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MOUSE ANTI-MAP-2
MONOCLONAL ANTIBODY

CATALOG NUMBER: MAB3418-50UG

LOT NUMBER:

QUANTITY: 50 µg

CONCENTRATION: 1 mg/mL

SPECIFICITY: MAP-2 (microtubule associated protein-2) is one of several high molecular weight proteins that play an important role in brain microtubule assembly. In addition to its association with microtubules, MAP-2 associates with neurofilaments and actin filaments suggesting that it may guide interaction among microtubules, other cytoskeletal elements, and cytoplasmic organelles (1).
MAP-2 is a stringent marker for neurons. In addition, MAP-2 displays intracellular specificity. In the central nervous system, MAP-2 is confined to neuronal cell bodies and dendrites. There are exceptions, however, where some axons stain positive for small amounts of MAP-2 (2,3). MAP-2 is uniformly distributed throughout the cell when first expressed in cultured neurons but becomes selectively localized as dendritic development proceeds (4,5).
SDS-PAGE Profiles: In SDS-PAGE MAP-2 from adult rat migrates as a closely associated doublet having a molecular weight of approximately 300 kD. However, early in brain development (postnatal day 10 in rats), MAP-2 migrates as a single band that is identical to the lower molecular weight band of the adult MAP-2 doublet (MAP-2b). Later in development (postnatal days 17-18), the mobility of MAP-2 changes to the adult doublet form. (In the spinal cord, conversion to the adult form occurs earlier).

IMMUNOGEN: Bovine brain microtubule protein.

ISOTYPE: IgG_1

CLONE NAME: AP20

APPLICATIONS: Western blot: 60 ng/mL
Immunohistochemistry: 5 µg/mL
Optimal working dilutions must be determined by end user.

SPECIES REACTIVITIES: Human, cow, rat, mouse, and chicken.

FORMAT: Purified immunoglobulin.

PRESENTATION: Liquid. Buffer = 0.02M Phosphate buffer, pH 7.6, 0.25M NaCl with 0.1% sodium azide.

STORAGE/HANDLING: Maintain at 2-8°C in undiluted aliquots for up to 6 months.

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APPLICATION NOTES

Western Blot: Users should run 4%-20% SDS-PAGE gradient gels. MAP-2 is detected as a 300 kD band with approximately 60 ng/ml anti-MAP-2.

Immunohistochemistry: Anti-MAP-2 can be used to stain tissue (brain or spinal cord) fixed with paraformaldehyde.

Important Note: *During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.*

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28820 Single Oak Drive • Temecula, CA 92590
Technical Support: T: 1-800-MILLIPORE (1-800-645-5476) • F: 1-800-437-7502
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