

Anti-MAP-2 [AA5 (AP18)] Bulk Size Ab02896-10.0-BT

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Kappa

Clone Number: AA5 (AP18)

Alternative Name(s) of Target: Methionine aminopeptidase 2; MetAP 2; MAP 2; Initiation factor 2-associated 67 kDa glycoprotein; p67; p67eIF2

UniProt Accession Number of Target Protein: Q3ZC89

Published Application(s): WB, IHC

Published Species Reactivity: Birds, Clawed frog, Cow, Rat, Human

Immunogen: The mouse version of this antibody was generated by immunizing mice with taxol-stabilized microtubules from rat brain.

Specificity: This antibody is specific to the phosphorylated form of MAP2a, b, c and shows no cross-reactivity with other MAPs, tau or tubulin. This antibody reacts with dendrites and cell bodies of neurons. It is useful in studies of neuron structure in normal and malignant brain tissue and in Alzheimer's. MAP-2 cotranslationally removes the N-terminal methionine from nascent proteins. The N-terminal methionine is often cleaved when the second residue in the primary sequence is small and uncharged.

Application Notes: While testing the specificity of the mouse version of this antibody, a western blot on P9 quail and adult rat brain was performed using the mouse version of this antibody. Furthermore, quail cerebellum was immunologically stained using the mouse version of this antibody (Tucker et al, 1988; PMID:3199190). To examine the relationship between changes in tau phosphorylation and loss of MAP2 immunoreactivity, immunocytochemistry was performed (Ashford et al, 1998; PMID:9786247). While assessing experience-dependent modifications in MAP2 phosphorylation in rat olfactory bulb, a western blot was performed against adult rat olfactory bulb proteins using the mouse version of this antibody. Furthermore, immunohistochemistry was performed against coronal sections of olfactory bulbs using the mouse version of this antibody (Philpot et al, 1997; PMID:9391014). While studying subependymal giant cell astrocytoma, immunohistochemistry was performed using the mouse version of this antibody (Lopes et al, 1995; PMID:8928613).

Antibody First Published in: Tucker et al. The sequential appearance of low- and high-molecular-weight forms of MAP2 in the developing cerebellum J Neurosci. 1988 Dec;8(12):4503-12. [PMID:3199190](#)

Note on publication: It is shown that avian MAP2 also exists as both high- (Mr approximately 260,000)

and low-molecular-weight (M_r approximately 65,000) forms whose relative abundance changes during brain maturation, indicating a conserved function for these proteins during vertebrate neuronal morphogenesis.

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.