

Phospho-CLDN2(Y224) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3639a

Specification

Phospho-CLDN2(Y224) Antibody - Product Information

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

Phospho-CLDN2(Y224) Antibody - 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.

Phospho-CLDN2(Y224) Antibody - 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

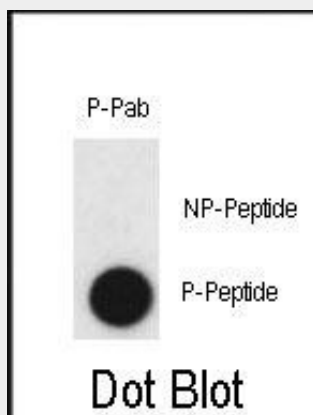
Cell junction, tight junction. Cell membrane {ECO:0000250|UniProtKB:O88552}; Multi-pass membrane protein

Phospho-CLDN2(Y224) Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Phospho-CLDN2(Y224) Antibody - 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.

Phospho-CLDN2(Y224) Antibody - 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.

Phospho-CLDN2(Y224) Antibody - 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)