abcam

ab187116

Anti-Claudin 9 antibody [YD4E9] - BSA and Azide free

Anti-Claudin 9 antibody [YD4E9] - BSA and Azide free (ab187116) is a rat monoclonal antibody provided in a PBS only buffer for easy conjugation detecting Claudin 9 in **Flow Cytometry, ELISA**. Suitable for **Human**.

- BSA, sodium azide, and glycerol-free for easy conjugation

Key facts

Isotype	IgG2b
Host species	Rat
Storage buffer	pH: 7.2 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human Claudin 9. Database link O95484
Carrier free	Yes
Clone number	YD4E9
Purification technique	Affinity purification Protein G
Concentration	2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1.2 µg for 10^6 Cells
Notes	ab18536 - Rat monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse
Dilution info	-
Notes	-

cELISA

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information Claudin 9

Function	Plays a major role in tight junction-specific obliteration of the intercellular space, through calcium-independent cell-adhesion activity. (Microbial infection) Acts as a receptor for hepatitis C virus (HCV) entry into hepatic cells.

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

Notes

What is this antibody validated in?
Anti-Claudin 9 antibody [YD4E9] - BSA and Azide free (ab187116) is a rat monoclonal antibody and is validated for use in Flow Cytometry (Flow Cyt), ELISA in Human samples.

Supplementary info

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

Activity summary	Claudin-9 also known as CLDN9 is a member of the claudin protein family. This protein plays an important role in forming tight junctions which are responsible for regulating paracellular permeability in epithelial and endothelial cell sheets. Claudin-9 has a predicted mass of approximately 23 kDa. It is primarily expressed in the inner ear specifically in the cochlea and has vital functions in maintaining the permeability barrier and the structural integrity of cell layers.
Biological function summary	Claudin-9 engages in maintaining the tight junction barrier function of epithelial cells. It operates within a complex interacting closely with other claudin family members to establish the selective paracellular barrier important for ion balance and cellular homeostasis. These interactions allow claudin-9 to contribute significantly to the physiology of tissues where it is expressed impacting hearing function through ion permeability regulation in the cochlear epithelium.
Pathways	Claudin-9 is an integral component of pathways involved in cell-to-cell adhesion and cell polarity maintenance. It participates prominently in the tight junction pathway which is tightly regulated for maintaining the fundamental structure of epithelial layers. In this context it works alongside related proteins such as occludin and certain zonula occludens proteins which fortify the overall structure and signaling pathways essential for epithelial cell function.
Associated diseases and disorders	Mutations or dysregulation of claudin-9 have been implicated in particular hearing impairments. Sensorineural hearing loss a condition attributed to malfunction in the inner ear's sensory parts aligns with malfunctions in claudin-9 activity. This condition can also have connections to other proteins involved in cochlear biology

such as K+ channel proteins indicating how disruptions in tight junction function can affect ion homeostasis and lead to auditory dysfunction.

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

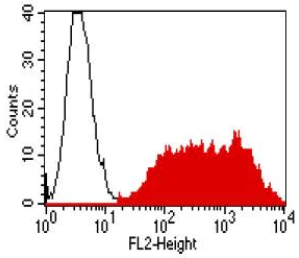
We do not recommend this combination. It is not covered by our product promise.

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.

1 product image



Flow Cytometry - Anti-Claudin 9 antibody [YD4E9] - BSA and Azide free (ab187116)

Flow cytometry analysis of BOSC23 cells transiently transfected with an expression vector encoding either Claudin 9 (red curve) or a control transfectant; using ab187116 at 1.2 µg/10^6 cells. PE-conjugated secondary antibodies were used for the analysis.

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