abcam

ab249638

Anti-PDZRN4 antibody [EPR11852] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR11852
Purification technique	Affinity purification Protein A

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Mouse, Rat, Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Not recommended

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information PDZRN4

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab249638 is the carrier-free version of ab171083.

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.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility
This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

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

Activity summary	PDZRN4 also known as LNX4 (Ligand of Numb-Protein X 4) functions mechanically as a modular scaffold protein playing a role in protein-protein interactions. It belongs to the PDZ and RING finger protein family and contains both PDZ domains and a RING finger motif. PDZRN4 has a molecular mass of approximately 82 kDa. Researchers have found this protein highly expressed in regions of the central nervous system and testis suggesting tissue-specific roles and significance.
Biological function summary	PDZRN4 facilitates interactions in cellular signaling networks. It acts as an important adaptor molecule that helps in organizing signaling complexes. PDZRN4 is often part of larger protein complexes integrating signals for proper neuronal development and function. It modulates synaptic transmission by interacting with other PDZ domain-containing proteins influencing receptor localization and synaptic stability.
Pathways	PDZRN4 involves itself in synaptic signaling particularly impacting pathways related to neuronal communication and calcium signaling. It is most importantly connected to the Ras signaling pathway. PDZRN4 interacts with proteins like Numb which plays a part in cell fate determination and PSD-95 known for its role in synapse formation and stabilization. These interactions highlight its influence on neuronal plasticity and developmental processes.
Associated diseases and disorders	PDZRN4 has associations with neurological conditions specifically Alzheimer’s disease and autism spectrum disorders. Abnormal expression or dysfunction of PDZRN4 can disrupt synaptic architecture implicating it in cognitive impairments observed in Alzheimer's disease. The protein also interacts with Numb a significant player in the Notch signaling pathway contributing to neurodevelopmental disorders like autism when misregulated. These connections highlight PDZRN4's potential as a therapeutic target in managing these conditions.

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.

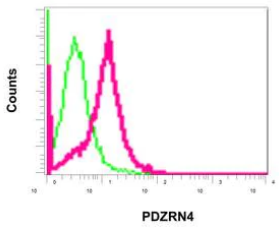
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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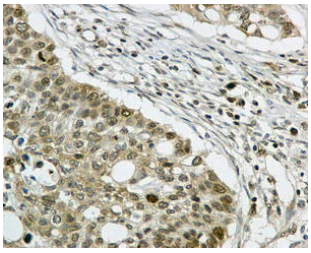
4 product images



Flow Cytometry (Intracellular) - Anti-PDZRN4 antibody [EPR11852] - BSA and Azide free (ab249638)

PDZRN4 Flow Cytometry (Intracellular) staining using rabbit Anti-PDZRN4 antibody

This data was developed using ab171083, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized U87-MG cells labeling PDZRN4 with ab171083 at 1/100 dilution (red), compared to a rabbit IgG negative control (green).

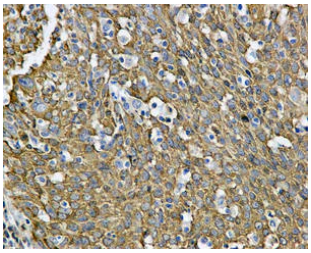


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDZRN4 antibody [EPR11852] - BSA and Azide free (ab249638)

PDZRN4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PDZRN4 antibody

This data was developed using ab171083, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human lung carcinoma tissue labeling PDZRN4 with ab171083 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

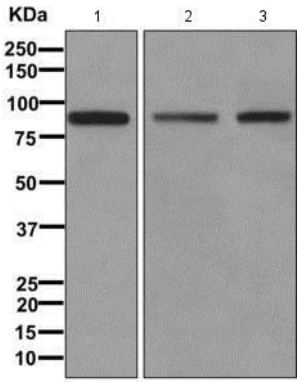


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDZRN4 antibody [EPR11852] - BSA and Azide free (ab249638)

PDZRN4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-PDZRN4 antibody

This data was developed using ab171083, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human cervical carcinoma tissue labeling PDZRN4 with ab171083 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-PDZRN4 antibody [EPR11852] - BSA and Azide free (ab249638)

This data was developed using ab171083, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-PDZRN4 antibody [EPR11852] (ab171083) at 1/1000 dilution

Lane 1:
Human prostate tissue lysate at 10 µg

Lane 2:
HepG2 cell lysate at 10 µg

Lane 3:
U87-MG cell lysate at 10 µg

Predicted band size: 117 kDa

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