Mouse Anti-MAP-2 (2a + 2b) Monoclonal Antibody

Mouse, Monoclonal (MAP-2)

Cat. No. DMAB3898
Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: 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.
Product Overview: Monoclonal Antibody to Microtubule Associated Protein-2 (MAP-2) (2a + 2b)
Specificity: Recognizes (Mr 300kDa) MAP-2 protein from bovine brain and dendrites and cell bodies of neurons. Strongly cross-reacts with MAP-2 from human, rat, mouse and chicken brains. Reacts with the high molecular weight forms (2a & 2b) of MAP-2 but not with the low molecular weight form (2c).
Clone: BP21
Isotype: IgG_1
Host animal: Mouse.
Source: Cell culture
Format: FITC, Liquid
Applications: Can be used in protein blotting and immunohistochemistry, frozen tissues only. The suggested working dilution for immunohistochemical staining is approximately 1:500. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded.
Purification: Protein G chromatography. Fluorescein which has a maximum absorbance at 492nm and an emission maximum at 518nm has been covalently attached to Anti-MAP-2 and purified to assure optimal fluorochrome/protein (F/P) molar ratios.
Affinity Constant: Not determined

REFERENCES

1. Cacares, A. et al (1984) J. Neuroscience 4:394.
2. Peng, I. et al (1986) J. Cell Biol. 102:252.
3. Lewis, S.A. et al (1989) Nature 342:498.

BACKGROUND

Introduction: Microtubule-associated protein 2 is a protein that in humans is encoded by the *MAP2* gene.This gene encodes a protein that belongs to the microtubule-associated protein family. The proteins of this family are thought to be involved in microtubule assembly, which is an essential step in neurogenesis. MAP2 serves to stabilize microtubules (MT) growth by crosslinking MT with intermediate filaments and other MT. The products of similar genes in rat and mouse are neuron-specific cytoskeletal proteins that are enriched in dendrites, implicating a role in determining and stabilizing dentritic shape during neuron development. A number of alternatively spliced variants encoding distinct isforms have been described.
Keywords: DKFZp686I2148; Dendrite specific MAP; DKFZp686I2148; MAP 2; MAP-2; MAP2; MAP2_HUMAN; MAP2A; MAP2B; MAP2C; Microtubule associated protein 2;Microtubule-associated protein 2; Mtap 2

PACKAGING

Concentration: 100ug/ml (OD280nm)
Buffer: 0.01M PBS, pH 7.4 containing 1% BSA.
Preservative: 0.09% Sodium azide
Storage: Store (protected from light) at 2–8° C. DO NOT FREEZE!
Warning: This product contains sodium azide, which has been classified as Xn (Harmful) in European Directive 67/548/EEC in the concentration range of 0.1–1.0%. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

45-16 Ramsey Road Shirley, NY 11967, USA
Tel: 631-624-4882 ·Fax:631-614-7828
E-mail: info@creative-diagnostics.com
www.creative-diagnostics.com