

Anti-Claudin 1 CLDN1 Rabbit Monoclonal Antibody
Catalog # ABO14010**Specification**

Anti-Claudin 1 CLDN1 Rabbit Monoclonal Antibody - Product Information

Application	WB
Primary Accession	O95832
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Claudin 1 CLDN1 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human, Mouse, Rat.

Anti-Claudin 1 CLDN1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 9076

Other Names

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

Calculated MW

22744 MW KDa

Application Details

WB 1:500-1:2000

Subcellular Localization

Cell junction, tight junction. Cell membrane; Multi-pass membrane protein.

Tissue Specificity

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

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen

A synthesized peptide derived from human Claudin 1

Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-Claudin 1 CLDN1 Rabbit Monoclonal 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

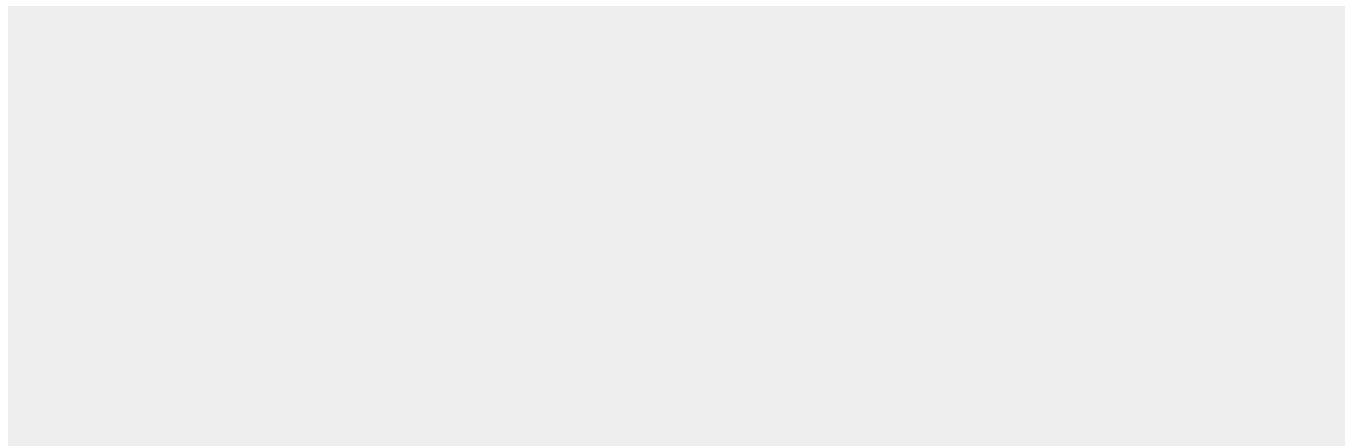
Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

Anti-Claudin 1 CLDN1 Rabbit Monoclonal 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](#)

Anti-Claudin 1 CLDN1 Rabbit Monoclonal Antibody - Images



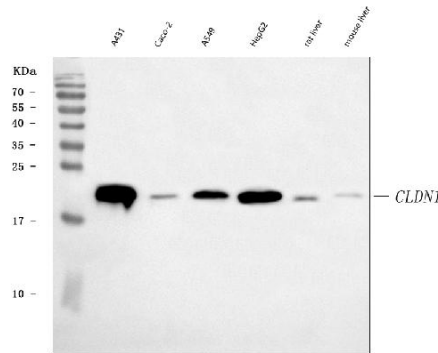


Figure 1. Western blot analysis of Claudin 1 using anti-Claudin 1 antibody (M01585). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,
Lane 2: human Caco-2 whole cell lysates,
Lane 3: human A549 whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: rat liver tissue lysates,
Lane 6: mouse liver tissue lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-Claudin 1 antigen affinity purified monoclonal antibody (Catalog # M01585) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Claudin 1 at approximately 23 kDa. The expected band size for Claudin 1 is at 23 kDa.