

Product datasheet for **AP02400PU-N**

MAPT / TAU pThr205 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	Suitable for use in Western blot (1/500~1/1000) and Immunohistochemistry (1/50~1/100).
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide sequence around phosphorylation site of threonine 205 (P-G-T(p)-P-G) derived from Human Tau.
Specificity:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site. Tau (phospho-Thr205) antibody detects endogenous levels of Tau only when phosphorylated at threonine 205.
Formulation:	PBS (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol. State: Aff - Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Immunoaffinity chromatography.
Conjugation:	Unconjugated
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	microtubule associated protein tau
Database Link:	Entrez Gene 4137 Human P10636



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Background:

Tau is a neuronal microtubule associated protein found predominantly on axons. The function of Tau is to promote tubulin polymerisation and stabilise microtubules, but it also serves to link certain signalling pathways to the cytoskeleton. Tau, in its hyperphosphorylated form, is the major component of paired helical filaments (PHF) and neurofibrillary lesions in Alzheimer's disease (AD) brain. Hyperphosphorylation impairs the microtubule binding function of Tau, resulting in the destabilisation of microtubules in AD brains, ultimately leading to the degeneration of the affected neurons. Hyperphosphorylated tau is also found in a range of other central nervous system disorders. Numerous serine/threonine kinases, including GSK3 beta, PKA, Cdk5, and casein kinase II can phosphorylate Tau.

Synonyms:

MAPTL, MTBT1, Microtubule-associated protein tau, PHF-tau, Neurofibrillary tangle protein, Paired helical filament-tau

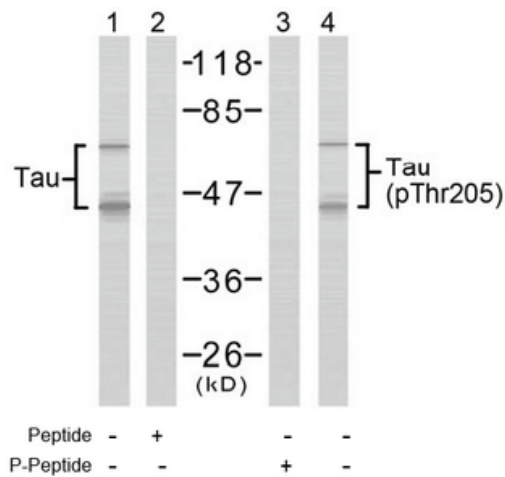
Product images:


Figure 2. Western blot analysis of extracts from mouse brain tissue using Tau antibody (Line 1 and 2) and Tau (phospho-Thr205) antibody (AP02400PU, Line 3 and 4).

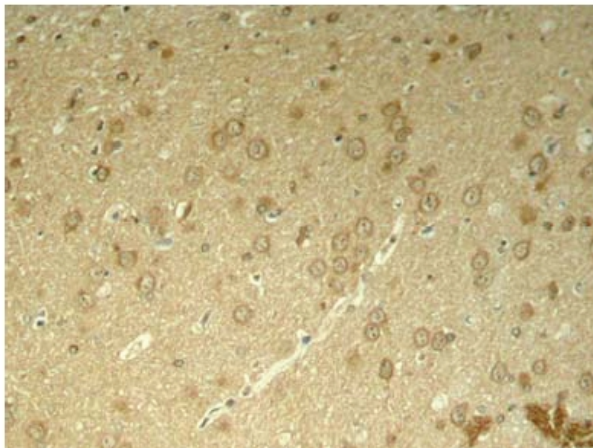


Figure 1. Immunohistochemical analysis of paraffin-embedded rat hippocampal region tissue from a model with Alzheimer's Disease using Tau (phospho-Thr205) antibody (AP02400PU).