

**Mouse Anti-MAP2 [SMI52]: MC0192, MC0192RTU7**

**Intended Use:** For Research Use Only

**Description:** This antibody reacts with a 200kDa protein, identified as heavy sub-unit of neurofilaments (NF-H). It reacts specifically with the phosphorylated KSP/KEP segment at the C-terminus of the heavy subunit (NF-H) of neurofilaments. After dephosphorylation of neurofilaments with alkaline phosphatase, this antibody no longer binds. Neurofilaments make up the main structural elements of axons and dendrites and are found in neurons, peripheral nerves, and sympathetic ganglion cells. Neurofilaments consist of three major subunits with molecular weights of 68kDa (NF-L), 160kDa (NF-M) and 200kDa (NF-H). Anti-neurofilament stains a number of neural, neuroendocrine, and endocrine tumors. Neuromas, ganglioneuromas, gangliogliomas, ganglioneuroblastomas, and neuroblastomas stain positively for anti-neurofilament. Neurofilaments are also present in paragangliomas as well as adrenal and extra-adrenal pheochromocytomas. Carcinoids, neuroendocrine carcinomas of the skin, and oat cell carcinomas of the lung also express neurofilament.

**Specifications:**

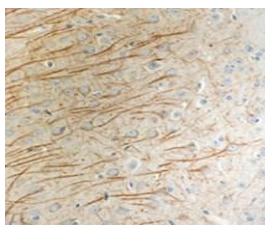
Clone: SMI52  
 Source: Mouse  
 Isotype: IgG1  
 Reactivity: Mammalian, xenopus  
 Localization: Cytoplasm, cytoskeleton  
 Formulation: Purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, ICC/IF, WB  
 Package:

Description	Catalog No.	Size
MAP2 Concentrated	MC0192	1 ml
MAP2 Prediluted	MC0192RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Human brain, paraganglioma  
 Concentrated Dilution: 50-200  
 Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
 Incubation Time and Temp: 30-60 minutes @ RT  
 Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE mouse brain stained with anti-MAP2 using DAB

**References:**

1. Maternal immune activation leads to selective functional deficits in offspring parvalbumin interneurons. Canetta S, et al. Mol Psychiatry 21:956-68, 2016.
2. A tissue-specific protein purification approach in Caenorhabditis elegans identifies novel interaction partners of DLG-1/Discs large. Waaijers S, et al. BMC Biol 14:66, 2016.
3. Macrophages Promote Axon Regeneration with Concurrent Neurotoxicity. Gensel JC, et al. J. Neurosci 29: 3956-3968, Mar 2009.

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Rev. A