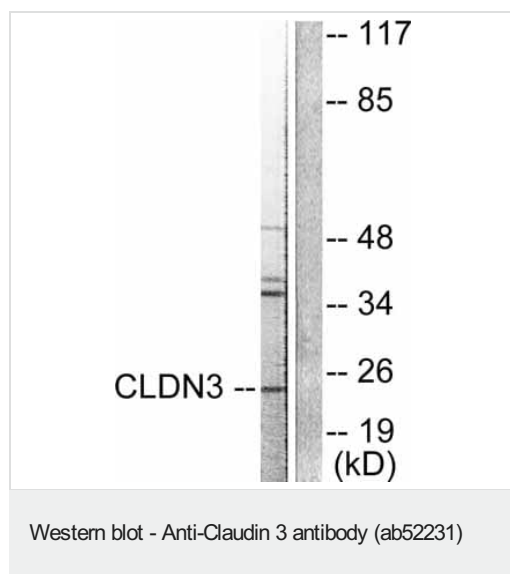
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ELISA		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB	★★★★★ (5)	1/500 - 1/1000. Detects a band of approximately 23 kDa (predicted molecular weight: 23 kDa).
ICC/IF		Use a concentration of 5 µg/ml.
IHC-P		Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

<b>Function</b>	Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the claudin family.
<b>Cellular localization</b>	Cell junction > tight junction. Cell membrane.

## Images



**All lanes :** Anti-Claudin 3 antibody (ab52231) at 1/500 dilution

**Lane 1 :** Extracts from HuvEc cells, untreated.

**Lane 2 :** Extracts from HuvEc cells, treated with the immunizing peptide.

**Predicted band size:** 23 kDa

**Observed band size:** 23 kDa

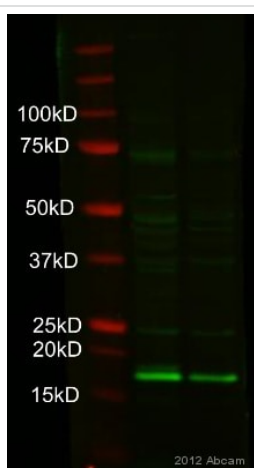
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Claudin 3 antibody (ab52231)

IHC image of ab52231 staining in normal human colon formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab52231, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Immunocytochemistry/ Immunofluorescence - Anti-Claudin 3 antibody (ab52231)

ICC/IF image of ab52231 stained MCF7 cells. The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab52231, 5µg/ml) overnight at +4°C. The secondary antibody (green) was [ab96899](#), DyLight® 488 goat anti-rabbit IgG (H+L) used at a 1/250 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Western blot - Anti-Claudin 3 antibody (ab52231)  
This image is courtesy of an anonymous Abreview

**All lanes :** Anti-Claudin 3 antibody (ab52231)

**Lane 1 :** Human urothelial cells (differentiated)

**Lane 2 :** Human urothelial cells (non-differentiated)

Lysates/proteins at 15 µg per lane.

#### Secondary

**All lanes :** IRDye® 800-conjugated Goat anti-rabbit IgG polyclonal

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 23 kDa

**Exposure time:** 2 minutes

Blocked with 0.1% Milk for 1 hour at 22°C

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

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