

Product datasheet

Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691] ab225315

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [4 Images](#)

Overview

Product name	Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691]
Description	Alexa Fluor® 647 Rabbit monoclonal [EPR19691] to MAP2
Host species	Rabbit
Conjugation	Alexa Fluor® 647. Ex: 652nm, Em: 668nm
Specificity	Suitable for mouse and rat IHC-Fr
Tested applications	Suitable for: IHC-Fr, IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	<p>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 Support team to discuss your requirements.</p> <p>Database link: P20357</p> <p>Run BLAST with Run BLAST with</p>
Positive control	IHC-P: Normal human cerebral cortex tissue sections. IHC-Fr: Mouse and Rat cerebellum tissue sections.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p> <p>Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any</p>

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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
Clonality	Monoclonal
Clone number	EPR19691
Isotype	IgG

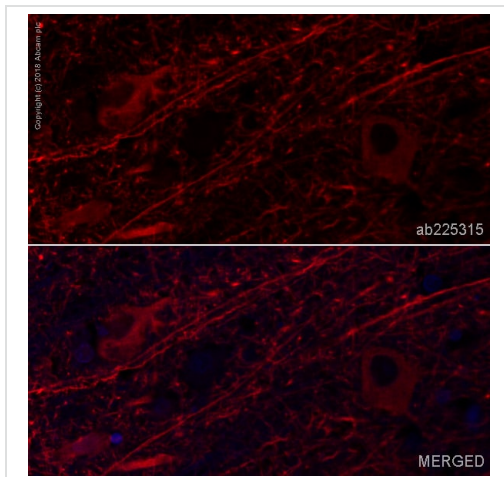
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab225315 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		1/50. IHC-Fr is suitable for mouse and rat
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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.



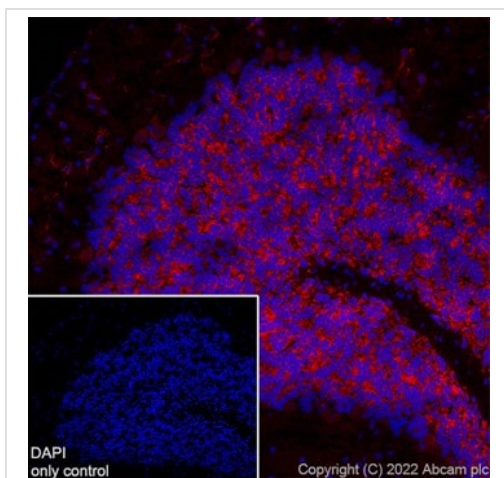
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691] (ab225315)

IHC image of MAP2 staining in a section of formalin-fixed paraffin-embedded normal human cerebral cortex.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6) in a Biocare Medical NxGen pressure cooker using retrieval settings of 110°C for 20 minutes. 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 ab225315 at 1/100 dilution (shown in red). Nuclear DNA was labeled with DAPI (shown in blue). The section was then mounted using Fluoromount®.

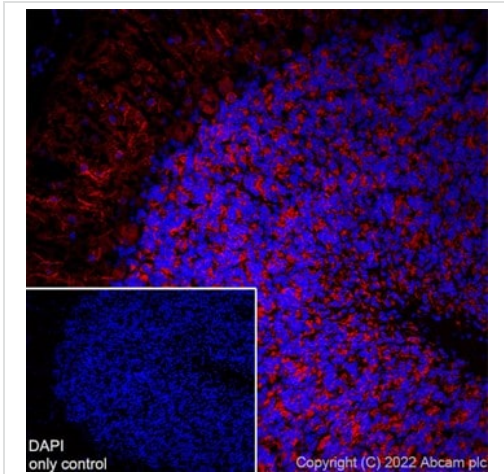
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

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



Immunohistochemistry (Frozen sections) - Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691] (ab225315)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebellum tissue labelling with ab225315 at 1:50 dilution (red). The nuclear counterstain was DAPI (Blue).



Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebellum tissue labelling with ab225315 at 1:50 dilution (red). The nuclear counterstain was DAPI (Blue).

Immunohistochemistry (Frozen sections) - Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691] (ab225315)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Alexa Fluor® 647 Anti-MAP2 antibody [EPR19691] (ab225315)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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