

MAP2 Mouse mAb

Cat No: HR1AM2178

For research use only

Overview

Product Name	MAP2 Mouse mAb
Source	Mouse
Applications	IHC
Species Reactivity	Human,Rat,Mouse
Recommended Dilutions	IHC 1:200
Immunogen	
Species	
Storage	
Isotype	
Clonality	Monoclonal
Concentration	1mg/ml
Observed band	N/AkDa
GeneID?Human?	4133
Human Swiss-Prot No.	
Cellular localization	
Alternative Names	MAP2A, MAP2B, MAP2C
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.