

Tau (Phospho-Ser396) Antibody

Catalog # AP68153

Product Information

Application WB Primary Accession P10636

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW78928

Additional Information

Gene ID 4137

Other Names Microtubule-associated protein tau (Neurofibrillary tangle protein) (Paired

helical filament-tau) (PHF-tau)

Dilution WB~~WB 1:500-2000, ELISA 1:10000-20000

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

azide.

Storage Conditions -20°C

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:<u>21985311</u>). 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:<u>21985311</u>, PubMed:<u>32961270</u>). 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).

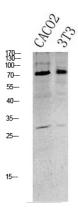
Tissue Location

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



Western blot analysis of various lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

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