

Claudin 2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP51093

Product Information

Application	WB, ICC, IHC-P
Primary Accession	P57739
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24549

Additional Information

Gene ID	9075
Other Names	Claudin-2, SP82, CLDN2
Dilution	WB~~1:1000 ICC~~N/A IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity (By similarity).

References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Wan D.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:15724-15729(2004).
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