

# Tau (Phospho-Ser396) Antibody

Catalog # AP68153

#### **Product Information**

Application WB
Primary Accession P10636

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 78928

#### **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).

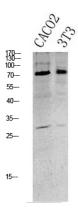
#### **Tissue Location**

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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