

Claudin 2 (CLDN2) Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6309a

Product Information

Application	WB, IHC-P, E
Primary Accession	P57739
Other Accession	O88552 , Q765P1 , NP_065117
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	24549
Antigen Region	135-164

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	WB~~1:1000 IHC-P~~1:100~500 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.

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

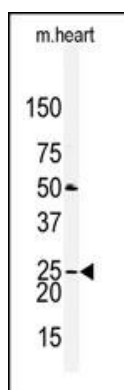
Background

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.

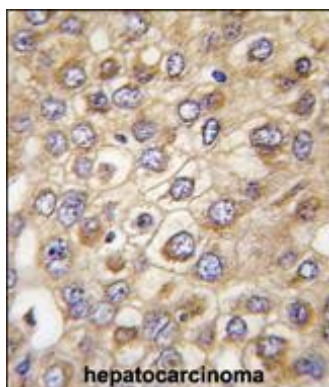
References

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

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.



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.