abcam

Product datasheet

Anti-MAP2 antibody [HM-2] ab11267

★★★★★ 8 Abreviews 158 References 3 Images

Overview

Product name	Anti-MAP2 antibody [HM-2]
Description	Mouse monoclonal [HM-2] to MAP2
Host species	Mouse
Tested applications	**Suitable for:** ICC, WB
Species reactivity	**Reacts with:** Rat **Predicted to work with:** Mouse, Chicken, Cow, Human, Quail
Immunogen	Full length protein corresponding to Rat MAP2. Rat brain microtubule associated proteins (MAPs).
Positive control	WB: Rat brain tissue lysate. ICC: B35 cells.
General notes	This product was changed from ascites to tissue culture supernatant on 05/06/2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team. Storage in frost-free freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.097% Sodium azide Constituent: 0.0268% PBS

Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	HM-2
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab11267 in the following tested applications.

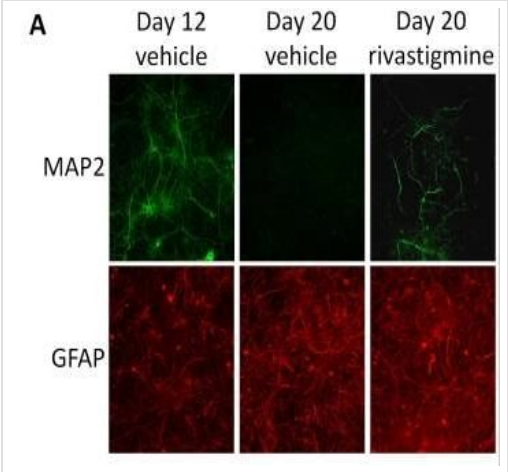
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC	★★★★★ (2)	Use a concentration of 2 µg/ml. Fix cells in 4% paraformaldehyde/PBS for 45 min; then permeabilise cells with 0.2% Triton X-100 in PBS for 5 min (see Farah et al) OR fix in 4% paraformaldehyde (containing 0.2% picric acid in 0.1 M phosphate buffer, pH 6.9) for 15 min at room temperature (see O' Hare et al) .
WB	★★★★☆ (2)	Use a concentration of 1 - 2 µg/ml. Predicted molecular weight: 200 kDa.

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



Immunocytochemistry - Anti-MAP2 antibody [HM-2] (ab11267)

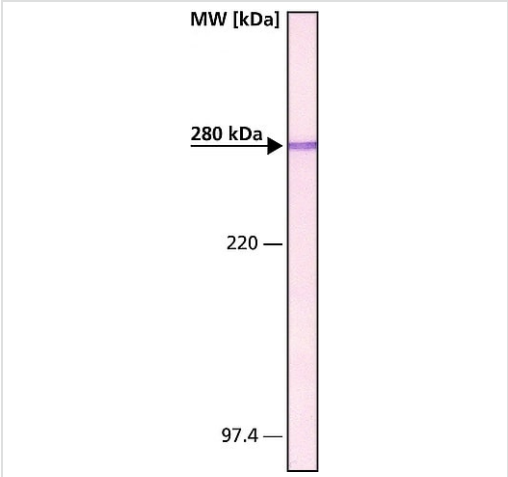
Rivastigmine preserves neuronal morphology and alters sAPP secretion

At day 12 or day 20, cells were fixed for immunocytochemistry analysis and probed with anti-MAP2 (green) and anti-GFAP (red) antibodies. Neuronal MAP2 immunoreactivity declines to almost undetectable levels between day 12 and day 20 in untreated cells, whereas neuronal morphology is preserved in rivastigmine treated cultures. Glial GFAP was observed to increase in both treated and untreated cells between day 12 and day 20. These results confirm the degeneration of neurons by day 20.

MAP2 is detected using ab11267 in 4% paraformaldehyde-fixed, 0.5% Triton X-100 permeabilized embryonic rat cerebrocortical cells.

(From Figure 2A of Bailey et al)

This image was generated using the ascites version of the product.

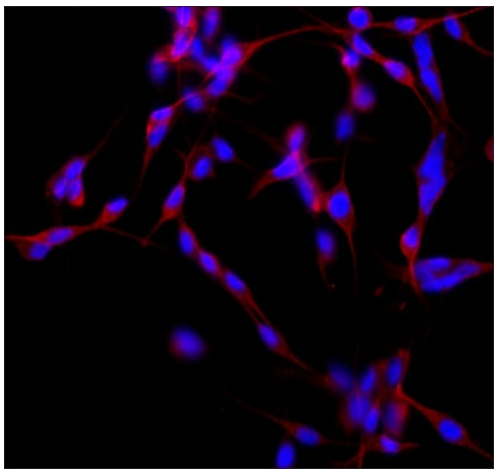


Western blot - Anti-MAP2 antibody [HM-2] (ab11267)

Anti-MAP2 antibody [HM-2] (ab11267) at 1 µg/ml + Rat brain lysate

Predicted band size: 200 kDa

This image was generated using the ascites version of the product.



Immunocytochemistry - Anti-MAP2 antibody [HM-2] (ab11267)

Immunocytochemical analysis of B35 (rat neuroblastoma cell line) cells labelling MAP2 with ab11267 at a concentration of 2 µg/mL. The secondary was developed using Goat anti-mouse IgG. Cells were counterstained with DAPI to stain nuclei.

This image was generated using the ascites version of the product.

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