

Anti-Tau Antibody (Monoclonal, TAU-2)

Catalog # ABO10477

Product Information

Application	WB, IHC-P
Primary Accession	P19332
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Mouse IgG monoclonal antibody for Tau, microtubule-associated protein tau (MAPT) detection. Tested with WB, IHC-P in Human;bovine. No cross reactivity with other proteins.
Reconstitution	Add 1ml of PBS buffer will yield a concentration of 100ug/ml.

Additional Information

Other Names	Microtubule-associated protein tau, Neurofibrillary tangle protein, Paired helical filament-tau, PHF-tau, Mapt, Mtapt, Tau
Calculated MW	78564
Application Details	Immunohistochemistry(Paraffin-embedded Section), 1-2 μ g/ml, Human, bovine, By Heat Western blot, 0.5-1 μ g/ml, Human, bovine
Subcellular Localization	Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton. Cell projection, axon. Mostly found in the axons of neurons, in the cytosol and in association with plasma membrane components.
Tissue Specificity	Expressed in neurons. The larger forms (isoform tau-A and isoform tau-B) are preferentially expressed in the peripheral nervous system while the other are expressed in the central nervous system. Low amounts of the larger forms are also found in limited areas of the CNS.
Source	Eukaryota
Protein Name	Microtubule-associated protein tau
Contents	Mouse ascites fluid, 1.2% sodium acetate, 2mg BSA, with 0.01mg NaN ₃ as preservative.
Clone Names	TAU-2

Immunogen	Bovine microtubule-associated proteins(MAPs).
Purification	Ascites
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20° C for one year. After r° Constitution, at 4° C for one month. It° Can also be aliquotted and stored frozen at -20° C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Contains 4 Tau/MAP repeats.

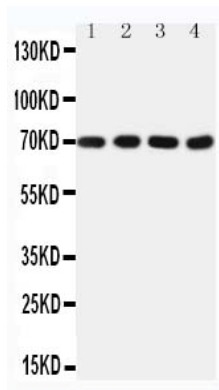
Protein Information

Name	Mapt {ECO:0000312 RGD:69329}
Synonyms	Mtapt, Tau
Function	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 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 {ECO:0000250 UniProtKB:P10636}. Cell membrane {ECO:0000250 UniProtKB:P10636}; Peripheral membrane protein {ECO:0000250 UniProtKB:P10636}; Cytoplasmic side {ECO:0000250 UniProtKB:P10636}. Cytoplasm, cytoskeleton {ECO:0000250 UniProtKB:P10636}. Cell projection, axon {ECO:0000250 UniProtKB:P10636}. Cell projection, dendrite {ECO:0000250 UniProtKB:P10636}. Secreted {ECO:0000250 UniProtKB:P10636}. Note=Mostly found in the axons of neurons, in the cytosol and in association with plasma membrane components. 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. {ECO:0000250 UniProtKB:P10636}
Tissue Location	Expressed in neurons. The larger forms (isoform tau-A and isoform tau-B) are preferentially expressed in the peripheral nervous system while the other are expressed in the central nervous system. Low amounts of the larger forms are also found in limited areas of the CNS

Background

The microtubule-associated proteins(MAPs) coassemble with tubulin into microtubules in vitro. Microtubule-associated protein tau appears to be enriched in axons. Tau are composed of 352 to 441 amino acids. The isoforms differ from each other by the presence or absence of 29-amino acid or 58-amino acid inserts located in the N terminus and a 31-amino repeat located in the C terminus. tau is important in establishing and maintaining neuronal morphology and is a major component of the neurofibrillary tangles(NFTs) characteristic of Alzheimer's brain. Microtubule-associated protein tau(MTBT1) is mapped to chromosome 17q21.

Images



Anti-Tau antibody (monoclonal), ABO10477, Western blotting
Lane 1: Rat Brain Tissue Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Mouse Brain Tissue Lysate
Lane 4: Mouse Brain Tissue Lysate

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