

Datasheet for ABIN361345

anti-MAP2 antibody

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Overview

Quantity:	100 µL
Target:	MAP2
Reactivity:	Cow
Host:	Chicken
Clonality:	Polyclonal
Conjugate:	This MAP2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

Product Details

Immunogen:	recombinant bovine MAP2 protein expressed in and purified from E. Coli
Specificity:	Specific for the ~ 280k MAP2 protein.
Cross-Reactivity:	Cow (Bovine), Human, Mouse (Murine), Rat (Rattus)
Sensitivity:	The antibody has been directly tested for reactivity in bovine, human, mouse and rat. It is expected that the antibody will react with other mammalian tissues.
Purification:	Total IgY fraction

Target Details

Target:	MAP2
Alternative Name:	MAP2 (MAP2 Products)
Background:	Microtubules are 25nm diameter protein rods found in most kinds of eukaryotic cells. They are

Target Details

polymerized from a dimeric subunit made of one a subunit and one b tubulin subunit. Microtubules are associated with a family of proteins called microtubule associated proteins (MAPs), which includes the protein (tau) and a group of proteins referred to as MAP1, MAP2, MAP3, MAP4 and MAP5 (Kindler & Gardner 1994). MAP2 is made up of two ~280kDa apparent molecular weight bands referred to as MAP2a and MAP2b. A third lower molecular weight form, usually called MAP2c, corresponds to a pair of protein bands running at ~70kDa on SDS-PAGE gels. All these MAP2 forms are derived from a single gene by alternate transcription, and all share a C-terminal sequence which includes either three or four microtubule binding peptide sequences, which are very similar to those found in the related microtubule binding protein (tau). MAP2 isoforms are expressed only in neuronal cells and specifically in the perikarya and dendrites of these cells. MAP2 has been recently shown to be the specific receptor for the neurosteroid pregnenolone (Fontaine-Lenore V. et al., 2006). Anti-MAP2 Left: Western blot of rat cortex lysate showing specific immunolabeling of the ~280k MAP2 protein. Right: Mixed neuron/glia cultures. The perikarya and dendrites of neurons are strongly and specifically stained with the MAP2 antibody (red). Cell nuclei are visualized with DAPI DNA stain.

Molecular Weight:	~280 kDa
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Gene ID:	4133
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UniProt:	P11137
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Application Details

Application Notes:	Recommended Dilution: WB: 1:20,000 IF: 1:2,500 Quality Control: Western blots performed on each lot.
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Restrictions:	For Research Use only
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Handling

Format:	Liquid
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Buffer:	total IgY fraction in PBS + 10 mM Sodium azide.
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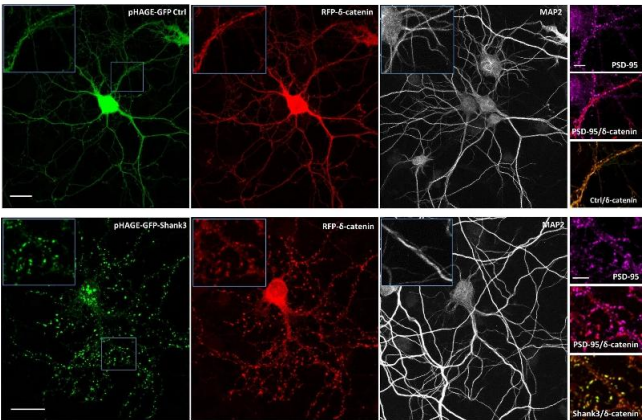
Preservative:	Sodium azide
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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	-20 °C
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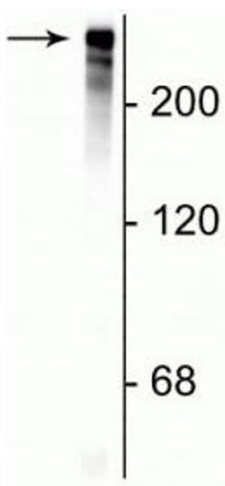
Product cited in: Ekuni, Tomofuji, Irie, Kasuyama, Umakoshi, Azuma, Tamaki, Sanbe, Endo, Yamamoto, Nishida, Morita: "Effects of periodontitis on aortic insulin resistance in an obese rat model." in: **Laboratory investigation; a journal of technical methods and pathology**, Vol. 90, Issue 3, pp. 348-59, (2010) ([PubMed](#)).

Validation report #104331 for Multiplex Immunohistochemistry (mIHC)



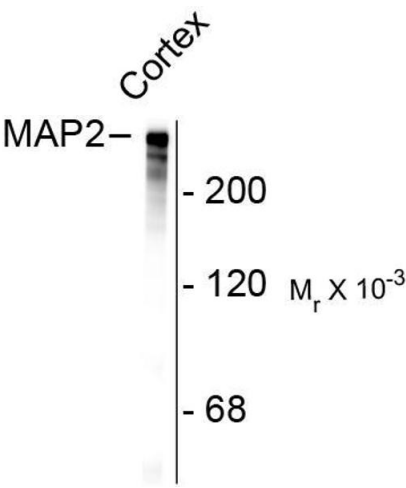
Immunostaining

Image 1. Effect of Shank3 on localization of δ -catenin in neurons. a Primary rat hippocampal neurons were transfected (DIV7) with RFP- δ -catenin together with either an empty pHAGE-GFP construct as control or pHAGE-GFP-Shank3 construct. The neurons were fixed (DIV14) and stained for MAP2 as dendritic marker and PSD-95 as synaptic marker (scale bar 20 μ m). In the control condition δ -catenin shows a diffused signal throughout transfected neurons, whereas coexpression of Shank3 results in recruiting more δ -catenin to postsynaptic sites with a distinct punctate pattern along dendrites. Boxed areas are magnified for GFP, RFP and PSD-95 signals (scale bar 5 μ m). Source: PMID33115499



Western Blotting

Image 2. Western blot of rat cortical lysate showing specific immunolabeling of the ~280 kDa MAP2 protein.



Western Blotting

Image 3. Western blots of rat cortex lysate showing specific immunolabeling of the ~280k MAP2 protein.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN361345.