abcam

ab124803

Anti-Cadherin 9 antibody [EPR5113]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR5113
Purification technique	Affinity purification Protein A
Dissociation constant	2.4×10^{-11} M
Concentration	2.085 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

ICC/IF

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/1000 - 1/10000
Notes	-

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Rat
Dilution info	-
Notes	-

IHC-P

Not recommended

Species	Mouse, Human, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/100 - 1/500
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

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

Predicted

Species	Rat
Dilution info	-
Notes	-

Target data

See full target information CDH9

Function	Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Storage information	Stable for 12 months at -20°C

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

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

Activity summary	Cadherin-9 also known as CDH9 is a classical cadherin protein with a critical role in cell adhesion. This protein has a molecular mass of approximately 130 kDa. Cadherin-9 is part of the cadherin superfamily characterized by calcium-dependent cell-cell adhesion. It is expressed in neural tissues particularly within the brain where it facilitates neuron-neuron adhesion by forming adherens junctions. This adhesive function is essential for maintaining proper cellular architecture in tissues.
Biological function summary	Cadherin-9 contributes to the establishment and maintenance of cell-cell junctions. It is not part of a complex but associates strongly with other cadherin proteins maintaining tissue structure and signaling within cadherin-mediated junctions. The protein's adhesive properties are critical to neural development where it influences axonal guidance synapse formation and the stabilization of neuronal circuits. This role ensures accurate neural connectivity essential for proper brain functioning.
Pathways	The role of Cadherin-9 connects to key signaling pathways involving Wnt and calcium-dependent pathways. Within these pathways Cadherin-9 interacts with proteins like beta-catenin which links to the intracellular domain of cadherins at cell junctions and is involved in signal transduction. The interaction of Cadherin-9 within these pathways implicates it in the regulation of cellular activities like differentiation proliferation and cell polarity which are necessary for proper tissue development and homeostasis.
Associated diseases and disorders	Cadherin-9 shows association with neurodevelopmental disorders such as autism and intellectual disabilities. In these conditions abnormal Cadherin-9 expression or function affects neuronal connectivity and synaptic stability. The protein also relates to the protein neuroligin which plays a role in synapse formation and is implicated in autism spectrum disorders. The Cadherin-9 and neuroligin interaction suggests pathways where disrupted cell adhesion and signaling impact neural circuitry formation and cognitive development.

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.

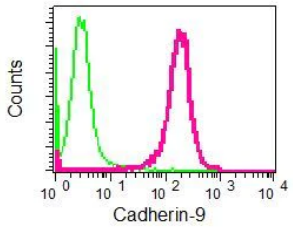
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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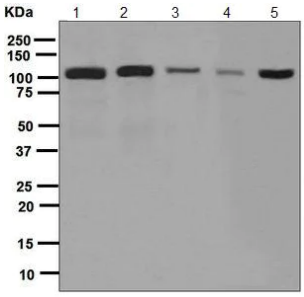
3 product images



Flow Cytometry (Intracellular) - Anti-Cadherin 9 antibody [EPR5113] (ab124803)

Cadherin 9 Flow Cytometry (Intracellular) staining using rabbit Anti-Cadherin 9 antibody

Intracellular flow cytometric analysis of permeabilized 293T cells using ab124803 at 1/100 dilution (red) or a rabbit IgG (negative) (green).



Western blot - Anti-Cadherin 9 antibody [EPR5113] (ab124803)

Cadherin 9 Western blot staining using rabbit Anti-Cadherin 9 antibody

All lanes:
Western blot - Anti-Cadherin 9 antibody [EPR5113] (ab124803) at 1/1000 dilution

Lane 1:
293T (Human embryonic kidney epithelial cell) cell lysate at 10 µg

Lane 2:
U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cell lysate at 10 µg

Lane 3:

Human testis lysate at 10 µg

Lane 4:
NIH/3T3 cell lysate at 10 µg

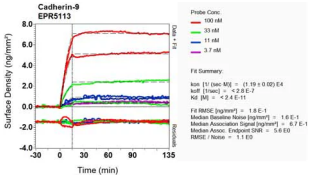
Lane 5:
Caco-2 cell lysate at 10 µg

Secondary

All lanes:
HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 88 kDa

Observed band size: 110 kDa



OI-RD Scanning - Anti-Cadherin 9 antibody [EPR5113] (ab124803)

We have systematically measured KD (the equilibrium dissociation constant between the antibody and its antigen), of more than 840 recombinant antibodies to assess not only their individual KD values but also to see the average affinity of antibody. Based on the comparison with published literature values for mouse monoclonal antibodies, Recombinant antibodies appear to be on average 1-2 order of magnitude higher affinity.

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