

Microtubule Associated Protein 2 C/D (MAP2C/D) Antibody

Mouse Monoclonal Antibody Catalog # AN1278

Specification

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

Application WB, IHC, IF
Primary Accession P11137
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

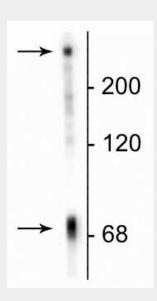
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

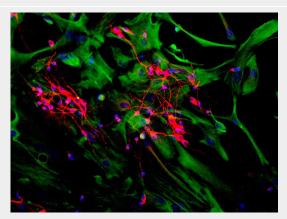


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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



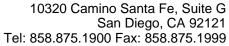
Western blot of neonatal rat brain lysate showing specific immunolabeling of the \sim 70 kDa MAP2C/D protein.



Immunostaining of mixed neuron/glial 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).