


## Product datasheet

# Anti-Claudin 1 antibody ab79404

1 Image

### Overview

<b>Product name</b>	Anti-Claudin 1 antibody
<b>Description</b>	Rabbit polyclonal to Claudin 1
<b>Host species</b>	Rabbit
<b>Specificity</b>	Detects endogenous levels of total Claudin 1 protein.
<b>Tested applications</b>	<b>Suitable for:</b> WB, ELISA
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Synthetic non phosphopeptide (Human) from around the phosphorylation site of tyrosine 210 (GKDY <sup>P</sup> V)
<b>Positive control</b>	HeLa cells, treated with Hu (2nM, 24hours)

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	Preservative: 0.02% Sodium Azide Constituents: 50% Glycerol, PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), 150mM Sodium chloride, pH 7.4
<b>Purity</b>	Immunogen affinity purified
<b>Purification notes</b>	Purified from rabbit antiserum by affinity chromatography using epitope specific immunogen.
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

Our [Abpromise guarantee](#) covers the use of **ab79404** 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
WB		1/500 - 1/1000. Detects a band of approximately 30 kDa (predicted molecular weight: 23 kDa).

Application	Abreviews	Notes
ELISA		1/20000.

## Target

### Function

Claudins function as major constituents of the tight junction complexes that regulate the permeability of epithelia. While some claudin family members play essential roles in the formation of impermeable barriers, others mediate the permeability to ions and small molecules. Often, several claudin family members are coexpressed and interact with each other, and this determines the overall permeability. CLDN1 is required to prevent the paracellular diffusion of small molecules through tight junctions in the epidermis and is required for the normal barrier function of the skin. Required for normal water homeostasis and to prevent excessive water loss through the skin, probably via an indirect effect on the expression levels of other proteins, since CLDN1 itself seems to be dispensable for water barrier formation in keratinocyte tight junctions (PubMed:23407391).

(Microbial infection) Acts as a receptor for hepatitis C virus in hepatocytes (PubMed:17325668). Acts as a receptor for dengue virus (PubMed:24074594).

### Tissue specificity

Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

### Involvement in disease

Ichthyosis-sclerosing cholangitis neonatal syndrome

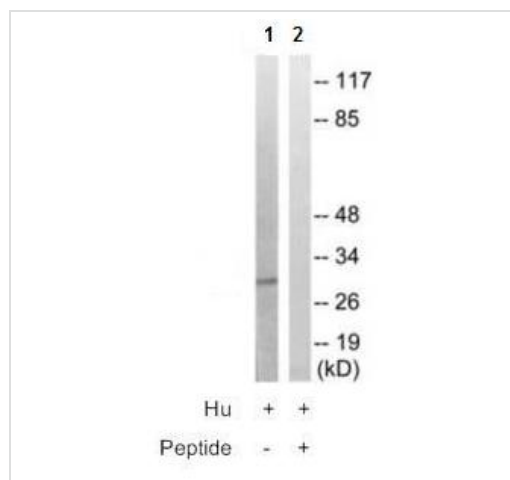
### Sequence similarities

Belongs to the claudin family.

### Cellular localization

Cell junction, tight junction. Cell membrane.

## Images



Western blot - Anti-Claudin 1 antibody (ab79404)

**All lanes :** Anti-Claudin 1 antibody (ab79404)  
at 1/500 dilution

**Lane 1 :** HeLa cell extract treated  
with Hu (2nM, 24hours)

**Lane 2 :** HeLa cell extract treated  
with Hu (2nM, 24hours) with immunising  
peptide at 10 µg

Lysates/proteins at 30 µg per lane.

**Predicted band size:** 23 kDa

**Observed band size:** 30 kDa

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