abcam

Product datasheet

Anti-MAP2 antibody [RM1010] - BSA and Azide free ab283865

Recombinant RabMAb

8 Images

Overview

Product name	Anti-MAP2 antibody [RM1010] - BSA and Azide free
Description	Rabbit recombinant multiclonal [RM1010] to MAP2 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-Fr, Flow Cyt (Intra), ICC/IF **Unsuitable for:** IHC-P or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	**This product was produced with the following immunogens:** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: SK-N-BE, IMR-32, Neuro-2a and PC-12 whole cell lysate; Mouse E12.5 brain, brain and cerebellum tissue lysates; Rat brain and cerebellum tissue lysates. IHC-Fr: Mouse cerebellum tissue; Rat cerebellum tissue. ICC/IF: Mouse primary neural/glia cells. Flow Cyt (intra): Mouse primary neuron cells; Neuro-2a cells.
General notes	ab283865 is the carrier-free version of **ab281588**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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 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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C.
Storage buffer	pH: 7.20 Constituent: 100% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Recombinant Multiclonal
Clone number	RM1010
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab283865 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
WB		Use at an assay dependent concentration. Predicted molecular weight: 199 kDa.
IHC-Fr		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

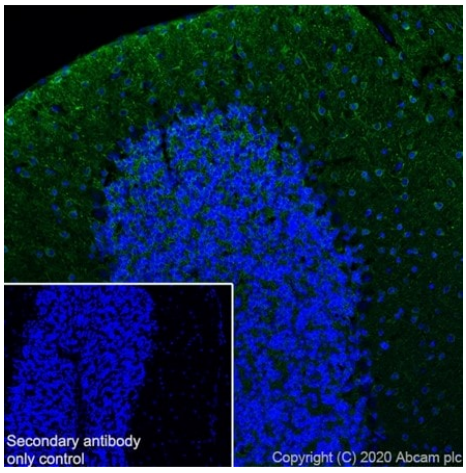
Application notes Is unsuitable for IHC-P or IP.

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



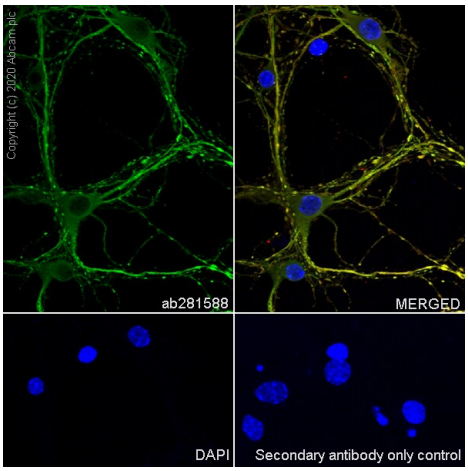
Immunohistochemistry (Frozen sections) - Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

This data was developed using **ab281588**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebellum tissue labeling MAP2 with 281588 at 1/100 (5.52 ug/ml) dilution followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (Green). Positive staining on mouse cerebellum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488)at 1/1000 dilution.

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

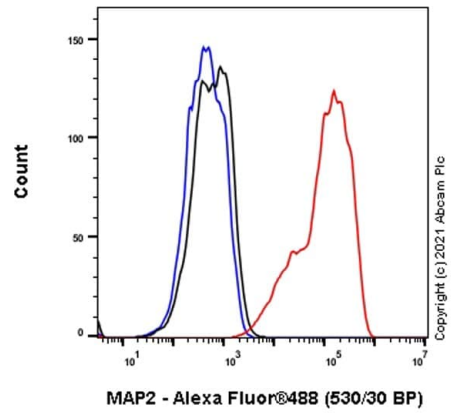


Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

This data was developed using **ab281588**, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural/glia cell cells labelling MAP2 with 281588 at 1/2000 (0.276 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green) Confocal image showing cytoplasmic staining in mouse primary neuron. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection is observed. **ab11267** Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 dilution, followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 dilution (Red). The Nuclear counterstain was DAPI (Blue).

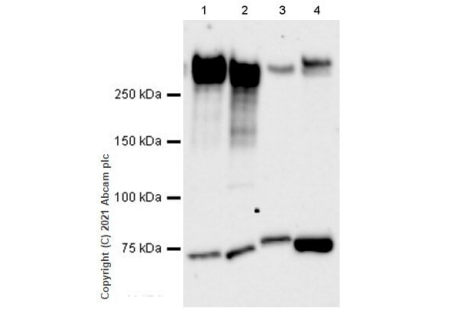
Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

This data was developed using **ab281588**, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized Mouse primary neuron cells labelling MAP2 with 281588 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (**ab172730**) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Western blot - Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

All lanes : Anti-MAP2 antibody [RM1010] - Neuronal Marker (**ab281588**) at 1/1000 dilution

Lane 1 : SK-N-BE(2) (Human neuroblastoma neuroblast) whole cell lysate
Lane 2 : IMR-32 (Human neuroblastoma neuroblast) whole cell lysate
Lane 3 : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysate
Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

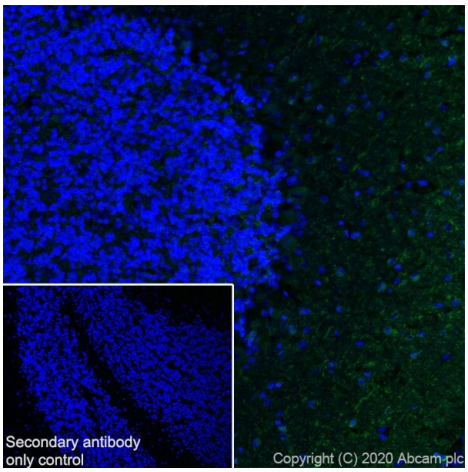
Predicted band size: 199 kDa
Observed band size: 280,70 kDa

This data was developed using **ab281588**, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

We recommend that samples are not boiled after adding loading buffer as this may cause protein aggregates.

Exposure time: 48 seconds.



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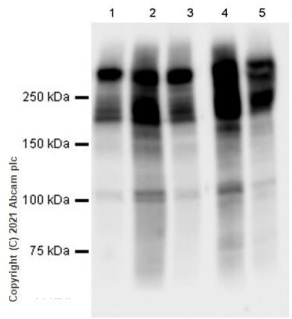
Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Western blot - Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

All lanes : Anti-MAP2 antibody [RM1010] - Neuronal Marker (**ab281588**) at 1/1000 dilution

Lane 1 : Mouse E12.5 brain lysate
Lane 2 : Mouse brain lysate
Lane 3 : Mouse cerebellum lysate
Lane 4 : Rat brain lysate
Lane 5 : Rat cerebellum lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

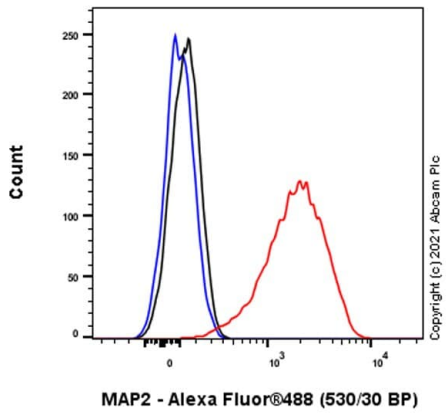
Predicted band size: 199 kDa
Observed band size: 70-280 kDa

This data was developed using **ab281588**, the same antibody clone in a different buffer formulation.

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

We recommend that samples are not boiled after adding loading buffer as this may cause protein aggregates.

Exposure time: 3 seconds.



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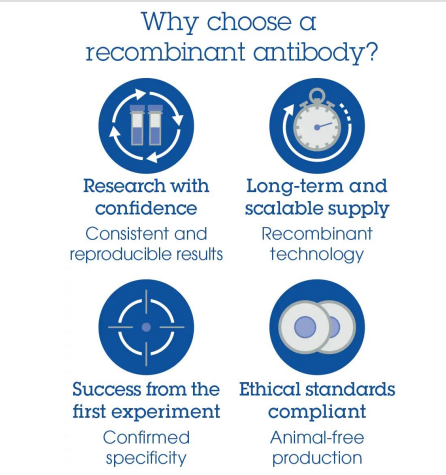

Anti-MAP2 antibody [RM1010] - BSA and Azide free (ab283865)

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