10320 Camino Santa Fe, Suite G
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Anti-Microtubule Associated Protein 2 (MAP2) Antibody

Our Anti-Microtubule Associated Protein 2 (MAP2) primary antibody from PhosphoSolutions is chicken p

Catalog # AN1437

Specification

Anti-Microtubule Associated Protein 2 (MAP2) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P11137
Reactivity	**Bovine, Chicken**
Host	**Chicken**
Clonality	**Polyclonal**
Isotype	**IgY**
Calculated MW	**199526**

Anti-Microtubule Associated Protein 2 (MAP2) Antibody - Additional Information

Gene ID **4133**

Other Names

DKFZp686I2148 antibody, MAP 2 antibody, MAP dendrite specific antibody, MAP-2 antibody, MAP2 antibody, MAP2A antibody, MAP2B antibody, MAP2C antibody, Microtubule associated protein 2 antibody, Microtubule-associated protein 2 antibody, MTAP2_HUMAN antibody

Target/Specificity

Microtubules are 25nm diameter protein rods found in most kinds of eukaryotic cells. They are 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 τ (tau) and a group of proteins referred to as MAP1, MAP2, MAP3, MAP4 and MAP5 (Kindler & Gardner 1994). MAP2 is made up of two ~280 kDa 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 ~70 kDa 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 τ (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).

Dilution

WB~~1:1000
IHC~~1:100~500

Format

Total IgY fraction

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Microtubule Associated Protein 2 (MAP2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

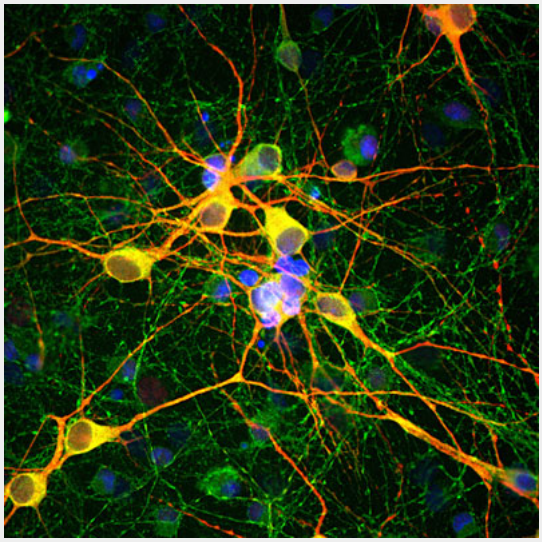
Shipping
Blue Ice

Anti-Microtubule Associated Protein 2 (MAP2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Microtubule Associated Protein 2 (MAP2) Antibody - Images



Immunofluorescence of cortical neuron-glial cell culture from E20 rat labeled with Anti- MAP2(cat. 1100-MAP2, red, 1:10,000), and Anti-Tau (green). The blue is DAPI staining of nuclear DNA. The anti-MAP2 antibody stains dendrites and perikarya of neurons, while the anti-TAU antibody labels neuronal perikarya, dendrites and also axonal process. As a result perikarya and dendrites appears orange-yellow, since they contain both MAP2 and tau, while axons are green.

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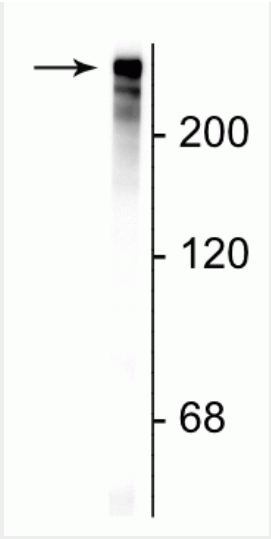

Western blot of rat cortical lysate showing specific immunolabeling of the ~280 kDa MAP2 protein.

Anti-Microtubule Associated Protein 2 (MAP2) Antibody - Background

Microtubules are 25nm diameter protein rods found in most kinds of eukaryotic cells. They are 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 τ (tau) and a group of proteins referred to as MAP1, MAP2, MAP3, MAP4 and MAP5 (Kindler & Gardner 1994). MAP2 is made up of two ~280 kDa 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 ~70 kDa 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 τ (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).