

# Rabbit Anti-Claudin 1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52052

## **Specification**

### Rabbit Anti-Claudin 1 Polyclonal Antibody - Product Information

Application WB, IHC-P Primary Accession 088551

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 22881

### Rabbit Anti-Claudin 1 Polyclonal Antibody - Additional Information

**Gene ID 12737** 

### **Other Names**

AI596271; Claudin-1; Cldn1

#### **Dilution**

<span class ="dilution\_WB">WB~~1:100~1:500</span><br \> <span class ="dilution\_IHC-P">IHC-P~~1:100~1:500</span>

#### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## Rabbit Anti-Claudin 1 Polyclonal Antibody - Protein Information

## Name Cldn1

### **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.

#### **Cellular Location**

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



membrane {ECO:0000250|UniProtKB:O95832}. Note=Associates with CD81 and the CLDN1-CD81 complex localizes to the basolateral cell membrane {ECO:0000250|UniProtKB:O95832}

#### **Tissue Location**

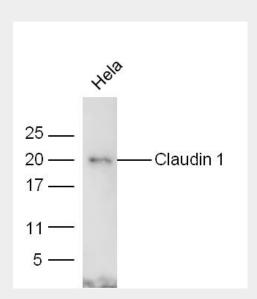
Detected in epidermis and liver (at protein level). Widely expressed, with highest levels in liver and kidney

# Rabbit Anti-Claudin 1 Polyclonal Antibody - Protocols

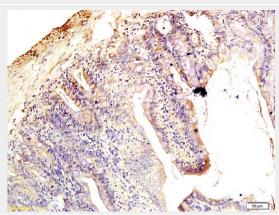
Provided below are standard protocols that you may find useful for product applications.

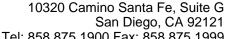
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Rabbit Anti-Claudin 1 Polyclonal Antibody - Images



HeLa lysates probed with Rabbit Anti-Claudin 1 Polyclonal Antibody (AP52052) at 1:300 overnight at  $4^{\circ}$ C. Followed by conjugation to secondary antibody at 1:5000 for 90 min at  $37^{\circ}$ C.







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Formalin-fixed and paraffin embedded rat intestine tissue labeled with Anti-Claudin 1 Polyclonal Antibody, Unconjugated (AP52052) followed by conjugation to the secondary antibody and DAB staining

# Rabbit Anti-Claudin 1 Polyclonal Antibody - 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.