

**Claudin 1 Antibody**  
Rabbit pAb  
Catalog # AP93214

## Specification

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### Claudin 1 Antibody - Product Information

Application	WB, IHC
Primary Accession	<a href="#">O95832</a>
Reactivity	Rat
Clonality	Polyclonal
<b>Other Names</b>	
Claudin1; CLD1;CLDN 1; ILVASC; SEMP1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	22744 Da

### Claudin 1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Claudin 1
Description	The claudin family is composed of 23 integral membrane proteins, and their expression, which varies among tissue types, may determine both the strength and properties of the epithelial barrier. Alteration in claudin protein expression pattern is associated with several types of cancer. Claudin-1 is expressed primarily in keratinocytes and normal mammary epithelial cells, but is absent or reduced in breast carcinomas and breast cancer cell lines.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### Claudin 1 Antibody - Protein Information

**Name** CLDN1

**Synonyms** CLD1, SEMP1

#### 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:<a href="http://www.uniprot.org/citations/23407391" target="\_blank">23407391</a>).

**Cellular Location**

Cell junction, tight junction. Cell membrane; Multi-pass membrane protein. Basolateral cell membrane Note=Associates with CD81 and the CLDN1-CD81 complex localizes to the basolateral cell membrane.

**Tissue Location**

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

**Claudin 1 Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Claudin 1 Antibody - Images**