

MAP2 Mouse Monoclonal Antibody

Catalog No: #38022



Package Size: #38022-1 50ul #38022-2 100ul

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Description

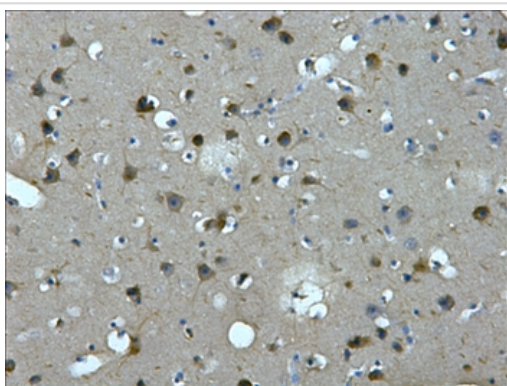
Product Name	MAP2 Mouse Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	7D4
Purification	Affinity purification using immunogen.
Applications	IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The MAP2 Mouse Monoclonal antibody detects endogenous MAP2 protein.s
Conjugates	Unconjugated
Target Name	MAP2
Other Names	DKFZp686I2148; MAP-2; MAP2; MAP2A; MAP2B; MAP2C; Microtubule-associated protein 2
Accession No.	Swiss-Prot#:P11137
Concentration	1.0mg/ml
Formulation	Mouse IgG1 in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

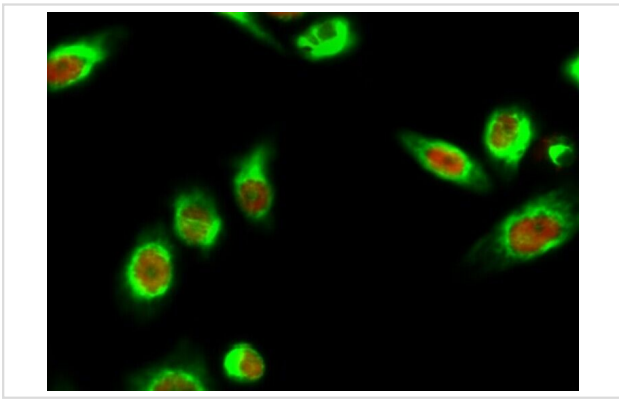
Immunohistochemistry: 1:200

IF 1:50-200

Images



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



Immunofluorescence analysis of HeLa cell.

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.

Published Papers

el at., The inhibition of PGAM5 suppresses seizures in a kainate-induced epilepsy model via mitophagy reduction. In Front Mol Neurosci on 2022 Dec 22 by Fuxin Zhong, Yunhao Gan, et al.. PMID:36618822, (2022)

[PMID:36618822](https://pubmed.ncbi.nlm.nih.gov/36618822/)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.