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

Phospho-CLDN2(Y224) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3639a

Product Information

Application	DB, E
Primary Accession	P57739
Other Accession	NP_065117
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16647
Calculated MW	24549

Additional Information

Gene ID	9075
Other Names	Claudin-2, SP82, CLDN2
Target/Specificity	This CLDN2 Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y224 of human CLDN2.
Dilution	DB~~1:500 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	Phospho-CLDN2(Y224) Antibody 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

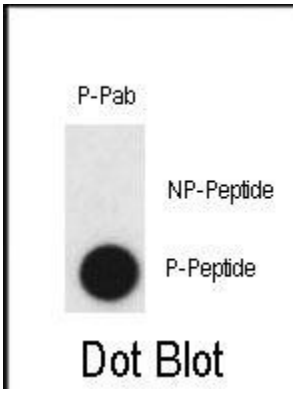
Background

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



Dot blot analysis of anti-Phospho-CLDN2-pY224 Antibody (Cat.#AP3639a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.