

## Tau mouse Monoclonal Antibody(10E3)

**Catalog # AP63781** 

#### **Specification**

# Tau mouse Monoclonal Antibody(10E3) - Product Information

Application WB, IHC-P
Primary Accession P10636
Reactivity Human, Ra

Reactivity Human, Rat, Mouse Host Mouse

Host Mouse Clonality Monoclonal

# Tau mouse Monoclonal Antibody(10E3) - Additional Information

**Gene ID 4137** 

**Other Names** 

MAPT

Dilution

WB~~WB 1:1000-2000, IHC 1:100-200

IHC-P~~N/A

**Format** 

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions** 

-20°C

### Tau mouse Monoclonal Antibody(10E3) - Protein Information

Name MAPT (HGNC:6893)

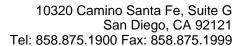
Synonyms MAPTL, MTBT1, TAU

#### **Function**

Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity (PubMed:<a href="http://www.uniprot.org/citations/21985311" target="\_blank">21985311</a>). 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:<a href="http://www.uniprot.org/citations/21985311" target="\_blank">21985311" target="\_blank">21985311</a>(a>, PubMed:<a href="http://www.uniprot.org/citations/32961270" target="\_blank">32961270</a>). 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**

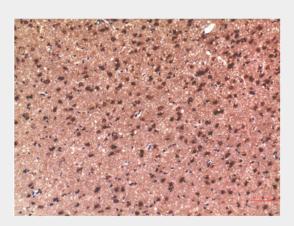
Expressed in neurons. Isoform PNS-tau is expressed in the peripheral nervous system while the others are expressed in the central nervous system

# Tau mouse Monoclonal Antibody(10E3) - Protocols

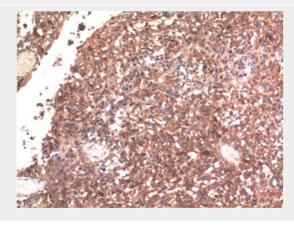
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Tau mouse Monoclonal Antibody(10E3) - Images

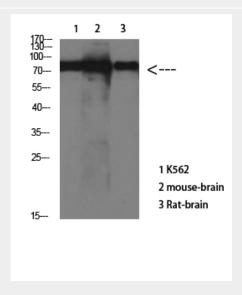


Immunohistochemical analysis of paraffin-embedded Rat Brain Tissue using Tau Mouse mAb diluted at 1:200





Immunohistochemical analysis of paraffin-embedded Human Brain Tissue using Tau Mouse mAb diluted at 1:200



Western Blot analysis of various cells using Antibody diluted at 1:1000

## Tau mouse Monoclonal Antibody(10E3) - Background

Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. 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. 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.