

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

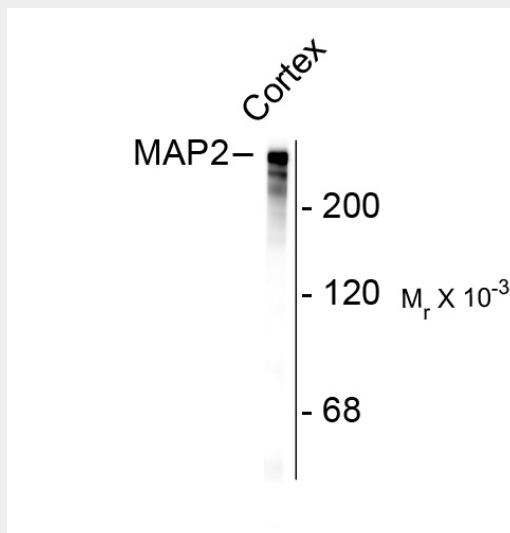
Blue Ice

Microtubule Associated Protein 2 (MAP2) Antibody - Protocols

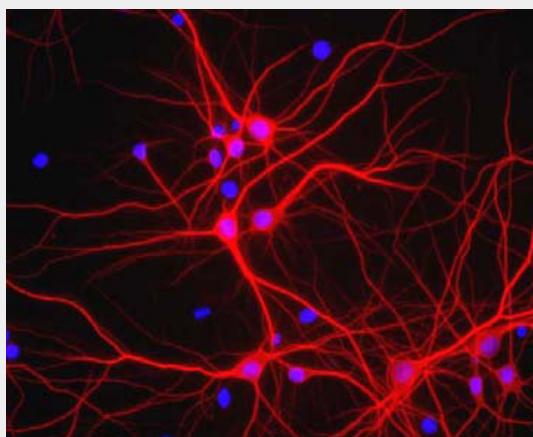
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Microtubule Associated Protein 2 (MAP2) Antibody - Images



Western blot of rat cortex lysate showing specific immunolabeling of the ~280k MAP2 protein.



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.

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 α subunit and one β 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.