

CLDN1 / Claudin 1 Antibody (clone 1C5-D9)
Mouse Monoclonal Antibody
Catalog # ALS13449**Specification**

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - Product Information

Application	WB, IHC
Primary Accession	O95832
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	23kDa KDa

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - Additional Information**Gene ID** 9076**Other Names**

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

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) is for research use only and not for use in diagnostic or therapeutic procedures.

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - 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.

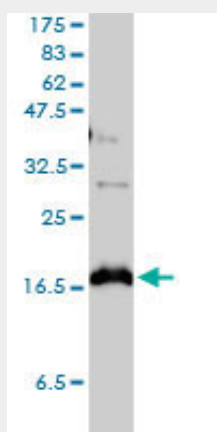
Tissue Location

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

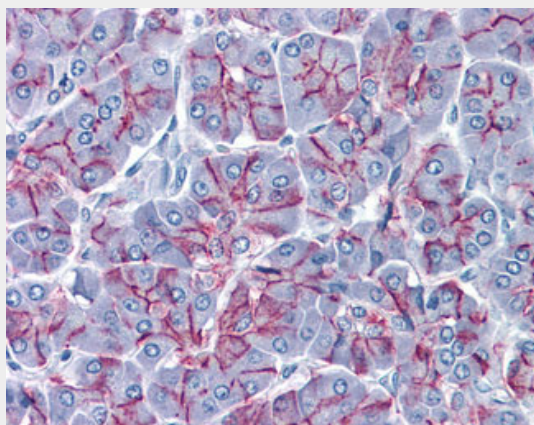
CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - Protocols

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](#)

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - Images

CLDN1 monoclonal antibody, clone 1C5-D9. Western blot of CLDN1 expression in PRC/PRF/5.



Anti-CLDN1 / Claudin 1 antibody IHC of human pancreas.

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - Background

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). CLDN1 acts as a coreceptor for HCV entry into hepatic cells.

CLDN1 / Claudin 1 Antibody (clone 1C5-D9) - 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).