

Phospho-Tau (S199) Antibody

Rabbit mAb Catalog # AP93123

Product Information

Application WB **Primary Accession** P10636

Reactivity Rat, Human, Mouse

Clonality Monoclonal

Other Names MAPT; Microtubule-associated protein tau; MTBT1; Neurofibrillary tangle

protein; Paired helical filament-tau; PHF-tau

Isotype Rabbit IgG Host Rabbit Calculated MW 78928

Additional Information

Dilution WB 1:500~1:2000 **Purification** Affinity-chromatography

Immunogen A synthesized peptide derived from human Phospho-Tau (S199)

Description 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. Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

Protein Information

Name MAPT (<u>HGNC:6893</u>)

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;

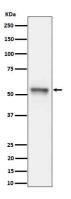
Cytoplasmic side. Cytoplasm, cytoskeleton. Cell projection, axon. Cell

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

Images



Western blot analysis of Phospho-Tau (S199) expression in mouse hippocampus cell lysate.

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