

## Product datasheet for AP01703PU-N

## MAPT / TAU pSer214 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: Western Blot: 1/500-1/1000.

Immunohistochemistry on paraffin sections: 1/50-1/200.

**Reactivity:** Human, Mouse, Rat

Host: Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic phosphopeptide derived from human isoforms Tau-4 around the phosphorylation

site of Serine 214.

Specificity: p-Tau (S214) pAb detects endogenous levels of Tau only when phosphorylated at Ser531,

isoforms Tau-3 and isoforms Tau-4 phosphorylated at Ser214, and other isoforms

phosphorylated at the corresponding Site.

**Formulation:** Phosphate buffered saline (PBS), pH~7.2 containing 0.05% Sodium Azide as preservative.

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: One year from despatch.

Predicted Protein Size: 50 to 80 kDa

Gene Name: microtubule associated protein tau



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P10636

**Background:** Tau is a neuronal microtubule associated protein found predominantly on axons. The function

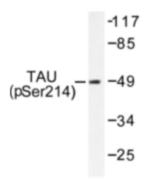
of Tau is to promote tubulin polymerisation and stabilise microtubules, but it also serves to link certain signalling pathways to the cytoskeleton. Tau, in its hyperphosphorylated form, is the major component of paired helical filaments (PHF) and neurofibrillary lesions in Alzheimer's disease (AD) brain. 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.

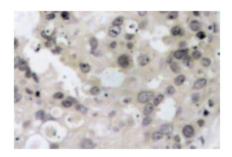
Synonyms: MAPTL, MTBTl, Microtubule-associated protein tau, PHF-tau, Neurofibrillary tangle protein,

Paired helical filament-tau

## **Product images:**



Western blot (WB) analysis of Tau pSer214 antibody (Cat.-No.: AP01703PU-N) in extracts from HeLa cells.



Immunohistochemistry (IHC) analyzes of Tau pSer214 antibody (Cat.-No.: AP01703PU-N) in paraffin-embedded mouse brain.