

Product datasheet for **TA389016**

MAP2 Mouse Monoclonal Antibody [Clone ID: 2C4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	2C4
Applications:	ICC, IHC, WB
Recommended Dilution:	WB: 1:5000 WB Brain: 1:5000 ICC: 1:2500-1:10,000
Reactivity:	Bovine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG2a
Clonality:	Monoclonal
Immunogen:	Full length recombinant human MAP2D protein.
Specificity:	Specific for endogenous levels of the ~70 kDa MAP2C/D isoforms as well as the ~280 kDa MAP2A/B. The antibody will bind all known MAP2 isoforms.
Formulation:	PBS + 50% glycerol and 5 mM NaN3
Concentration:	lot specific
Purification:	Protein G Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	70
Gene Name:	microtubule associated protein 2
Database Link:	Entrez Gene 4133 Human P11137



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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 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 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 τ (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).

Synonyms:

DKFZp686I2148; MAP-2; MAP2A; MAP2B; MAP2C; OTTHUMP00000163916

Note:

Protein G purified culture supernatant