

MAP 2

Cat.No. 188 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) (see remarks) IP: not tested yet ICC: 1 : 1000 IHC: yes IHC-P/FFPE: 1 : 250 up to 1 : 500
Immunogen	Recombinant protein corresponding to AA 2 to 314 from human MAP2-4 hu (UniProt Id: P11137-4)
Reactivity	Reacts with: human (P11137), rat (P15146), mouse (P20357), chicken. Other species not tested yet.
Specificity	Specific for MAP 2; recognizes all four isoforms.
Matching control	188-0P
Remarks	WB: Due to its large size, MAP 2 requires special gel-electrophoresis and Western blot protocols for visualization by immunoblotting. Excellent results can be obtained with the 4-12% TRIS-glycine gradient gels from anamed or NuPAGE 3-8% TRIS-Acetate gradient gels from invitrogen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

There are two major classes of heat stable microtubule associated proteins (MAPs): **MAP 2**, and tau. Both protein classes are involved in the regulation of microtubule polymerization in cells. Four differentially regulated isoforms of MAP 2 have been described so far.

Selected References SYSY Antibodies

The active zone protein family ELKS supports Ca²⁺ influx at nerve terminals of inhibitory hippocampal neurons.
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The Journal of neuroscience : the official journal of the Society for Neuroscience (2014) 3437: 12289-303. . **ICC**

Region-specific expression of vesicular glutamate and GABA transporters under various ischaemic conditions in mouse forebrain and retina.

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Neuroscience (2013) 231: 328-44. . **IHC**

Up-regulation of neurofilament light chains is associated with diminished immunoreactivities for MAP2 and tau after ischemic stroke in rodents and in a human case.

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Fusion Competent Synaptic Vesicles Persist upon Active Zone Disruption and Loss of Vesicle Docking.

Wang SSH, Held RG, Wong MY, Liu C, Karakhanyan A, Kaeser PS
Neuron (2016) 914: 777-791. . **ICC**

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Philosophical transactions of the Royal Society of London. Series B, Biological sciences (2014) 3691654: 20140134. . **ICC; tested species: mouse**

Inefficient type I interferon-mediated antiviral protection of primary mouse neurons is associated with the lack of apolipoprotein I9 expression.

Kreit M, Paul S, Knoops L, De Cock A, Sorgeloos F, Michiels T
Journal of virology (2014) 887: 3874-84. . **ICC; tested species: mouse**

Neurological impairment in experimental antiphospholipid syndrome is associated with increased ligand binding to hippocampal and cortical serotonergic 5-HT1A receptors.

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Immunobiology (2013) 2184: 517-26. . **IHC; tested species: mouse**

Activity-dependent regulation of MHC class I expression in the developing primary visual cortex of the common marmoset monkey.

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Behavioral and brain functions : BBF (2011) 7: 1. . **IHC**

The anaphase promoting complex is required for memory function in mice.

Kuczera T, Stilling RM, Hsia HE, Bahari-Javan S, Irniger S, Nasmyth K, Sananbenesi F, Fischer A
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Somatodendritic serotonin release and re-uptake in mouse embryonic stem cell-derived serotonergic neurons.

Lau T, Schneid T, Heimann F, Gundelfinger ED, Schloss P
Neurochemistry international (2010) 578: 969-78. . **ICC**