

## MAP2 Mouse Monoclonal Antibody

Catalog No: #38022

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## Description

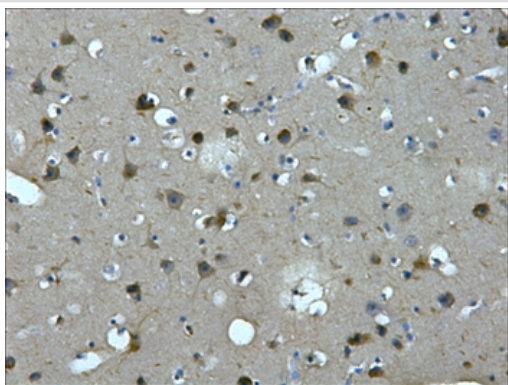
Product Name	MAP2 Mouse Monoclonal Antibody
Host Species	Mouse
Clonality	Monoclonal
Clone No.	7D4
Purification	Affinity purification using immunogen.
Applications	IHC,IF
Species Reactivity	Hu Ms Rt
Specificity	The MAP2 Mouse Monoclonal antibody detects endogenous MAP2 protein.s
Target Name	MAP2
Other Names	DKFZp686I2148; MAP-2; MAP2; MAP2A; MAP2B; MAP2C; Microtubule-associated protein 2
Accession No.	Swiss-Prot#:P11137
Uniprot	P11137
GeneID	4133;
Concentration	1.0mg/ml
Formulation	Mouse IgG1 in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

## Application Details

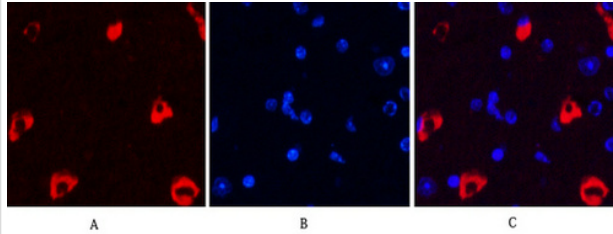
IHC dilution: 1:200

IF dilution:1:50-200

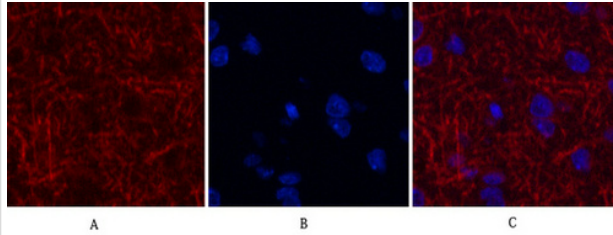
## Images



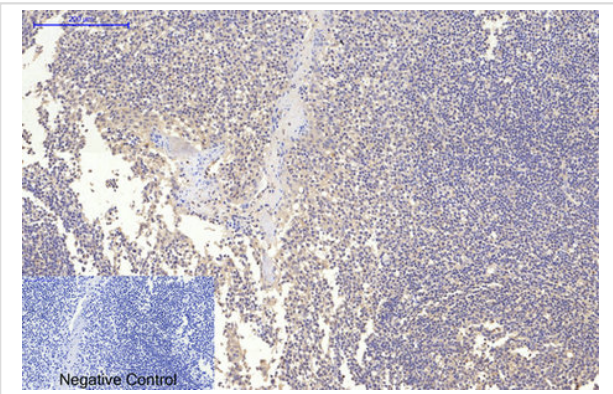
IHC staining of paraffin-embedded Human brain tissue with MAP2 mouse mAb 7D4 diluted at 1:200.



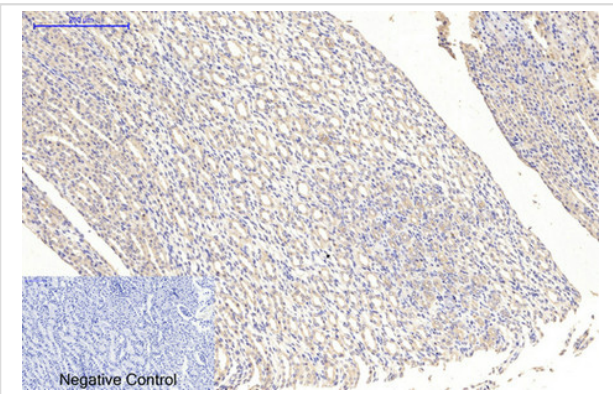
Immunofluorescence analysis of Mouse-brain tissue. 1,MAP2 Monoclonal Antibody(7D4)(red) was diluted at 1:200(4C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



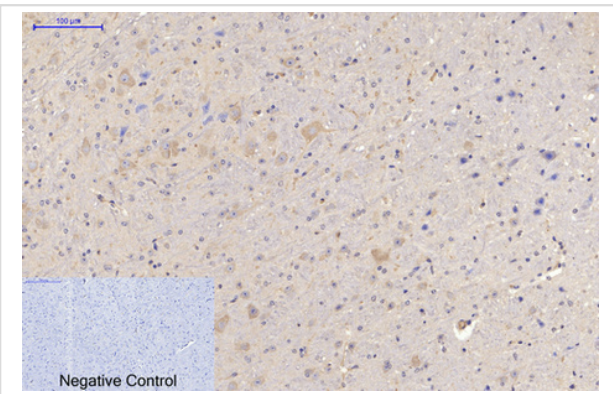
Immunofluorescence analysis of Rat-brain tissue. 1,MAP2 Monoclonal Antibody(7D4)(red) was diluted at 1:200(4C,overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,MAP2 Monoclonal Antibody(7D4) was diluted at 1:200(4C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,MAP2 Monoclonal Antibody(7D4) was diluted at 1:200(4C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-brain tissue. 1,MAP2 Monoclonal Antibody(7D4) was diluted at 1:200(4C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.

## Background

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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.

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Note: This product is for in vitro research use only