abcam

**ab187119**

# Anti-Claudin 6 + Claudin 9 antibody [YD9H8]

## Key facts

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| **Isotype** | IgG2b |
| **Host species** | Rat |
| **Storage buffer** | pH: 7.2 Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | Native Full Length Protein corresponding to Human CLDN6. Database link P56747 |
| **Carrier free** | Yes |
| **Clone number** | YD9H8 |
| **Purification technique** | Affinity purification Protein G |
| **Concentration** | 2 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt

### Tested

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| **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. |

## Target data

See full target information CLDN6

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| **Function** | Plays a major role in tight junction-specific obliteration of the intercellular space. (Microbial infection) Acts as a receptor for hepatitis C virus (HCV) entry into hepatic cells. |

## Storage

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| **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.

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| **Activity summary** | Claudin 6 and Claudin 9 are integral membrane proteins that function as key components of tight junctions acting mechanically to regulate the paracellular barrier permeability in epithelial cells. These proteins which weigh approximately 23 kDa and 22 kDa respectively form networks that control the passage of ions and small molecules in tissue barriers. Claudin 6 (also known as CLDN6) is expressed in various tissues during embryonic development but shows limited presence in adult tissues. Claudin 9 (also recognized by its gene name CLDN9) displays expression in inner ear cells and other specific epithelial regions. |
| **Biological function summary** | These proteins help maintain tissue integrity by creating selective barriers that influence ion selectivity and cellular polarity. Claudin 6 and Claudin 9 are part of larger tight junction complexes that include other claudin family members and associated proteins like occludin and ZO-1. These complexes are essential for maintaining the proper function of epithelial and endothelial tissues ensuring that cells coordinate efficiently in forming structured tissue layers. |
| **Pathways** | The engagement of Claudin 6 and Claudin 9 in tight junction pathways impacts epithelial barrier processes and various signaling pathways. They play roles in the regulation of epithelial cell migration and proliferation through connections to |

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| | proteins such as ZO-1 and influence signal transduction cascades like the Wnt/β-catenin pathway. These interactions highlight their significances in maintaining homeostasis and responding to physiological stimuli. |
| **Associated diseases and disorders** | Alterations in Claudin 6 and Claudin 9 expression or function associate with conditions like cancer and hearing loss. Dysregulation of Claudin 6 has been linked to several cancers affecting tumor progression and metastasis often interacting with proteins such as E-cadherin. Claudin 9's role in hearing connects to its function in maintaining the ion balance within the cochlea and malfunction can result in nonsyndromic hearing loss possibly in conjunction with other tight junction proteins like claudin 14. |

## 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**

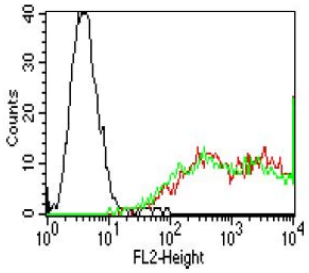
We do not recommend this combination. It is not covered by our product promise.

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.

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## 1 product image




## Flow Cytometry - Anti-Claudin 6 + Claudin 9 antibody [YD9H8] (ab187119)

Flow cytometry analysis of BOSC23 cells transiently transfected with expression vectors encoding either Claudin 9 (red curve), Claudin 6 (green curve) or a control transfectant; using ab187119 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'.