



## MAP2 Mouse Monoclonal Antibody

E12-090

**Catalog Number:** E12-090**Amount:** 100µg/100µl**Clone Number:** 7D4

**Background:** MAP2 is the major microtubule associated protein of brain tissue. There are three forms of MAP2; two are similarly 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.

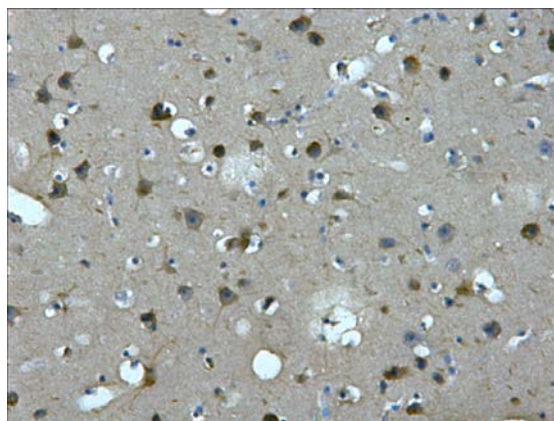
**Form of Antibody:** Mouse IgG1 in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

**Storage/Stability:** Store at -20°C/1 year. Do not aliquot the antibody.

**Specificity/Sensitivity:** The MAP2 Mouse Monoclonal antibody detects endogenous MAP2 proteins

**Reactivity:** H,M,R

**Applications:** IHC: 1:200



IHC staining of Human brain tissue  
paraffin-embedded with MAP2 mouse mAb (7D4)  
diluted at 1:200.

**For Research Use Only**