# abcam

## Product datasheet

# Anti-MAP2 antibody - Neuronal Marker ab32454

★★★★★ 35 Abreviews 256 References 7 图像

概述

产**品名称** Anti-MAP2抗体- Neuronal Marker

描述 兔多克隆抗体to MAP2 - Neuronal Marker

**宿主** Rabbit

预测可用于: Goat, Cat, Lizard 🔷

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

常规说明

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

性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**存储溶液** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our

scientific support team who will be happy to help.

纯**度** Immunogen affinity purified

**克隆** 多克隆

**同种型** IgG

#### The Abpromise guarantee

#### Abpromise™承诺保证使用ab32454于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度:实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	****(8)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB	****(1)	Use at an assay dependent concentration. Predicted molecular weight: 199 kDa.
ICC/IF	<b>★★★★★ (11)</b>	1/1000.

#### 靶标

功能 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.

序列相似性 Contains 3 Tau/MAP repeats.

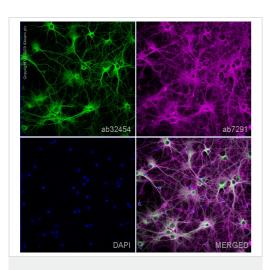
翻译后修饰 Phosphorylated at serine residues in K-X-G-S motifs by MAP/microtubule affinity-regulating

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.

细胞定位 Cytoplasm, cytoskeleton.

#### 图片



Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody - Neuronal Marker (ab32454)

ab32454 staining MAP2 in Rat Primary Neurons DIV14 cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab32454 at 1µg/ml and ab7291, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with ab150081, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and ab150120, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour magenta). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 4% paraformaldehyde (10 min).

Image was acquired with a high-content analyser (Operetta CLS,
Perkin Elmer) and a maximum intensity projection of confocal

sections is shown.



Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody - Neuronal Marker (ab32454)

Müller A et al. Monitoring Astrocytic Proteome Dynamics by Cell Type-Specific Protein Labeling. PLoS One 10:e0145451 (2015).

Rat astrocytes (DIV 22) cells were fixed with 4% paraformaldehyde and stained for MAP2 (Green) using ab32454 at 1/1000 dilution in ICC/IF analysis.



Western blot - Anti-MAP2 antibody - Neuronal Marker (ab32454)

**All lanes :** Anti-MAP2 antibody - Neuronal Marker (ab32454) at 1  $\mu$ g/ml

Lane 1: Mouse Brain (day 0) Tissue Lysate

Lane 2 : Mouse Brain Tissue Lysate

Lane 3: Rat Brain Tissue Lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Goat polyclonal to Rabbit lgG - H&L - Pre-Adsorbed

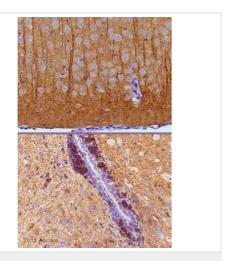
(HRP) at 1/50000 dilution

**Predicted band size:** 199 kDa **Observed band size:** 268,280 kDa

Exposure time: 2 minutes

Blocking buffer: 2% BSA

Gel type: TA



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MAP2 antibody - Neuronal Marker (ab32454)

This image is courtesy of an Abreview by Carl Hobbs.

ab32454 staining MAP2 in mouse brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with formaldehyde and blocked with 1% BSA for 10 minutes at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/3000 in blocking buffer) for 2 hours at 21°C in TBS/BSA/azide. An undiluted Biotin-conjugated goat anti-rabbit IgG polyclonal was used as the secondary antibody.



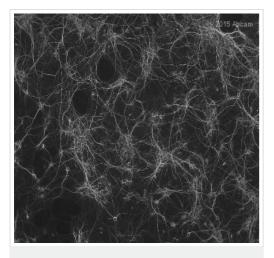
Western blot - Anti-MAP2 antibody - Neuronal Marker (ab32454)

Gonzales PK et al. Transcriptome analysis of genetically matched human induced pluripotent stem cells disomic or trisomic for chromosome 21. PLoS One 13:e0194581 (2018).

**All lanes :** Anti-MAP2 antibody - Neuronal Marker (ab32454) at 1/1000 dilution

Lanes 1-2: Trisomic induced Pluripotent Stem Cells (iPSCs)Lanes 3-4: Disomic induced Pluripotent Stem Cells (iPSCs)

Predicted band size: 199 kDa

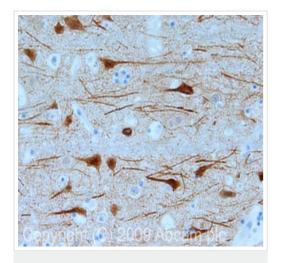


Immunocytochemistry/ Immunofluorescence - Anti-MAP2 antibody - Neuronal Marker (ab32454)

This image is courtesy of an Abreview submitted by Babben Tinner

ab32454 staining MAP2 in rat cryopreserved embryonic cortical neurons cells by ICC/IF

(Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde with picric acid. Samples were incubated with primary antibody (1/2000 in 10mM PBS + 0.3% Triton-X) for 12 hours at 4°C. An Alexa Fluor<sup>®</sup> 488-conjugated donkey anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MAP2 antibody - Neuronal Marker (ab32454)

IHC image of MAP2 staining in human cerebral cortex FFPE section, performed on a Leica Bond TM system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab32454, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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

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