

Claudin 1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50636**Specification**

Claudin 1 Antibody - Product Information

Application	WB, IHC
Primary Accession	O95832
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23 KDa
Antigen Region	180-211

Claudin 1 Antibody - Additional Information**Gene ID** 9076**Other Names**

Claudin-1, Senescence-associated epithelial membrane protein, CLDN1, CLD1, SEMP1

Dilution

WB~~1:1000

IHC~~1:50-1:100

FormatRabbit IgG in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

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:23407391).

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

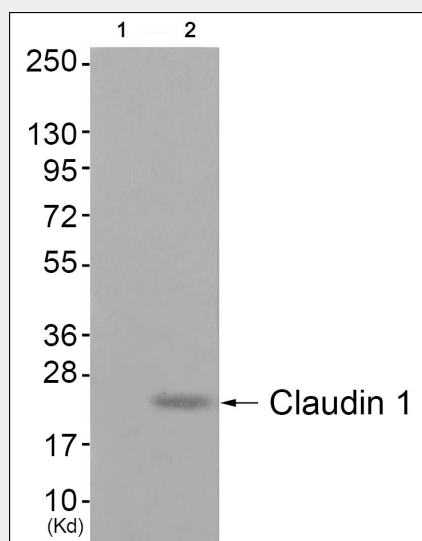
Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

Claudin 1 Antibody - Protocols

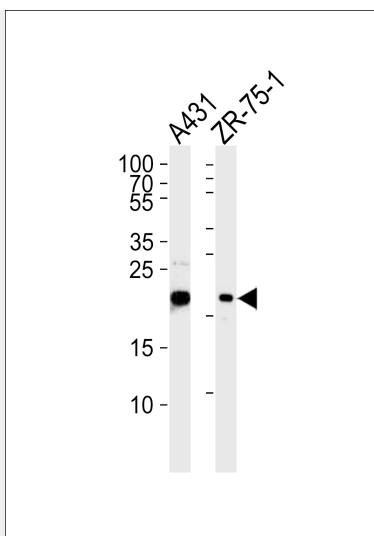
Provided below are standard protocols that you may find useful for product applications.

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

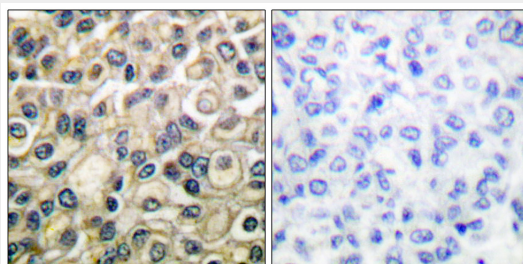
Claudin 1 Antibody - Images



Western blot analysis of extracts from 293 cells (Lane 2), using Claudin 1 Antibody. The lane on the left is treated with synthesized peptide.



Western blot analysis of lysates from A431,ZR-75-1 cell line (from left to right),using Claudin 1 Antibody(AP50636). AP50636 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Claudin 1 antibody .

Claudin 1 Antibody - Background

Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity (By similarity). Acts as a co- receptor for HCV entry into hepatic cells.

Claudin 1 Antibody - References

Swisshelm K.L.,et al.Gene 226:285-295(1999).
Mitic L.M.,et al.Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases.
Halford S.,et al.Cytogenet. Cell Genet. 88:217-217(2000).
Kraemer F.,et al.Hum. Genet. 107:249-256(2000).
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).