

**Localization** – Cytoplasm

**Host Species** – Mouse

**Ig Class** – IgG1, kappa

### Intended Use

This antibody is designed for the specific localization of MAP-2 in formalin-fixed, paraffin-embedded (FFPE) tissue sections.

### Storage & Handling

Store RTU Vial at 2-8°C. Fresh dilutions for concentrated antibodies, if required, should be prepared prior to use and are stable for up to one day at room temperature (20-26°C).

### Working Principle

IHC is a two-step process wherein the primary antibody binds to the antigen of interest and that binding is detected by a chromogen. The primary antibody may be used in IHC using manual techniques or any Automated Staining System. Positive and negative controls should always be run simultaneously with all patient specimens.

### Product Description

MAP2 (Microtubule-Associated Protein 2) is expressed in two high-molecular-weight isoforms (MAP2a and MAP2b) and a low-molecular-weight variant, all derived through alternative splicing of a single gene. Its expression is developmentally regulated, reflecting its essential role in neurogenesis through the promotion of microtubule assembly. Homologous gene products in rat and mouse are neuron-specific cytoskeletal proteins localized predominantly to dendrites, where they contribute to the establishment and stabilization of dendritic architecture during neuronal differentiation. MAP2 serves as a valuable marker in the investigation of neuronal morphology in both normal and neoplastic brain tissue and is also relevant to studies of neurodegenerative disorders, including Alzheimer's disease.

### Material Supplied

MAP-2 antibody is affinity purified and diluted in PBS, pH 7.4, containing 1% BSA and 0.09% sodium azide.

### Material required But Not Supplied

- Xylene
- Isopropyl alcohol
- Positive charged slides
- Wash Buffer
- DI Water
- Antigen retrieval buffers
- Blocking Reagents
- Detection System
- Control Tissues
- Hematoxylin
- Mounting media
- Cover glass

### Working Reagent Procedure

- Ready-to-Use antibodies have been optimized for use with the recommended protocols and should not require further dilution.
- Concentrated antibodies must be diluted in accordance with the recommended protocol.

### Recommended Protocol

Refer the following table for the details on specific recommended protocol for this antibody.

<b>Control Tissue</b>	Human brain.
<b>Dilution factor</b>	<b>1:20-50</b> (Antibody Diluent: DH144)

<b>Antibody Incubation Time</b>	30-60 Minutes at RT
<b>Retrieval Pre-treatment</b>	<b>Tris-EDTA based HIER</b> (AR9 Buffer: DH020)

### Precautions

*This product should be used by qualified and trained professional users only.*

Avoid microbial contamination of reagents to minimize non-specific staining. Never pipette reagents by mouth. Avoid contact of reagents and specimens with skin. If reagents or specimens come into contact with sensitive area, wash with sufficient amounts of water. Dispose of the unused reagents. This kit contain sodium azide at concentrations of less than 0.1%. Sodium azide is not classified as a hazardous chemical at these concentrations, but proper handling protocols should be observed. For more information on product hazards, precautions and waste disposal, *Material Safety Data Sheets* are available upon request.

### Limitations

Improper tissue handling and processing prior to immunostaining can lead to inconsistent results. Variations in embedding and fixation or the nature of the tissue may lead to variations in results. Endogenous peroxidase activity or pseudo peroxidase activity in erythrocytes and tissue biotin may result in non-specific staining based on the detection system employed. Tissues containing Hepatitis B Surface Antigen (HBsAg) may give false positive with horseradish peroxidase systems. Improper counterstaining and mounting may compromise the interpretation of results. Interpretation of the staining result is solely the responsibility of the user. Experimental results should be confirmed by a medically-established diagnostic product or procedure. Evaluation must be performed by a qualified pathologist.

### Troubleshooting

For Technical Support contact us at +91 - 7506501122 or [info@dygnova.com](mailto:info@dygnova.com) or your local distributor to report unusual staining.

ORDERING INFORMATION	
CATALOG#	DESCRIPTION
DH558-01C	0.1 ML Concentrated Antibody Vial
DH558-05C	0.5 ML Concentrated Antibody Vial
DH558-1C	1 ML Concentrated Antibody Vial
DH558-3R	3 ML Ready-to-Use Antibody Vial
DH558-6R	6 ML Ready-to-Use Antibody Vial
DH558-12R	12 ML Ready-to-Use Antibody Vial

Doc No: DH/DS/RB555Rev.00

	Manufacturer Details		Use by Date	<b>LOT</b>	Lot/Batch Number
	Manufacturing Date		Consult Instructions for Use	<b>REF</b>	Catalogue Number
	Temperature Limits		Sufficient for 'n' assays / tests	<b>IVD</b>	In-vitro Diagnostic Medical Device