10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-MAPT / Tau Antibody (clone MCA-2E9)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS17373

Specification

Anti-MAPT / Tau Antibody (clone MCA-2E9) - Product Information

Application	**WB, IHC-P, IF, ICC**
Primary Accession	P10636
Predicted	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**78928**

Anti-MAPT / Tau Antibody (clone MCA-2E9) - Additional Information

Gene ID 4137

Alias Symbol	**MAPT**

Other Names
MAPT, FTDP-17, MSTD, Neurofibrillary tangle protein, PHF-tau, MTBT2, PPND, DDPAC, MAPTL, MTBT1, Paired helical filament-tau, TAU

Target/Specificity
Clone 2E9 is known to react with tau from human, mouse and rat. Since tau is highly conserved, it is likely that the antibody is effective on other species also.

Reconstitution & Storage
PBS, 10 mM sodium azide. +4°C or -20°C, Avoid repeated freezing and thawing.

Precautions
Anti-MAPT / Tau Antibody (clone MCA-2E9) is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-MAPT / Tau Antibody (clone MCA-2E9) - Protein Information

Name MAPT (HGNC:6893)

Synonyms MAPTL, MTBT1, TAU

Function
Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity (PubMed:21985311). The C-terminus binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau functions as a linker protein between both (PubMed:21985311, PubMed:32961270). Axonal polarity is predetermined by TAU/MAPT localization (in

the neuronal cell) in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.

Cellular Location
Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton. Cell projection, axon. Cell projection, dendrite. Secreted Note=Mostly found in the axons of neurons, in the cytosol and in association with plasma membrane components (PubMed:10747907). Can be secreted; the secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum- Golgi intermediate compartment) followed by vesicle entry and secretion (PubMed:32272059).

Tissue Location
Expressed in neurons. Isoform PNS-tau is expressed in the peripheral nervous system while the others are expressed in the central nervous system

Anti-MAPT / Tau Antibody (clone MCA-2E9) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-MAPT / Tau Antibody (clone MCA-2E9) - Images