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Tau mouse Monoclonal Antibody(10E3)

Catalog # AP63781

Product Information

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

Additional Information

Gene ID	4137
Other Names	MAPT
Dilution	WB~~WB 1:1000-2000, IHC 1:100-200 IHC-P~~WB 1:1000-2000, IHC 1:100-200 IF~~1:50~200 ICC~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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).

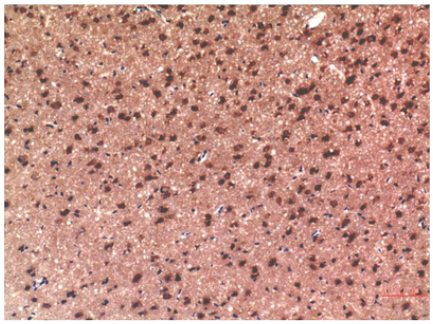
Tissue Location

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

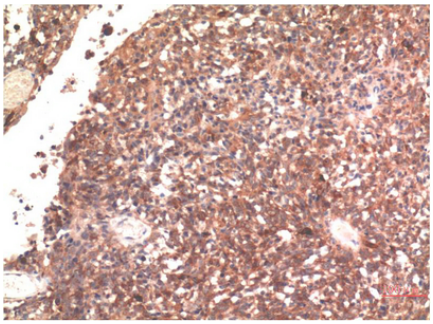
Background

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.

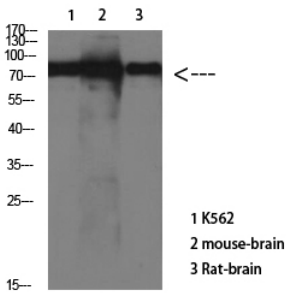
Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.