

Anti-TAU (pT529) Antibody

Rabbit polyclonal antibody to TAU (pT529)

Catalog # AP60026

Product Information

Application	WB, IHC
Primary Accession	P10636
Other Accession	P10637
Reactivity	Human, Mouse, Rat, Monkey, Pig, Chicken, Bovine, Drosophila
Host	Rabbit
Clonality	Polyclonal
Calculated MW	78928

Additional Information

Gene ID	4137
Other Names	MAPTL; MTBT1; TAU; Microtubule-associated protein tau; Neurofibrillary tangle protein; Paired helical filament-tau; PHF-tau
Target/Specificity	Recognizes endogenous levels of TAU (pT529) protein.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	MAPT (HGNC:6893)
Synonyms	MAPTL, MTBT1, TAU
Function	<p>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.</p> <p>Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein;</p>

Cellular Location

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

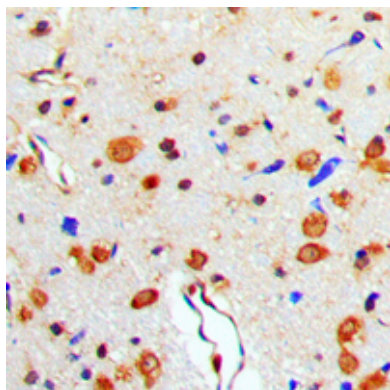
Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human TAU (pT529). The exact sequence is proprietary.

Images



Western blot analysis of TAU (pT529) expression in mouse brain (A), rat brain (B) whole cell lysates.



Immunohistochemical analysis of TAU (pT529) staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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