

# **Product datasheet for AP08019PU-S**

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OriGene Technologies, Inc.

## MAPT / TAU pThr212 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WE

Recommended Dilution: Western blot (1/500-1/1000).

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** The antiserum was produced against synthesized phosphopeptide derived from human Tau

around the phosphorylation site of threonine 212 (S-R-TP-P-S).

**Specificity:** This antibody AP08019PU detects endogenous levels of Tau only when phosphorylated at

Threonine 212.

Formulation: PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.02% Sodium Azide and 50% Glycerol.

State: Aff - Purified

State: Liquid purified Ig fraction.

**Purification:** Immunoaffinity Chromatography: 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.

**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





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:**

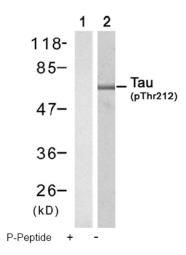


Figure 1. Western blot analysis of extract from Mouse brain tissue, using Tau (phospho-Thr212) antibody AP08019PU (Lane 1 and 2).