

Rabbit anti-Rat Tau (Ser416) Polyclonal Antibody | anti-MAPT antibody

Anti-Phospho Ser416 Tau

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA72803	Rabbit	Rat	Immunohistochemistry, Dot Blot, Western Blot

PRODUCT SYNONYMS

Tau (Ser416); Polyclonal Antibody; Anti-Phospho Ser416 Tau; anti-MAPT antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Specificity	Specific for ~59, 65, 68k tau protein phosphorylated at Ser416.
Purity/Purification	Affinity Purified (Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephospho-peptide affinity columns.)
Form/Format	100 ul in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per ml BSA and 50% glycerol. Adequate amount of material to conduct 10-mini Western Blots.
Sequence Length	752
Applicable Applications for anti-MAPT antibody	IHC (Immunohistochemistry), DB (Dot Blot), WB (Western Blot)
Antigen	Phosphopeptide corresponding to amino acid residues surrounding the phospho-Ser416 of rat tau.
Immunogen Information	Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser416 conjugated to KLH
Immunogen Species	Rat
Reactivity Assumed Based on 100% Sequence Homology	Bovine, canine, human, mouse, and non-human primate
Species Reactivity Note	The antibody has been directly tested for reactivity in Western blots in rat tissues. It is anticipated that the antibody will react with bovine, canine, human, mouse and non-human primate tissues based on the fact that these species have 100% homology with the amino acid sequence used as antigen.
Biological Significance	Tau is a key microtubule-associated protein that plays an important role in the formation of microtubules in axons (Binder et al. 1985). Six tau isoforms have been identified as products of a single gene produced by alternative mRNA splicing (Goedert 1990). Tau mutations have been implicated in many neurodegenerative disorders such as Alzheimer's disease (AD), Pick's disease and progressive supranuclear palsy. It has been well documented that hyperphosphorylated tau is a major component of paired helical filaments in AD brain (Lee 1995). Serine 416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II (Steiner et al. 1990).
Preparation and Storage	For long term storage -80 degree C. Short term storage is at -20 degree C and is also acceptable as aliquots may be taken without freeze/thawing due to the presence of 50% glycerol. Stock solutions are stable for a minimum of 1 year at -20 degree C.

IMAGES



Application Data

ADDITIONAL INFORMATION

Related Product Information for anti-MAPT antibody	Affinity purified rabbit polyclonal antibody
References	• Binder LI, Frankfurter A, Rebhun LI (1985) The distribution of tau in the mammalian central nervous system. J Cell Bio Oct; 101(4):1371-8. • Lee V.M.Y. (1995) Disruption of the cytoskeleton in Alzheimer's disease. Curr. Opin. Neurobiol. 5, 663-668. • Goedert M. and Jakes R. (1990) Expression of separate isoforms of human tau protein: correlation with the tau pattern in brain and effects on tubulin polymerization. EMBO J 9, 4225-4230. • Steiner B., Mandelkow E.M., Biernat J. et al. (1990) Phosphorylation of microtubule-associated protein tau: identification of the site for Ca2+-calmodulin dependent kinase and relationship with tau phosphorylation in Alzheimer tangles. EMBO J. 9, 3539-3544.

NCBI AND UNIPROT INFORMATION

NCBI GI #	13432197
NCBI GeneID	29477
UniProt Accession #	P19332; Q63567; Q63677; Q9QW06
Molecular Weight	59/65/68
NCBI Official Full Name	Microtubule-associated protein tau
NCBI Official Synonym Full Names	microtubule-associated protein tau
NCBI Official Symbol	Mapt
NCBI Official Synonym Symbols	pTau; Mtapt; RNPTAU
NCBI Protein Information	microtubule-associated protein tau; PHF-tau; paired helical filament-tau; neurofibrillary tangle protein; Tau microtubule-associated protein
UniProt Protein Name	Microtubule-associated protein tau
UniProt Gene Name	Mapt
UniProt Synonym Gene Names	Mtapt; Tau; PHF-tau
UniProt Entry Name	TAU_RAT

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/tau-ser416-antibody-immunohistochemistry-dot-blot-western-blot-elisa/72803>