abcam

Product datasheet

Alexa Fluor® 488 Anti-MAP2 antibody [EPR19691] ab225316



Overview

Product name Alexa Fluor® 488 Anti-MAP2 antibody [EPR19691]

Description Alexa Fluor® 488 Rabbit monoclonal [EPR19691] to MAP2

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications
Suitable for: IHC-Fr
Species reactivity
Reacts with: Human

Predicted to work with: Mouse, Rat

Immunogen Recombinant fragment within Mouse MAP2 aa 650-1000. The exact immunogen sequence used

to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific

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Support team to discuss your requirements.

Database link: P20357

Positive control IHC-Fr: normal human cerebral cortex tissue sections

General notesThis 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 production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS

Purity Protein A purified

ClonalityMonoclonalClone numberEPR19691

Isotype IgG

Applications

The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab225316 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr	*** <u>*</u>	1/100.

Target

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.

Sequence similarities Contains 3 Tau/MAP repeats.

Post-translational modifications

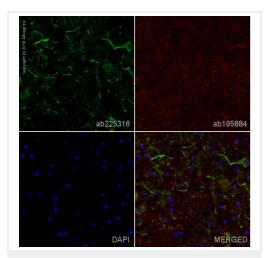
Phosphorylated at serine residues in K-X-G-S motifs by MAP/microtubule affinity-regulating kinase (MARK1 or MARK2), causing detachment from microtubules, and their disassembly (By

similarity). Isoform 2 is probably phosphorylated by PKA at Ser-323, Ser-354 and Ser-386 and by

FYN at Tyr-67.

Cellular localization Cytoplasm, cytoskeleton.

Images



Immunohistochemistry (Frozen sections) - Alexa Fluor® 488 Anti-MAP2 antibody [EPR19691] (ab225316)

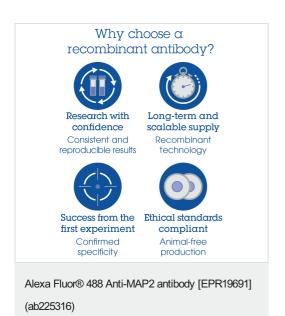
IHC image of MAP2 staining in a section of frozen normal human cerebral cortex*.

The section was fixed using 10% formaldehyde in 1XPBS for 10 minutes. No antigen retrieval step was performed prior to staining. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M (w/v) glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab225316 at 1/100 dilution (shown in green) and counterstained using ab195884, Rat monoclonal to Tubulin (Alexa Fluor® 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

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.



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