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Claudin 1 (CLDN1) Antibody (Loop2)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6308b

Specification

Claudin 1 (CLDN1) Antibody (Loop2) - Product Information

Application	**WB,E**
Primary Accession	O95832
Other Accession	P56745, Q6L708
Reactivity	**Human, Mouse**
Predicted	**Bovine, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**22744**
Antigen Region	**122-163**

Claudin 1 (CLDN1) Antibody (Loop2) - Additional Information

Gene ID 9076

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

Target/Specificity
This Claudin 1(CLDN1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 122-163 amino acids from human Claudin 1(CLDN1).

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Claudin 1 (CLDN1) Antibody (Loop2) is for research use only and not for use in diagnostic or therapeutic procedures.

Claudin 1 (CLDN1) Antibody (Loop2) - 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.

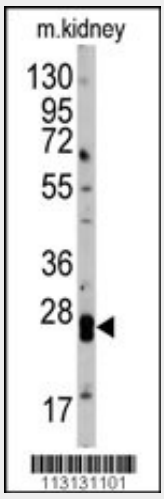
Tissue Location
Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

Claudin 1 (CLDN1) Antibody (Loop2) - 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

Claudin 1 (CLDN1) Antibody (Loop2) - Images



Western blot analysis of anti-hCLDN1-Loop2 Pab (Cat. #AP6308b) in mouse kidney tissue lysates (35ug/lane). CLDN1(arrow) was detected using the purified Pab.

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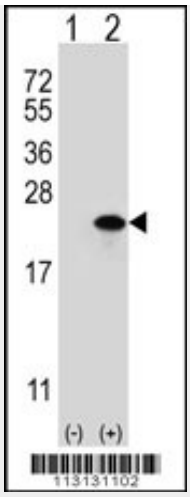

Western blot analysis of CLDN1 (arrow) using rabbit polyclonal CLDN1 Antibody (Loop2) (Cat. #AP6308b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CLDN1 gene.

Claudin 1 (CLDN1) Antibody (Loop2) - Background

CLDN1, a member of the claudin family, is an integral membrane protein and a component of tight junction strands. Tight junctions represent one mode of cell-to-cell adhesion in epithelial or endothelial cell sheets, forming continuous seals around cells and serving as a physical barrier to prevent solutes and water from passing freely through the paracellular space. These junctions are comprised of sets of continuous networking strands in the outwardly facing cytoplasmic leaflet, with complementary grooves in the inwardly facing extracytoplasmic leaflet. Loss of function mutations result in neonatal ichthyosis-sclerosing cholangitis syndrome.

Claudin 1 (CLDN1) Antibody (Loop2) - References

Kinugasa,T., Anticancer Res. 27 (6A), 3729-3734 (2007)
Paschoud,S., Mod. Pathol. 20 (9), 947-954 (2007)
Morohashi,S., Int. J. Mol. Med. 20 (2), 139-143 (2007)
Krajewska,M., Prostate 67 (9), 907-910 (2007)