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Anti-Claudin 1 Antibody
Rabbit polyclonal antibody to Claudin 1
Catalog # AP59766

Specification

Anti-Claudin 1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O95832
Other Accession	O88551
Reactivity	**Human, Mouse, Rat, Bovine, SARS, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**22744**

Anti-Claudin 1 Antibody - Additional Information

Gene ID 9076

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

Target/Specificity
Recognizes endogenous levels of Claudin 1 protein.

Dilution
WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)
IHC~~1:100~500

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-Claudin 1 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.

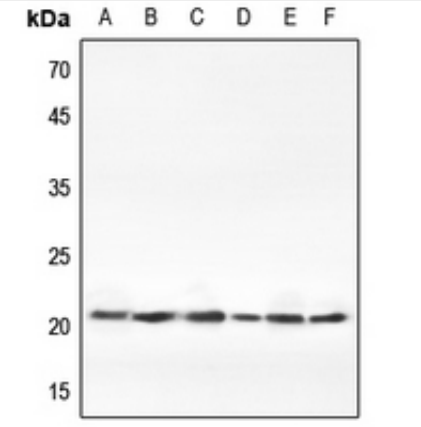
Tissue Location
Strongly expressed in liver and kidney. Expressed in heart, brain, spleen, lung and testis.

Anti-Claudin 1 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 Cytomety
- Cell Culture

Anti-Claudin 1 Antibody - Images



Western blot analysis of Claudin 1 expression in Hela (A), H1688 (B), mouse liver (C), mouse kidney (D), rat liver (E), rat kidney (F) whole cell lysates.

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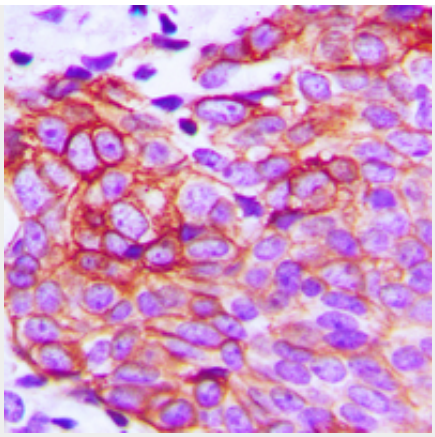

Immunohistochemical analysis of Claudin 1 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-Claudin 1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Claudin 1. The exact sequence is proprietary.