www.antibodiesinc.com
orders@antibodiesinc.com
530-758-4400

PRODUCT DATASHEET

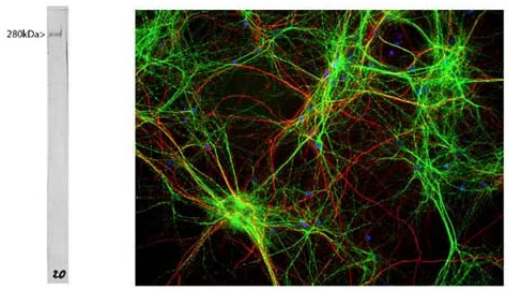
Anti-Microtubule Associated Protein 2 (MAP2) Antibody

Product Details

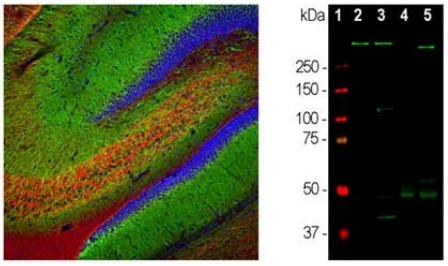
Available Variants	100 µg (SKU:M-1625-100)
Conjugate	Unconjugated
Isotype	IgG
Clone	5H11
Host Species	Mouse
Format	IgG
Physical State	Lyophilized
Buffer	Lyophilized from PBS buffer pH 7.2-7.6 with 0.1% trehalose, and sodium azide
Production Notes	Protein G purified
Applications	ICC, IHC, WB
Dilution Ranges	WB: 1:5000-1:10000 IHC: 1:1000-1:5000 ICC: 1:1000-1:5000
Species Reactivity	Bovine, Human, Mouse, Rat
Immunogen	High molecular MAP protein preparation derived from bovine brain
Specificity	The specificity of this antibody has been confirmed by WB and IHC against the antigen. Human; rat; mouse;.
Storage	Spin vial briefly before opening. Reconstitute with 100 µL sterile-filtered, ultrapure water to achieve a 1 mg/mL concentration. Centrifuge to remove any insoluble material. At least 12 months after purchase at 2-8°C (lyophilized formulations). After reconstitution, aliquot and store at -20°C for a higher stability. Avoid freeze-thaw cycles.
UniProt ID	Q0IIA8 UniProt Summary: The exact function of MAP2 is unknown but MAPs may

	stabilize the microtubules against depolymerization. They also seem to have a stiffening effect on microtubules.
Country of Origin	United States
Shipping	25°C (ambient)
Expiration	12 months after date of receipt (unopened vial).
Usage Statement	For research use only.
NCBI Gene ID	281294

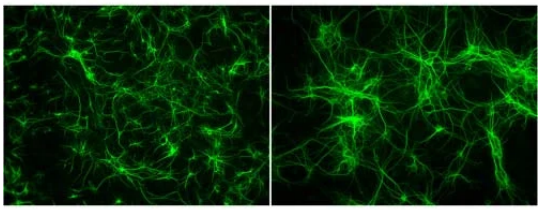
Product Images



Whole rat brain lysate with mouse anti-MAP2 antibody. The antibody recognizes the ~280 kDa protein. Right: Mixed neuron/glia cultures stained with mouse anti-MAP2 (green) and also rabbit antibody to neurofilament H (Catalog Number R-1388-50) (red). Since the NF-H protein is largely expressed in neuronal axons, while the MAP2 is only found in neuronal dendrites and perikarya, there is little overlap between these two staining patterns. DNA stain shows nuclei of neurons and non-neuronal cells (blue).



Left: Rat hippocampus section stained by **Immunohistochemistry** with mouse anti-MAP2 (green, 1:5,000) and rabbit antibody to alpha-internexin (R-1379-50, red, 1:2,000). IHC Method: Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post-fixed for 24 hours, cut to 45 um, and free-floating sections were stained. MAP2 protein is detected in the perikarya and dendrites of the most neurons, and the alpha-internexin antibody selectively stains axons and dendrites of neuronal cells. **Right: Western blot** analysis of tissue lysates using mouse anti-MAP2 (green, 1:10,000). [1] protein standard, [2] adult rat whole brain, [2] embryonic (E20) rat brain, [4] adult rat spinal cord, and [5] adult mouse brain. A band at about 280 kDa corresponds to full length MAP2A and MAP2B protein. MAP2A/B is expressed heavily in adult brain particularly in cortical regions, but is a more minor component of spinal cord and almost absent from the embryonic brain sample. Note that the epitope for this antibody in within the projection domain found only in MAP2A and MAP2B, thus the antibody does not bind to the lower molecular weight MAP2C and MAP2D isoforms which lack this region.



MAP2 staining in fixed and permeabilized striatal neurons (7 DIV) by **Immunocytochemistry**. Primary antibody concentration: 1 µg/mL. Image courtesy of QBM Cell Science.