



Datasheet for ABIN125739

## anti-MAP2 antibody



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### Overview

Quantity:	0.1 mg
Target:	MAP2
Reactivity:	Human, Mouse, Pig
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunoprecipitation (IP), Immunohistochemistry (Frozen Sections) (IHC (fro)), Multiplex Immunohistochemistry (mIHC)

### Product Details

Immunogen:	Microtubule protein (bovine brain) enriched for kinesin
Clone:	MT-08
Isotype:	IgG1
Specificity:	The antibody MT-08 recognizes an epitope (aa 1375-1395) located in central domain of molecule Microtubule Associated Protein 2ab (MAP2ab).
Cross-Reactivity (Details):	Human, Porcine, Mouse
Purification:	Purified by protein-A affinity chromatography
Purity:	> 95 % (by SDS-PAGE)

### Target Details

Target:	MAP2
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## Target Details

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Alternative Name:	MAP2ab ( <a href="#">MAP2 Products</a> )
Background:	MAP2a and 2b (270 kDa) being found mostly in dendrites, stabilize microtubules (shift the reaction kinetics in addition of new subunits and microtubule growth) and participate in determining the structure of different parts of vertebrate nerve cells.

## Application Details

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Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

## Handling

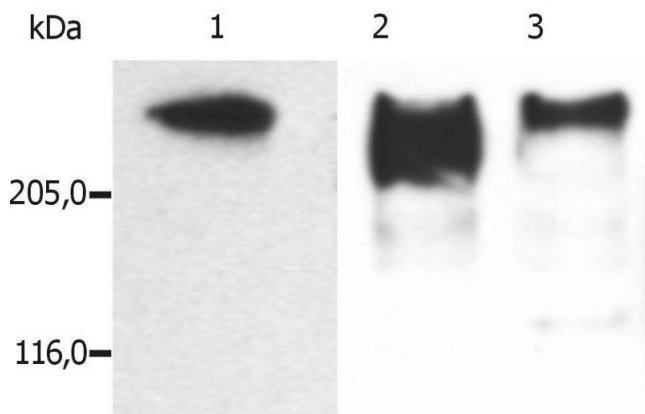
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Concentration:	1 mg/mL
Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<b>Do not freeze.</b>
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.

## Publications

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Product cited in:	Dzijak, Yildirim, Kahle, Novák, Hnilicová, Venit, Hozák: "Specific nuclear localizing sequence directs two myosin isoforms to the cell nucleus in calmodulin-sensitive manner." in: <b>PLoS ONE</b> , Vol. 7, Issue 1, pp. e30529, (2012) ( <a href="#">PubMed</a> ).
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#### Western Blotting

**Image 1.** Western Blotting analysis (reducing conditions) of microtubules partially purified from porcine brain lysate. Lane 1: immunostaining with anti-MAP2ab (MT-01) Lane 2: immunostaining with anti-MAP2ab (MT-07) Lane 3: immunostaining with anti-MAP2ab (MT-08)



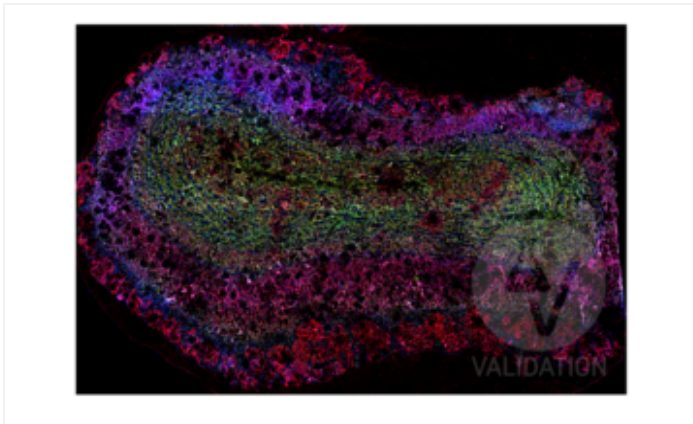
**Successfully validated (Multiplex Immunohistochemistry (mIHC))**

by [Akoya Biosciences](#)

Report Number: 104333

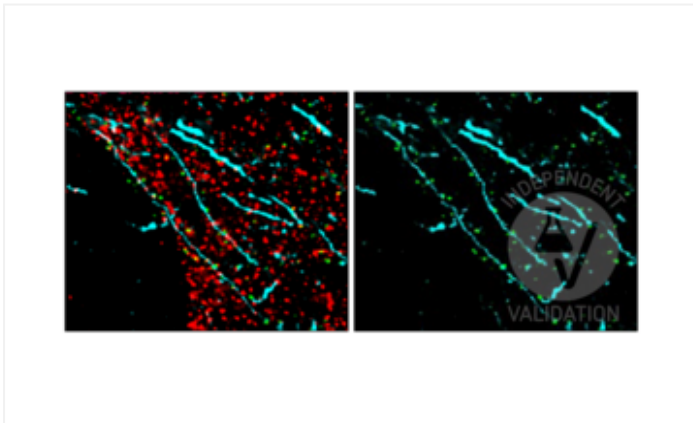
Date: Apr 20 2021

Target:	MAP2
Lot Number:	536958
Method validated:	Multiplex Immunohistochemistry (mIHC)
Positive Control:	Fresh frozen mouse olfactory bulb
Negative Control:	Unlabeled control (mouse fresh frozen)
Notes:	Passed. The anti-MAP2 antibody ABIN125739 specifically labels structural elements of neurons. Staining can be observed in neuronal cell bodies, axons and occasionally in proximal dendritic processes.
Primary Antibody:	ABIN125739
Protocol:	<ul style="list-style-type: none"><li>• Protocol details are described in the Akoya Biosciences CODEX® User Manual (see <a href="https://www.akoyabio.com/wp-content/uploads/2021/01/CODEX-User-Manual.pdf">https://www.akoyabio.com/wp-content/uploads/2021/01/CODEX-User-Manual.pdf</a>).</li><li>• Tissue preparation as outlined in the Akoya Biosciences CODEX® User Manual fresh-frozen tissue protocol.</li><li>• Conjugation of the anti-MAP2 antibody ABIN125739 to an oligo barcode used to bind oligo-bound fluorophore ATTO 550.</li></ul>
Experimental Notes:	<ul style="list-style-type: none"><li>• No signal was detected in unlabeled specimens.</li><li>• Specific staining of MAP2 was also observed with human FFPE cortical tissue sections with both citrate antigen retrieval and EDTA antigen retrieval.</li><li>• Optimal staining and signal to noise ratios were obtained if tissue was pre-treated for autofluorescence removal (see <a href="https://www.akoyabio.com/wp-content/uploads/2020/07/Custom-Demonstrated-Protocol-Autofluorescence-Quenching-Mar2020.pdf">https://www.akoyabio.com/wp-content/uploads/2020/07/Custom-Demonstrated-Protocol-Autofluorescence-Quenching-Mar2020.pdf</a>).</li></ul>



**Validation image no. 1 for anti-Microtubule-Associated Protein 2 (MAP2) antibody (ABIN125739)**

Murine fresh frozen coronal olfactory bulb section (Thickness = 5  $\mu\text{m}$ ) labeled with anti-MAP2 antibody ABIN125739 (blue; bound to fluorophore ATTO 550). Labeling is present throughout olfactory bulb layers with and concentration in the external plexiform and mitral cell layers. Slc17a7 and PSD-95/DLG4 were labeled with ABIN1027710 (green; bound to fluorophore ATTO 550) and ABIN361694 (red; bound to fluorophore ATTO 550).



**Validation image no. 2 for anti-Microtubule-Associated Protein 2 (MAP2) antibody (ABIN125739)**

FFPE normal human cortex tissue section labeled with anti-MAP2 antibody ABIN125739 (cyan; bound to fluorophore ATTO 550) after EDTA antigen retrieval. DLG4 and Synapsin were labeled with anti-DLG4 antibody ABIN361694 (green; bound to fluorophore ATTO 550) and anti-SYN1 antibody ABIN5542390 (red; bound to fluorophore AF488).