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BP157 Polyclonal Antibody to Microtubule Associated Protein 2 (MAP2 + Tau) - Serum

Quantity: 0.2 ml

Concentration: 25.5 mg/ml

Background: MAP2 is the major microtubule associated protein of brain tissue. There are three forms of MAP2; two are similarily sized with apparent molecular weights of 280 kDa (MAP2a and MAP2b) and the third with a lower molecular weight of 70 kDa (MAP2c). In the newborn rat brain, MAP2b and MAP2c are present, while MAP2a is absent. Between postnatal days 10 and 20, MAP2a appears. At the same time, the level of MAP2c drops by 10-fold. This change happens during the period when dendrite growth is completed and when neurons have reached their mature morphology. MAP2 is degraded by a Cathepsin D-like protease in the brain of aged rats. There is some indication that MAP2 is expressed at higher levels in some types of neurons than in other types. MAP2 is known to promote microtubule assembly and to form side-arms on microtubules. It also interacts with neurofilaments, actin, and other elements of the cytoskeleton.

Host: Rabbit

Immunogen: Native, from brain

Format:
State: Liquid Ig fraction
Purification: Prepared by Ammonium Sulphate fractionation
Buffer System: PBS, pH 7.2, 0.09 % Sodium Azide

Applications:
Immunohistochemistry on frozen sections (1:5 - 1:30).
Western blot (Recognises mainly the MAP2 protein (280 kD) and to a lesser extent the Tau protein (60 kD) in blotting using bovine brain extract. When testing against rat brain extract this antibody shows strong bands at 60 kD and fainter bands at the higher molecular weights. This could be due to differences in the sample preparation).
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
This antibody detects Microtubule Associated Protein 2 (+ tau).
Species: Bovine
Other species not tested.

Storage:
Store the antibody at -20 °C. Ship at 2 - 8 °C.
Avoid repeated freezing and thawing.
Shelf life: One year from despatch.

General Readings:
1. (0) J. Neuroscience., Feb 1999; 19:1324-1334