abcam

ab211439

Anti-Claudin 8 antibody

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human CLDN8 aa 100-200 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link P56748
Purification technique	Affinity purification Immunogen
Concentration	0.25 - 0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/75
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information CLDN8

Function	Can associate with other claudins to regulate tight junction structural and functional strand dynamics (By similarity). May coassemble with CLDN4 into tight junction strands containing anion-selective channels that convey paracellular chloride permeability in renal collecting ducts (By similarity) (PubMed:36008380). Cannot form tight junction strands on its own (PubMed:36008380).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Claudin 8 also known as CLDN8 is a protein that functions as a critical component of tight junction strands which are integral to maintaining cell-to-cell adhesion. This protein belongs to the claudin family characterized by their role in forming the backbone of tight junctions. Claudin 8 has a molecular mass of approximately 23 kDa. It is expressed in several tissues including the kidney and gastrointestinal tract epithelium where it regulates selective permeability.
Biological function summary	Claudin 8 contributes to the creation and maintenance of the barrier function of epithelial layers. It integrates into tight junction complexes collaborating with other claudins and occludin to establish selective paracellular transport. This organization allows for the regulation of movement of ions and small solutes between cells essential in controlling the internal environment of organs.
Pathways	Research shows Claudin 8 plays a role in epithelial and endothelial cell permeability. It is involved in the calcium signaling pathway and the MAPK (Mitogen-Activated Protein Kinase) pathway both important for cell signaling and response to extracellular stimuli. Within these pathways Claudin 8 interacts with proteins such as ZO-1 (Zonula Occludens-1) to modulate tight junction integrity and function.
Associated diseases and disorders	Defects or changes in Claudin 8 expression have associations with conditions like hypermagnesemia with seizures and mental retardation as well as certain types of cancer. In these contexts alterations in the protein's function can disrupt normal paracellular transport and contribute to disease pathology. Additionally Claudin 8 also links with occludin another component of tight junctions suggesting that aberrant interactions between these proteins might underpin certain disease processes.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

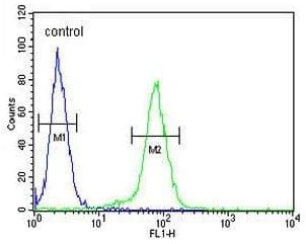
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

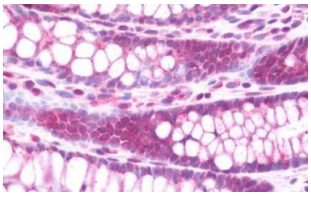
2 product images



Flow Cytometry (Intracellular) - Anti-Claudin 8 antibody (ab211439)

Claudin 8 Flow Cytometry (Intracellular) staining using rabbit Anti-Claudin 8 antibody

Intracellular flow cytometric analysis of 293 cells labeling Claudin 8 with ab211439 at 1/10 dilution (right histogram) compared to a negative control (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Claudin 8 antibody (ab211439)

Claudin 8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-Claudin 8 antibody

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human colon tissue labeling Claudin 8 with ab211439 at 1/75 dilution.

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