10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Claudin 2 (CLDN2) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6309a

Specification

Claudin 2 (CLDN2) Antibody (N-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P57739
Other Accession	O88552, Q765P1, NP_065117
Reactivity	**Human**
Predicted	**Bovine, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**135-164**

Claudin 2 (CLDN2) Antibody (N-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 135-164 amino acids from the N-terminal region of human Claudin 2 (CLDN2).

Dilution
IHC-P~~1:10~50
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 (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Claudin 2 (CLDN2) Antibody (N-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:20460438, PubMed:36008380). 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).

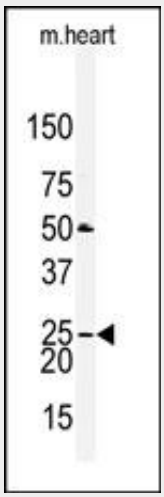
Cellular Location
Cell junction, tight junction. Cell membrane {ECO:0000250|UniProtKB:O88552}; Multi-pass membrane protein

Claudin 2 (CLDN2) Antibody (N-term) - Protocols

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

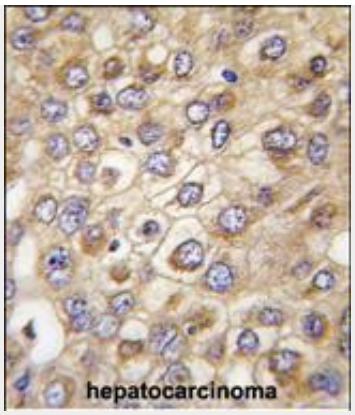
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



Western blot analysis of anti-CLDN2 Antibody (N-term) (Cat. #AP6309a) in mouse heart tissue lysates (35ug/lane). CLDN2(arrow) was detected using the purified Pab.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with CLDN2 (Human N-term) (Cat.#AP6309a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Claudin 2 (CLDN2) Antibody (N-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 (N-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)