

#### Claudin 2 (CLDN2) Antibody (C-term) Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6309b

### Specification

# Claudin 2 (CLDN2) Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region

WB,E <u>P57739</u> <u>NP\_065117</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 190-220

### Claudin 2 (CLDN2) Antibody (C-term) - Additional Information

Gene ID 9075

Other Names Claudin-2, SP82, CLDN2

Target/Specificity

This Claudin 2 (CLDN2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 190-220 amino acids from the C-terminal region of human Claudin 2 (CLDN2).

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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 2 (CLDN2) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# Claudin 2 (CLDN2) Antibody (C-term) - Protein Information

Name CLDN2 {ECO:0000303|PubMed:31320686, ECO:0000312|HGNC:HGNC:2041}

Function Forms paracellular channels: polymerizes in tight junction strands with cation- and



water-selective channels through the strands, conveying epithelial permeability in a process known as paracellular tight junction permeability (PubMed:<u>20460438</u>, PubMed:<u>36008380</u>). In intestinal epithelium, allows for sodium and water fluxes from the peritoneal side to the lumen of the intestine to regulate nutrient absorption and clear enteric pathogens as part of mucosal immune response (By similarity). In kidney, allows passive sodium and calcium reabsorption across proximal tubules from the lumen back to the bloodstream (By similarity). In the hepatobiliary tract, allows paracellular water and cation fluxes in the hepatic perivenous areas and biliary epithelium to generate bile flow and maintain osmotic gradients (By similarity).

**Cellular Location** Cell junction, tight junction. Cell membrane {ECO:0000250|UniProtKB:088552}; Multi-pass membrane protein

# Claudin 2 (CLDN2) Antibody (C-term) - 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
- <u>Cell Culture</u>

Claudin 2 (CLDN2) Antibody (C-term) - Images

m.kidney	
150	
75	
50	
37	
25	-4
50 37	-4

Western blot analysis of anti-CLDN2 Antibody (C-term) (Cat. #AP6309b) in mouse kidney tissue lysates (35ug/lane). CLDN2(arrow) was detected using the purified Pab.

#### Claudin 2 (CLDN2) Antibody (C-term) - Background

Members of the claudin protein family, such as CLDN2, are expressed in an organ-specific manner and regulate the tissue-specific physiologic properties of tight junctions.

#### Claudin 2 (CLDN2) Antibody (C-term) - References

Morita,K., Proc. Natl. Acad. Sci. U.S.A. 96 (2), 511-516 (1999) Furuse,M., J. Cell Biol. 141 (7), 1539-1550 (1998)