abcam

ab233710

Anti-PCDH9 antibody [7G3A2]

Mouse Monoclonal PCDH9 antibody. Suitable for Flow Cyt, WB, ICC/IF and reacts with Human, Rat samples. Cited in 2 publications. Immunogen corresponding to Recombinant Fragment Protein within Human PCDH9 aa 1-150.

Image updates are in progress. Products remain available and covered by the Abcam Product Promise. Learn more.

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human PCDH9 aa 1-150. The exact immunogen used to generate this antibody is proprietary information. Database link Q9HC56
Clone number	7G3A2
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/200 - 1/400
Notes	-

Expected

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

WB

Tested

Species	Rat
Dilution info	1/500 - 1/2000
Notes	-

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/50 - 1/250
Notes	-

Expected

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

Target data

See full target information PCDH9

Function	Potential calcium-dependent cell-adhesion protein.

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	The protocadherin-9 (PCDH9) protein also known as PCDH-[Greek letter]9 is a member of the protocadherin gene cluster integral to the cadherin superfamily. This protein weighs approximately 110 kDa and is widely expressed in the central nervous system including the cerebral cortex and cerebellum. PCDH9 contains six extracellular cadherin domains a transmembrane region and a cytoplasmic tail facilitating cell-cell adhesion.
Biological function summary	PCDH9 functions in the nervous system influencing synaptic development and maintenance. It participates in complex cell signaling events critical for neuronal connectivity. PCDH9 has a role in regulating synapse formation and neural circuitry important for cognitive processes. Its functions are connected to synaptic specificity and strength contributing to neural network architecture and stability.
Pathways	PCDH9 integrates into neural development and synaptic plasticity pathways. It plays a part in the Wnt signaling pathway important for neurogenesis interacting with proteins such as Dishevelled which modulates cytoskeletal dynamics and cellular signaling. The protein's interactions within these pathways suggest its involvement in the refinement of synapses during brain development.
Associated diseases and disorders	PCDH9 has links to neurodevelopmental disorders including autism spectrum disorder (ASD) and intellectual disabilities. Its disruption can affect neural connectivity and synaptic communication highlighting its role in these conditions.

PCDH9's connection to other neural-related proteins like neuroligins frames its relevance in pathologies where neural network dysfunctions occur. Research continues to explore PCDH9's therapeutic potentials in these contexts.

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

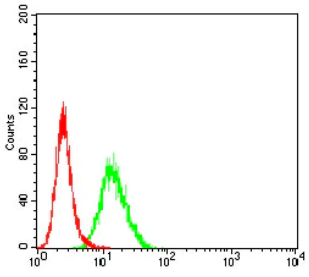
We do not recommend this combination. It is not covered by our product promise.

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.

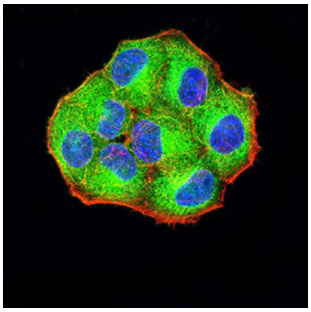
2 product images



Flow Cytometry - Anti-PCDH9 antibody [7G3A2] (ab233710)

PCDH9 Flow Cytometry staining using mouse Anti-PCDH9 antibody

Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cells labeling PCDH9 with ab233710 at 1/200 dilution (green) compared with a negative control (red).



Immunocytochemistry/ Immunofluorescence - Anti-PCDH9 antibody [7G3A2] (ab233710)

PCDH9 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-PCDH9 antibody

HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for PCDH9 (green) using ab233710 at 1/50 dilution in ICC/IF. Actin is labeled with AlexaFluor®555-Phalloidin (red). Blue: DRAQ5 DNA dye.

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