

**Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody**  
**Mouse Monoclonal Antibody**  
**Catalog # AN1278****Specification**

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**Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P11137</a>
Reactivity	Bovine
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	199526

**Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody - Additional Information**

Gene ID	4133
Gene Name	MAP2

**Target/Specificity**

Full length recombinant human MAP2D protein

**Dilution**

WB~~ 1:5000

IHC~~ 1:2500

IF~~1:50~200

**Format**

Protein G purified culture supernatant

**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 C/D (MAP2C/D) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

Blue Ice

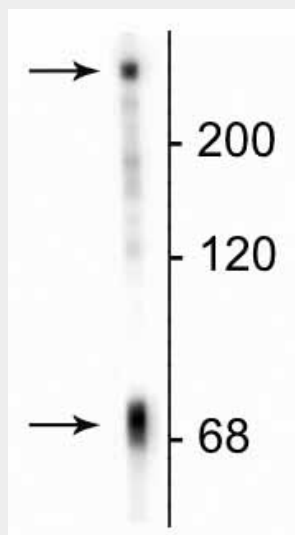
**Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody - Protocols**

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

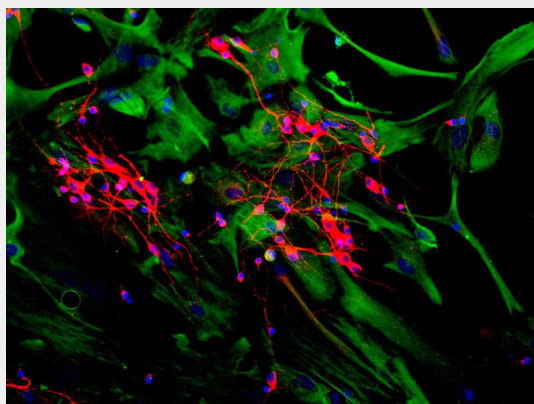
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody - Images



Western blot of neonatal rat brain lysate showing specific immunolabeling of the ~70 kDa MAP2C/D protein.



Immunostaining of mixed neuron/glia cultures showing specific cytoplasmic labeling of dendrites and perikarya of neuronal cells in red with anti-MAP2C/D and astrocyte and fibroblast labeling (green) with anti-vimentin

### Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody - Background

Microtubules are 25nm diameter protein rods found in most kinds of eukaryotic cells. 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 ~280 kDa bands referred to as MAP2a and MAP2b. A third lower molecular weight form, MAP2C and MAP2D, 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 (tau). MAP2 isoforms are expressed only in neuronal cells and specifically in the perikarya and dendrites of these cells. MAP2C and MAP2D are expressed earlier in

development than the MAP2a and MAP2b isoforms, so that this antibody is a more useful marker of neuronal development. MAP2 has been recently shown to be the specific receptor for the neurosteroid pregnenolone (FontaineLenore V. et al., 2006).