

## Anti-MAP2 Antibody Picoband™

Catalog Number: A01201-4

### About MAP2

Microtubule-associated protein 2 is a protein that in humans is encoded by the MAP2 gene. This gene encodes a protein that belongs to the microtubule-associated protein family. The proteins of this family are thought to be involved in microtubule assembly, which is an essential step in neurogenesis. The products of similar genes in rat and mouse are neuron-specific cytoskeletal proteins that are enriched in dendrites, implicating a role in determining and stabilizing dendritic shape during neuron development. A number of alternatively spliced variants encoding distinct isoforms have been described.

### Overview

Product Name	Anti-MAP2 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-MAP2 Antibody Picoband™ catalog # A01201-4 Tested in ELISA, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P11137

### Technical Details

Immunogen	E.coli-derived human MAP2 recombinant protein (Position: A360-E1101).
Predicted Reactive Species	Human
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.

Purification	Immunogen affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Western blot, 0.25-0.5 ug/ml, Human</p> <p>Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat</p> <p>Direct ELISA, 0.1-0.5 ug/ml, Human</p>

## Anti-MAP2 Antibody Picoband™ (A01201-4) Images

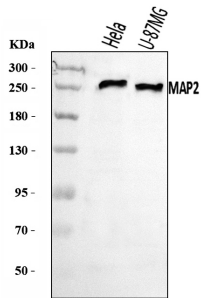


Figure 1. Western blot analysis of MAP2 using anti-MAP2 antibody (A01201-4).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human Hela whole cell lysates,

Lane 2: human U-87MG whole cell lysates.

After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MAP2 antigen affinity purified polyclonal antibody (Catalog # A01201-4) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for MAP2 at approximately 280 kDa. The expected band size for MAP2 is at 200 kDa.

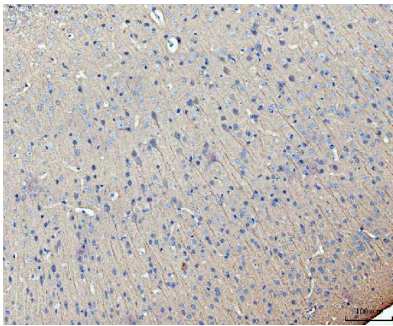


Figure 2. IHC analysis of MAP2 using anti-MAP2 antibody (A01201-4).

MAP2 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MAP2 Antibody (A01201-4) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

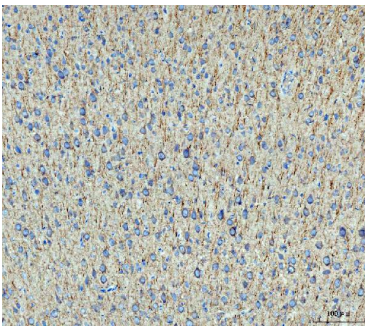


Figure 3. IHC analysis of MAP2 using anti-MAP2 antibody (A01201-4).

MAP2 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-MAP2 Antibody (A01201-4) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

## 19 Publications Citing This Product

1. PubMed ID: 10.4103/1673-5374.165512, The role of Rho/Rho-kinase pathway and the neuroprotective effects of fasudil in chronic cerebral ischemia

2. PubMed ID: 10.4103/1673-5374.202947, Neural stem cells over-expressing brain-derived neurotrophic factor promote neuronal survival and cytoskeletal protein expression in traumatic brain injury sites

3. PubMed ID: 10.3969/j.issn.1673-5374.2012.34.007, Ipsilateral versus bilateral limb-training in promoting the proliferation and differentiation of endogenous neural stem cells following cerebral infarction in rats

Visit [bosterbio.com/anti-map2-picoband-trade-antibody-a01201-4-boster.html](http://bosterbio.com/anti-map2-picoband-trade-antibody-a01201-4-boster.html) to see all 19 publications.

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