10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Microtubule Associated Protein 2 (MAP2) Antibody
Chicken polyclonal antibody
Catalog # AN1161

Specification

Microtubule Associated Protein 2 (MAP2) Antibody - Product Information

Application	**WB, IF**
Primary Accession	P11137
Reactivity	**Bovine, Human, Mouse, Rat**
Host	**Chicken**
Clonality	**polyclonal**
Calculated MW	**280 KDa**

Microtubule Associated Protein 2 (MAP2) Antibody - Additional Information

Gene ID	**4133**
Gene Name	**MAP2**

Other Names
Microtubule-associated protein 2, MAP-2, MAP2

Target/Specificity
Bovine MAP2 isolated from brain by the GTP microtubule cycling method.

Dilution
WB~~ 1:20000
IF~~ 1:2500

Format
Total IgY fraction

Antibody Specificity
Specific for the ~ 280k MAP2 protein.

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

Shipping
Blue Ice

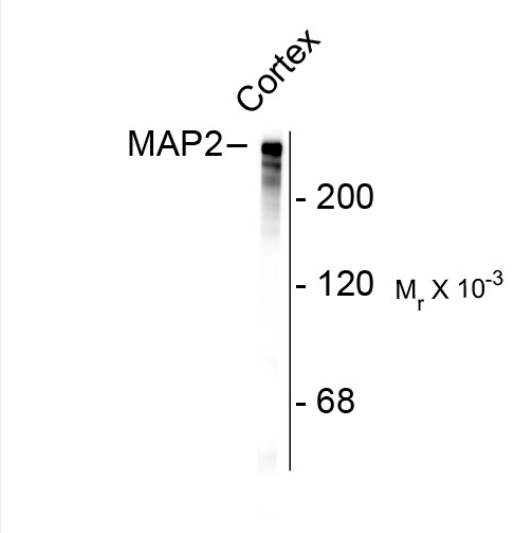
Microtubule Associated Protein 2 (MAP2) Antibody - Protocols

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

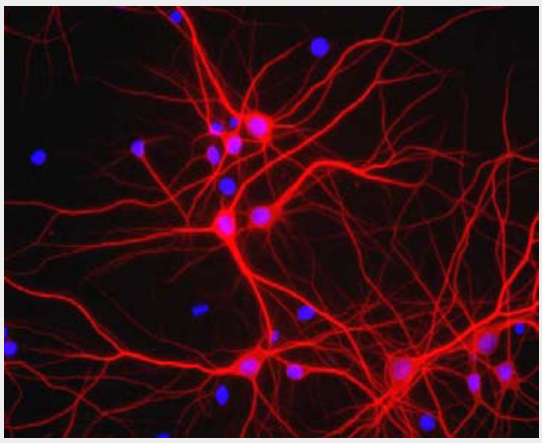
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Microtubule Associated Protein 2 (MAP2) Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~280k MAP2protein.



Mixed neuron/glial cultures. The perikarya and dendrites of neurons are stronglyand specifically stained with the MAP2 antibody (red). Cell nuclei are visualized with DAPI DNA stain.

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 ~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 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).

Microtubule Associated Protein 2 (MAP2) Antibody - References

Kindler S, Gardner CC (1994) Four repeat MAP2 isoforms in human and rat brain. Brain Res Mol Brain Res. 26(1-2):218-224.
Fontaine-Lenore V, Chambraud B, Fellous A, David S, Duchossoy Y, Baulieu EE, Robel P (2006) Microtubule-associated protein 2 (MAP2) is a neurosteroid. Proc Natl Acad Sci USA 103(12):4711-6.