



# ELK Biotechnology

MAP2 Mouse mAb

Catalog NO.: EM1067

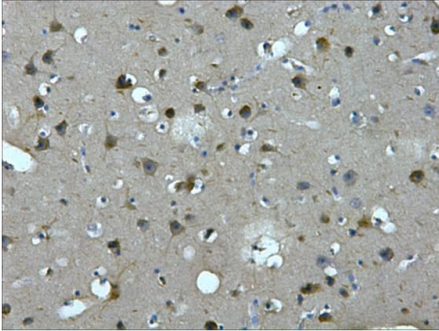
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## Overview

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Product name	MAP2 Mouse Monoclonal antibody
Source	Mouse
Applications	IHC
Species reactivity	Human Rat Mouse
Recommended dilutions	Immunohistochemistry:1/200 <b>NOTE: Optimal dilutions should be determined by the end user.</b>
Immunogen	Synthetic Peptide
Species	Human
Storage	PBS with 0.02% sodium azide and 50% glycerol pH 7.4. Store at -20° C. Avoid repeated freeze-thaw cycles.
Isotype	IgG1
Clonality	Monoclonal
Concentration	1 mg/ml
Observed band	N/A
GenelD (Human)	4133
Human Swiss-Prot No.	P11137
Cellular localization	Cytoplasm cytoskeleton.
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 0 and 20 MAP2a appears. At the same time the level of MAP2c drops by 0-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.



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