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CLDN1 / Claudin 1 Antibody (aa162-211)

Rabbit Polyclonal Antibody
Catalog # ALS14477

Specification

CLDN1 / Claudin 1 Antibody (aa162-211) - Product Information

Application	**WB, IHC-P, E**
Primary Accession	O95832
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**23kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A**

CLDN1 / Claudin 1 Antibody (aa162-211) - Additional Information

Gene ID 9076

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

Target/Specificity
Claudin 1 Antibody detects endogenous levels of total Claudin 1 protein.

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions
CLDN1 / Claudin 1 Antibody (aa162-211) is for research use only and not for use in diagnostic or therapeutic procedures.

CLDN1 / Claudin 1 Antibody (aa162-211) - 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.

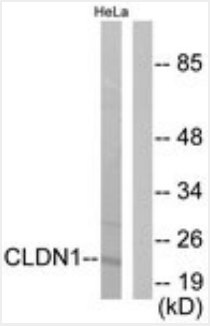
Volume
50 µl

CLDN1 / Claudin 1 Antibody (aa162-211) - Protocols

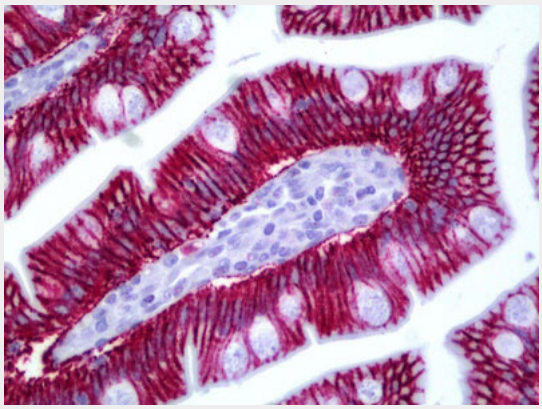
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLDN1 / Claudin 1 Antibody (aa162-211) - Images



Western blot of extracts from HeLa cells, using Claudin 1 Antibody.



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Anti-CLDN1 / Claudin 1 antibody IHC of human small intestine.

CLDN1 / Claudin 1 Antibody (aa162-211) - 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 (aa162-211) - 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).