abcam

ab250096

Anti-EPB41L1 antibody [EPR11090] - 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	EPR11090
Purification technique	Affinity purification
Concentration	1.062 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IP

Tested

Species	Human
Dilution info	-

Notes	-

Expected

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

WB

Tested

Species	Human
Dilution info	-
Notes	-

Expected

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

IHC-P

Not recommended

Species	Mouse, Human
Dilution info	-
Notes	-

ICC/IF

Not recommended

Species	Mouse, Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

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

Target data

See full target information EPB41L1

Function	May function to confer stability and plasticity to neuronal membrane via multiple interactions, including the spectrin-actin-based cytoskeleton, integral membrane channels and membrane-associated guanylate kinases.

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

ab250096 is the carrier-free version of ab179453.

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.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

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	The EPB41L1 gene encodes for protein 4.1N often referred to as EPB41L1 which is a member of the protein 4.1 superfamily. This protein has a molecular mass of approximately 145 kDa. EPB41L1 is expressed mostly in the nervous system including various brain regions and peripheral nerves. This protein is pivotal for maintaining structural integrity and stability of the cytoskeleton. EPB41L1 interacts with spectrin-actin complexes contributing to cellular shape and mechanical properties.
Biological function summary	Protein 4.1N plays a role in cellular processes like cell adhesion and migration. It participates in the formation of multiprotein complexes that include cytoskeletal elements and membrane proteins. This protein also influences neuronal function through its interaction with ion channels and synaptic proteins. EPB41L1 is integral to neuronal adaptability and contributes to synaptic plasticity processes impacting neuron communication.
Pathways	EPB41L1 is heavily involved in the signal transduction pathways within neurons. This protein associates with the Ras signaling pathway and can engage with proteins like Ras-related proteins that influence cell proliferation and differentiation. Additionally EPB41L1 is part of the integrin signaling pathway where it modulates cellular interactions with the extracellular matrix and impacts cell movement.

Associated diseases and disorders	EPB41L1 has connections to neurodevelopmental and psychiatric disorders including schizophrenia and autism spectrum disorders. Impaired EPB41L1 function may disrupt neuronal communication leading to cognitive and behavioral symptoms. The protein is also linked to interactions with DISC1 a protein associated with psychiatric conditions providing insights into its role in the etiology of these disorders.

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

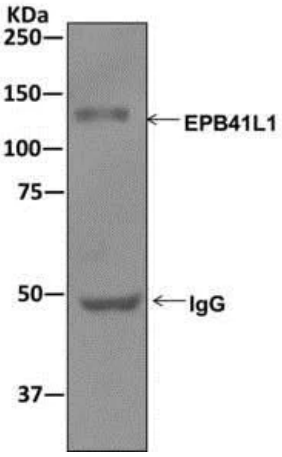
We do not recommend this combination. It is not covered by our product promise.

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.

3 product images

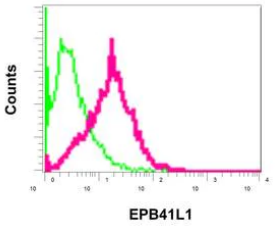


Immunoprecipitation - Anti-EPB41L1 antibody [EPR11090] - BSA and Azide free (ab250096)

This data was developed using ab179453, the same antibody clone in a different buffer formulation.
Western blot analysis on immunoprecipitation pellet from Human fetal brain lysate immunoprecipitated using ab179453 at 1/10 dilution.

All lanes:
Immunoprecipitation - Anti-EPB41L1 antibody [EPR11090] (ab179453)

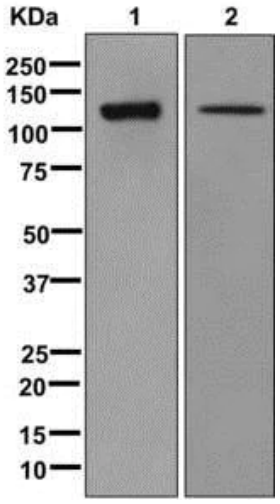
Predicted band size: 99 kDa



Flow Cytometry (Intracellular) - Anti-EPB41L1 antibody [EPR11090] - BSA and Azide free (ab250096)

EPB41L1 Flow Cytometry (Intracellular) staining using rabbit Anti-EPB41L1 antibody

This data was developed using ab179453, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized Neuro 2a cells labeling EPB41L1 with ab179453 at 1/10 dilution (red), compared to a rabbit IgG negative control (green).



Western blot - Anti-EPB41L1 antibody [EPR11090] - BSA and Azide free (ab250096)

This data was developed using ab179453, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-EPB41L1 antibody [EPR11090] (ab179453) at 1/1000 dilution

Lane 1:
Human fetal brain tissue lysate at 10 µg

Lane 2:
Neuro 2a lysate at 10 µg

Predicted band size: 99 kDa

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