abcam

ab89900

Anti-P cadherin antibody [MM0508-9V11]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Lyophilized
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human CDH3. The exact immunogen used to generate this antibody is proprietary information. Database link P22223
Clone number	MM0508-9V11
Purification technique	Affinity purification Protein G
Reconstitution	reconstitute with PBS at 200µL
Purification notes	filter sterilised

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/50 - 1/200
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	1/500 - 1/1000
Notes	-

Target data

See full target information CDH3

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	Blue Ice
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	P cadherin also known as cadherin-3 or CDH3 is a calcium-dependent cell-cell adhesion glycoprotein. Scientists often refer to it as P-cadherin and it belongs to the cadherin protein family which includes other members like E-cadherin and N-cadherin. The molecular mass of P cadherin is approximately 120 kDa. It is mainly expressed in epithelial tissues including the basal side of scalp and mammary glands acting as an important mediator in maintaining tissue integrity.
Biological function summary	P cadherin plays an important role in facilitating cell adhesion and establishing proper tissue architecture. It often forms part of a larger complex by interacting with catenins including beta-catenin which helps link the cadherin itself to the actin cytoskeleton. Through these interactions P cadherin influences processes

	such as cell sorting boundary formation and cell polarization essential for embryonic development and tissue homeostasis.
Pathways	Cell adhesion and signal transduction are influenced by P cadherin through its involvement in the Wnt signaling pathway and cadherin-catenin complex. Within the Wnt pathway P cadherin interacts with other key proteins such as beta-catenin which transduces signals leading to gene expression changes. This interaction is important for controlling cellular processes including cell proliferation and differentiation.
Associated diseases and disorders	P cadherin associates with various cancer types particularly breast and prostate cancers. Altered expression or dysfunction of P cadherin correlates with tumor progression and metastasis. Its interaction with E-cadherin may also contribute to the development and progression of skin disease hypotrichosis with juvenile macular dystrophy. Understanding the role of P cadherin within these contexts offers potential for developing targeted therapies and diagnostic tools.

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

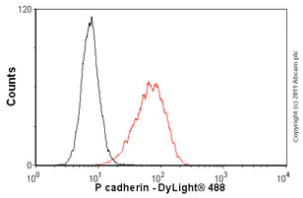
We do not recommend this combination. It is not covered by our product promise.

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

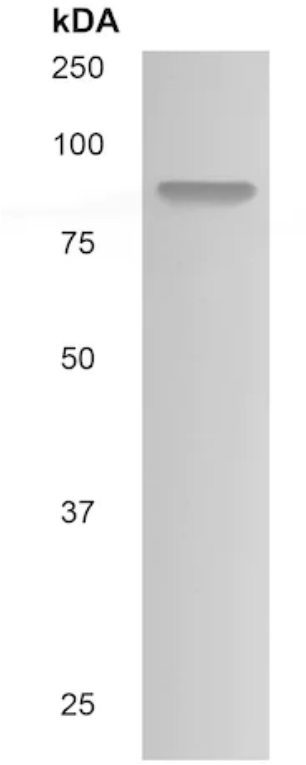


Flow Cytometry - Anti-P cadherin antibody [MM0508-9V11] (ab89900)

P cadherin Flow Cytometry staining using mouse Anti-P cadherin antibody

Overlay histogram showing A431 cells stained with ab89900 (red line). The cells were fixed with 80% methanol (5 min) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab89900, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

Please note that Abcam do not have any data for use of this antibody on non-fixed cells. We welcome any customer feedback.



Western blot - Anti-P cadherin antibody [MM0508-9V11] (ab89900)

All lanes:
Western blot - Anti-P cadherin antibody [MM0508-9V11] (ab89900) at 1/500 dilution

All lanes:
Human placenta tissue lysate

Predicted band size: 91 kDa

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