abcam

ab318993

Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric)

Chicken recombinant monoclonal MAP2 EPR19691 antibody. Suitable for IHC-P, IHC-Fr, Flow cytometry and ICC/IF. Reacts with human, mouse and rat samples.

This antibody is the chimeric Chicken version of clone EPR19691, available in rabbit as ab183830 with over 50 publications. Same clone, same staining pattern, different species antibody backbone.
Learn more about chimeric antibodies

Lab Essentials | Recombinant | 20ul selling size

Key facts

Isotype	IgY
Host species	Chicken
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	EPR19691
Purification technique	Affinity purification Thiophilic Resin
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

Not recommended

Species	Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/2000
Notes	-

Species	Rat
Dilution info	1/2000
Notes	-

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	1/100
Notes	-

Species	Mouse
Dilution info	1/100
Notes	-

Species	Rat
Dilution info	1/100
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/50000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/50000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/50000
Notes	Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

WB

Not recommended

Species	Human, Mouse, Rat
Dilution info	-

Notes	-

Target data

See full target information Map2

Function	The exact function of MAP2 is unknown but MAPs may stabilize the microtubules against depolymerization. They also seem to have a stiffening effect on microtubules.

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

Notes

Find all reagents to label mature neurons in our "Mature neuron markers guide".

This chicken monoclonal chimeric antibody has been engineered from a RabMAb parent antibody (ab183830). By design, some rabbit sequence is retained as part of the variable domain. When multiplexing with other rabbit-derived antibodies, using cross absorbed FC-reactive secondary antibodies are recommended.

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.

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.

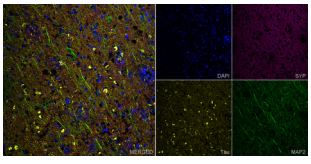
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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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15 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human Alzheimer’ s brain using chicken Anti-MAP2 antibody

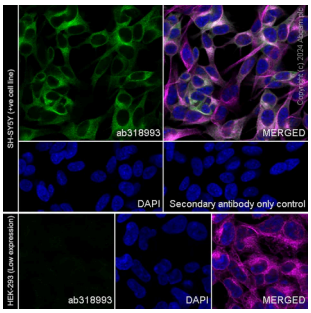
Composite multiplex immunofluorescence staining of SYP, MAP2 and Tau (MBD region) staining in a section of formalin-fixed paraffin-embedded human Alzheimer’ s brain*.

Performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with EDTA (Ph9.0) using retrieval settings of 100°C for 40 minutes. The section was then incubated at room temperature for 1 hour with ab309493 at 1µg/ml dilution (shown in green), ab318993 at 1µg/ml (shown in magenta), and ab308439 at 1µg/ml (shown in yellow). Then incubated for 1 hour with ab150119 Goat Anti-Mouse IgG H&L (Alexa Fluor® 647) preadsorbed 1/1000, ab150086 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 555) preadsorbed 1/1000, and ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed 1/1000. Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Dako Fluorescence Mounting Medium ®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

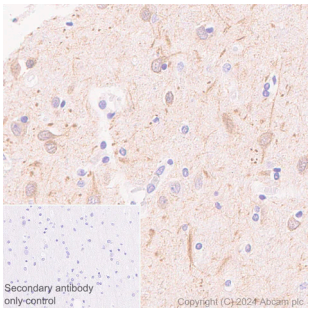
MAP2 Immunocytochemistry/ Immunofluorescence staining using chicken Anti-MAP2 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized SH-SY5Y (human neuroblastoma epithelial cell) cells labelling MAP2 with ab318993 at 1/100 (9.72 ug/ml) dilution, followed by ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in SH-SY5Y cell line (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue).
Negative control: HEK-293
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human cerebrum using chicken Anti-MAP2 antibody

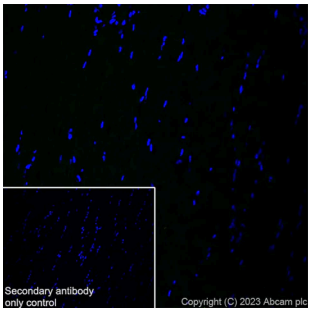
Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labeling MAP2 with ab318993 at 1/50000 (0.019 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on human cerebrum.
The section was incubated with ab318993 for 10 mins at room temperature and followed by anti-Chicken IgY antibody (ab97136) for 8 mins during the LeicaDS9800 kit staining procedure.
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 Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 10 mins



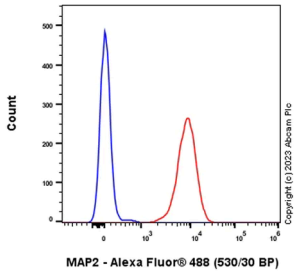
Immunohistochemistry (Frozen sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Frozen sections) staining of Rat skeletal muscle (fresh frozen) using chicken Anti-MAP2 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat skeletal muscle (fresh frozen) tissue labeling MAP2 with ab318993 at 1/2000 (0.486 ug/ml) dilution followed by ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) at 1/1000 2 ug/mL dilution (Green).

Negative control: confocal image showing no staining on rat skeletal muscle. The nuclear counterstain was DAPI (Blue). The section was incubated with ab318993 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).

Secondary antibody control: Secondary antibody is ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488)at 1/1000 2 ug/mL dilution.

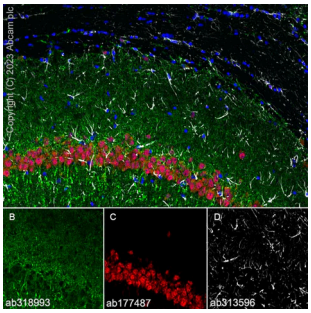


Flow Cytometry (Intracellular) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Flow Cytometry (Intracellular) staining of PC-12 (rat adrenal gland pheochromocytoma cell) using chicken Anti-MAP2 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized PC-12 (rat adrenal gland pheochromocytoma cell) cells labelling MAP2 with ab318993 at 1/1000 dilution (0.1 ug)(Red) compared with an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti-Chicken IgY H&L (Alexa Fluor® 488, ab150173) at 1/5000 dilution was used as the secondary antibody.



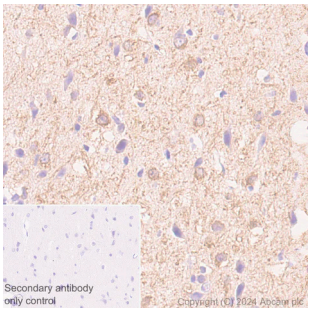
Immunohistochemistry (Frozen sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Frozen sections) staining of Rat hippocampus (fresh frozen) using chicken Anti-MAP2 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat hippocampus (fresh frozen) tissue labeling MAP2 with ab318993 at 1/2000 (0.486 ug/ml) dilution followed by ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) at 1/1000 2 ug/mL dilution (Green).

Panel A: merged staining of anti-MAP2 (ab318993, green), anti-NeuN (ab177487, red) and anti-GFAP (ab313596, grey) on rat hippocampus.
Panel B: anti-MAP2 stained on rat hippocampus.
Panel C: anti-NeuN stained in neuron of rat hippocampus.
Panel D: anti-GFAP stained in astrocytes of rat hippocampus.
The nuclear counterstain was DAPI (Blue). The section was incubated with ab318993, ab177487 and ab313596 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).

Secondary antibody control: Secondary antibody is ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488)at 1/1000 2 ug/mL dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Rat cerebrum using chicken Anti-MAP2 antibody

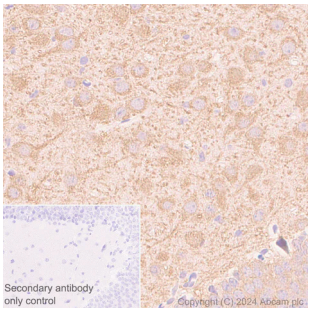
Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labeling MAP2 with ab318993 at 1/50000 (0.019 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on rat cerebrum.
The section was incubated with ab318993 for 10 mins at room temperature and followed by anti-Chicken IgY antibody (ab97136) for 8 mins during the LeicaDS9800 kit staining procedure.
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 Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 10 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse cerebrum using chicken Anti-MAP2 antibody

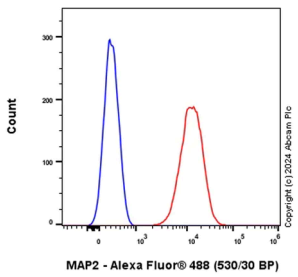
Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labeling MAP2 with ab318993 at 1/50000 (0.019 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Positive staining on mouse cerebrum.
The section was incubated with ab318993 for 10 mins at room temperature and followed by anti-Chicken IgY antibody (ab97136) for 8 mins during the LeicaDS9800 kit staining procedure.
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

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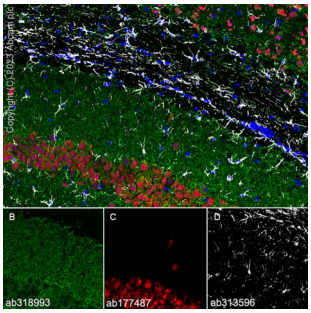


Flow Cytometry (Intracellular) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Flow Cytometry (Intracellular) staining of Neuro-2a (mouse neuroblastoma neuroblast) using chicken Anti-MAP2 antibody

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling MAP2 with ab318993 at 1/1000 dilution (0.1 ug) (Red) compared with an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue).

Goat anti-Chicken IgY H&L (Alexa Fluor® 488, ab150173) at 1/5000 dilution was used as the secondary antibody.



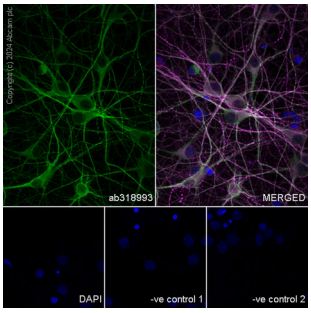
Immunohistochemistry (Frozen sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Frozen sections) staining of Mouse hippocampus (fresh frozen) using chicken Anti-MAP2 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse hippocampus (fresh frozen) tissue labeling MAP2 with ab318993 at 1/2000 (0.486 ug/ml) dilution followed by ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) at 1/1000 2 ug/mL dilution (Green).

Panel A: merged staining of anti-MAP2 (ab318993, green), anti-NeuN (ab177487, red) and anti-GFAP (ab313596, grey) on mouse hippocampus.
Panel B: anti-MAP2 stained on mouse hippocampus.
Panel C: anti-NeuN stained in neuron of mouse hippocampus.
Panel D: anti-GFAP stained in astrocytes of mouse hippocampus.
The nuclear counterstain was DAPI (Blue). The section was incubated with ab318993, ab177487 and ab313596 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).

Secondary antibody control: Secondary antibody is ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488)at 1/1000 2 ug/mL dilution.



Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

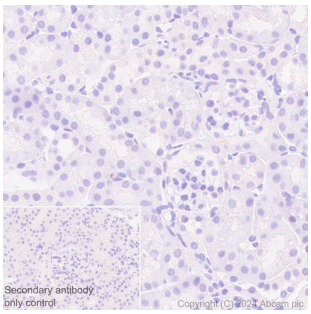
MAP2 Immunocytochemistry/ Immunofluorescence staining of rat primary neuron using chicken Anti-MAP2 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neuron cells labelling MAP2 with ab318993 at 1/100 (9.72 ug/ml) dilution, followed by ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in rat primary neurons (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). 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 (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse kidney using chicken Anti-MAP2 antibody

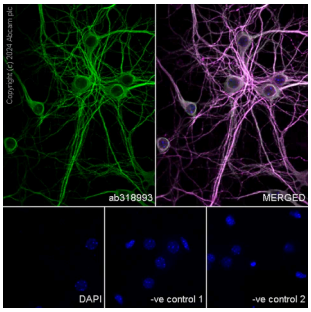
Immunohistochemical analysis of paraffin-embedded Mouse kidney tissue labeling MAP2 with ab318993 at 1/50000 (0.019 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Negative control: no staining on mouse kidney.
The section was incubated with ab318993 for 10 mins at room temperature and followed by anti-Chicken IgY antibody (ab97136) for 8 mins during the LeicaDS9800 kit staining procedure.
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 Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 10 mins



Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

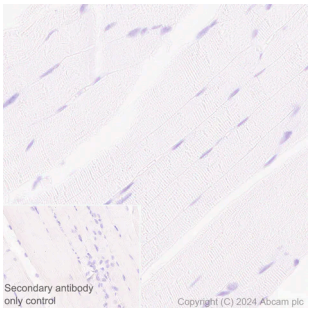
MAP2 Immunocytochemistry/ Immunofluorescence staining of Mouse primary neuron using chicken Anti-MAP2 antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Mouse primary neuron cells labelling MAP2 with ab318993 at 1/100 (9.72 ug/ml) dilution, followed by ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green).

Confocal image showing cytoplasmic staining in mouse primary neurons (shown in green). The counterstain was observed in magenta. Nuclear DNA was labeled with DAPI (shown in blue). 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 (Magenta). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse skeletal muscle using chicken Anti-MAP2 antibody

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling MAP2 with ab318993 at 1/50000 (0.019 ug/ml) dilution, followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

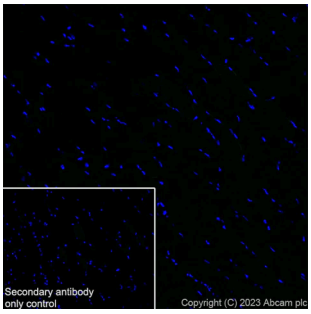
Negative control: no staining on mouse skeletal muscle
The section was incubated with ab318993 for 10 mins at room temperature and followed by anti-Chicken IgY antibody (ab97136) for 8 mins during the LeicaDS9800 kit staining procedure.
The immunostaining was performed on a Leica Biosystems BOND® RX 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 Citrate buffer (pH 6.0, Epitope Retrieval Solution 1) for 10 mins

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Immunohistochemistry (Frozen sections) - Anti-MAP2 antibody [EPR19691] - Neuronal Marker - Chicken IgY (Chimeric) (ab318993)

MAP2 Immunohistochemistry (Frozen sections) staining of Mouse skeletal muscle (fresh frozen) using chicken Anti-MAP2 antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse skeletal muscle (fresh frozen) tissue labeling MAP2 with ab318993 at 1/2000 (0.486 ug/ml) dilution followed by ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) 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 ab318993 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).

Secondary antibody control: Secondary antibody is ab150169 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488)at 1/1000 2 ug/mL dilution.

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