abcam

ab312310

Anti-Reelin antibody [EPR26278-30]

Anti-Reelin antibody [EPR26278-30] (ab312310) is a rabbit monoclonal antibody detecting Reelin in **Western Blot, Flow Cytometry (Intra), IHC-P, IHC-Fr, ICC/IF**. Suitable for **Human, Mouse, Rat**.

- Biophysical QC for unrivalled batch-batch consistency

Recombinant | RabMAb | 20ul selling size

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	EPR26278-30
Purification technique	Affinity purification Protein A
Concentration	0.517 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Human
Dilution info	1/1000

Notes	0.515 ug/ml

Species	Mouse
Dilution info	1/1000
Notes	0.515 ug/ml

Species	Rat
Dilution info	1/1000
Notes	0.515 ug/ml

IHC-P

Tested

Species	Human
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

IHC-Fr

Tested

Species	Mouse
Dilution info	1/100
Notes	-

Species	Rat

Dilution info	1/100
Notes	-

Expected

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

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Rat
Dilution info	1/50
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Not recommended

Species	Human, Rat
Dilution info	-
Notes	-

IP

Not recommended

Species	Human, Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information RELN

Function	Extracellular matrix serine protease secreted by pioneer neurons that plays a role in layering of neurons in the cerebral cortex and cerebellum by coordinating cell positioning during neurodevelopment. Regulates microtubule function in neurons and neuronal migration. Binding to the extracellular domains of lipoprotein receptors VLDLR and LRP8/APOER2 induces tyrosine phosphorylation of DAB1 and modulation of TAU phosphorylation. Affects migration of sympathetic preganglionic neurons in the spinal cord, where it seems to act as a barrier to neuronal migration. Enzymatic activity is important for the modulation of cell adhesion.

Storage

Shipped at conditions	Conditional Ambient
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

Notes

What is this antibody validated in?
Anti-Reelin antibody [EPR26278-30] (ab312310) is a rabbit recombinant monoclonal antibody and is validated for use in Western Blot (WB), Flow Cytometry (Intra), Flow Cytometry (Flow Cyt), Immunohistochemistry (IHC-P), Immunohistochemistry (IHC-Fr), Immunocytochemistry/immunofluorescence (ICC/IF) in Human, Mouse, Rat samples.

What is the molecular weight of Reelin?
Anti-Reelin [EPR26278-30] (ab312310) specifically detects a band for Reelin (UniProt: P78509) at a molecular weight of 388kDa.

Other related products
We have a range of other formats of antibody clone [EPR26278-30] also available for your convenience: ab312310, Carrier free - ab312311

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.

Trial sizes available!
Test your antibody or perform pre-screening before committing to a larger quantity. Sold in 20µl. Discover our selection of trial-size antibodies.

Supplementary info

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

Activity summary	Reelin a large glycoprotein with a mass of approximately 388 kDa plays an integral role in brain development and function. Known for its presence in the extracellular matrix it is frequently referred to as RELN protein. Reelin is predominantly expressed in the brain especially in regions such as the cerebral cortex hippocampus and cerebellum. Its expression is highly regulated suggesting its importance in neurological processes.
Biological function summary	Reelin functions in the regulation of neuronal migration and positioning in the developing brain. Acting as a signaling molecule it forms part of a larger complex essential for proper neuronal layering and synaptic plasticity. Reelin interacts with various receptors on the cell surface initiating a cascade of intracellular signaling that influences cell orientation and dendritic growth.

Pathways	Reelin engages both the Reelin signaling pathway and the PI3K-Akt pathway highlighting its diverse influence on cellular processes. In the Reelin signaling pathway it associates with proteins like Dab1 and VLDLR playing an important role in the modulation of tyrosine kinases. This association affects neuronal structures by guiding their architectural development while interactions with the PI3K-Akt pathway impact cell survival and growth.
Associated diseases and disorders	Reelin has been implicated in conditions such as lissencephaly and autism spectrum disorders. Altered Reelin signaling may contribute to the abnormal neuronal migration seen in these diseases. Moreover its interplay with other proteins like ApoE which modifies brain structure and function in these disorders highlights Reelin's relevance in maintaining neurological health.

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

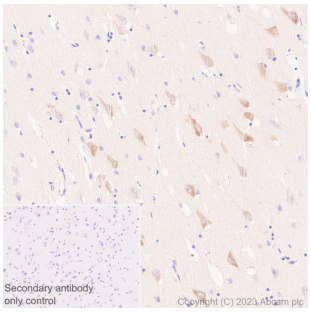
We do not recommend this combination. It is not covered by our product promise.

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.

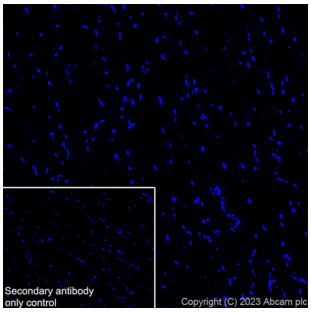
Full details and terms and conditions can be found here:
Terms & Conditions.

15 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

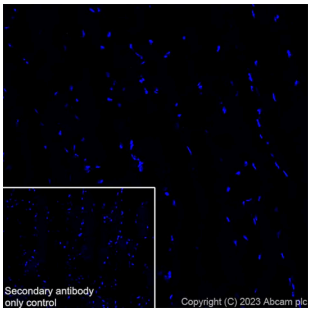
Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling Reelin with ab312310 at 1/500 (1.03 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining on a subset of neurons on human cerebrum (PMID: 9861036).The section was incubated with ab312310 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



Immunohistochemistry (Frozen sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Reelin Immunohistochemistry (Frozen sections) staining of Mouse skeletal muscle (fresh) using rabbit Anti-Reelin antibody

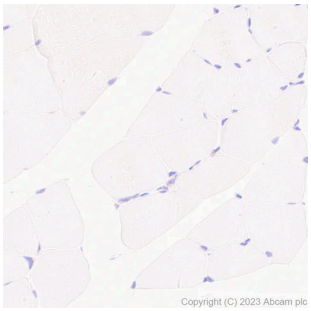
Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse skeletal muscle (fresh) tissue labeling Reelin with ab312310 at 1/100 (5.15 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Negative control: confocal image showing no staining on mouse skeletal muscle. The nuclear counterstain was DAPI (Blue). The section was incubated with ab312310 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.



Immunohistochemistry (Frozen sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Reelin Immunohistochemistry (Frozen sections) staining of Rat skeletal muscle (fresh) using rabbit Anti-Reelin antibody

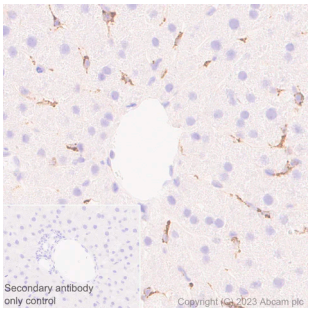
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Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

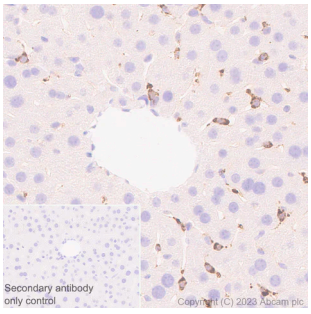
Reelin Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse skeletal muscl using rabbit Anti-Reelin antibody

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscl tissue labeling Reelin with ab312310 at 1/2000 (0.258 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Negative control: No staining on mouse skeletal muscle.The section was incubated with ab312310 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



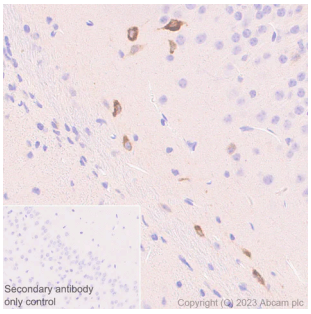
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Immunohistochemical analysis of paraffin-embedded Rat liver tissue labeling Reelin with ab312310 at 1/2000 (0.258 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining on rat liver hepatic stellate cells.The section was incubated with ab312310 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



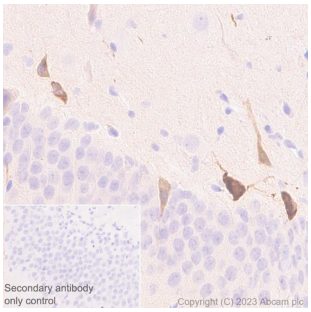
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

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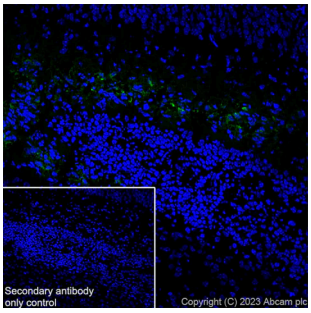
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling Reelin with ab312310 at 1/2000 (0.258 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining on a subset of neurons on mouse cerebrum (PMID: 20610758).The section was incubated with ab312310 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



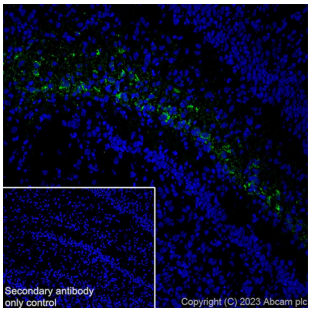
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Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling Reelin with ab312310 at 1/2000 (0.258 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Cytoplasmic staining on a subset of neurons on rat cerebrum (PMID: 9501244).The section was incubated with ab312310 for 30 mins at room temperature.The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins



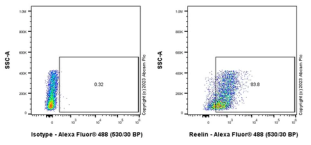
Immunohistochemistry (Frozen sections) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse p0 hippocampus (fresh) tissue labeling Reelin with ab312310 at 1/100 (5.15 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Confocal image showing positive staining on mouse p0 hippocampus. The nuclear counterstain was DAPI (Blue). The section was incubated with ab312310 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.



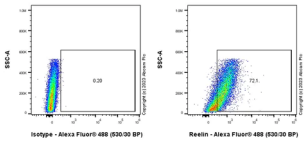
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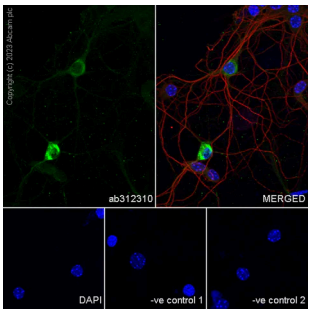
Flow Cytometry (Intracellular) - Anti-Reelin antibody [EPR26278-30] (ab312310)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized rat hippocampal neuron cells labelling Reelin with ab312310 at 1/50 dilution (1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Reelin antibody [EPR26278-30] (ab312310)

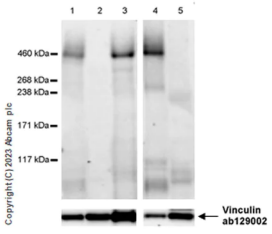
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized mouse cortex primary neuron cells labelling Reelin with ab312310 at 1/50 dilution (1 ug)/Red (Red) compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-Reelin antibody [EPR26278-30] (ab312310)

Reelin Immunocytochemistry/ Immunofluorescence staining of Mouse hippocampus primary neuron using rabbit Anti-Reelin antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Mouse hippocampus primary neuron cells labelling Reelin with ab312310 at 1/50 (10.3 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing cytoplasmic staining in mouse hippocampus primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 4ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Western blot - Anti-Reelin antibody [EPR26278-30] (ab312310)

Reelin Western blot staining using rabbit Anti-Reelin antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST Negative control: U-937; skeletal muscle. In Western blot, anti- Vinculin antibody (ab129002) loading control staining at 1/10000 dilution. Exposure time: 103 seconds
All lanes:
Western blot - Anti-Reelin antibody [EPR26278-30] (ab312310) at 1/1000 dilution

Lane 1:
HepG2 (human hepatocellar carcinoma epithelial cell) whole cell lysate 20 at 20 µg

Lane 2:
U-937 (human histiocytic lymphoma monocyte) whole cell lysate at 20 µg

Lane 3:
C6 (rat glial tumor glial cell) whole cell lysate at 40 µg

Lane 4:
Mouse P0 hippocampus tissue lysate at 20 µg

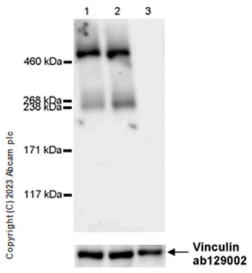
Lane 5:
Mouse skeletal muscle tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 420 kDa

Exposure time: 103s



Western blot - Anti-Reelin antibody [EPR26278-30] (ab312310)

Reelin Western blot staining using rabbit Anti-Reelin antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST Negative control: skeletal muscle.
In Western blot, anti- Vinculin antibody (ab129002) loading control staining at 1/10000 dilution.
Exposure time: 37 seconds
All lanes:
Western blot - Anti-Reelin antibody [EPR26278-30] (ab312310) at 1/1000 dilution

Lane 1:
Rat cerebellum tissue lysate at 20 µg

Lane 2:
Rat hippocampus tissue lysate at 20 µg

Lane 3:
Rat skeletal muscle tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Observed band size: 420 kDa

Exposure time: 37s

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