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AP02629PU-N Polyclonal Antibody to MAPT / TAU - Aff - Purified

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

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

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.

Uniprot ID: P10636

NCBI: 9606

Host: Rabbit

Immunogen: The antiserum was produced against synthesized non-phosphopeptide derived from human Tau around the phosphorylation site of serine 235 (P-K-SP-P-S).

Format:
State: Liquid purified IgG
Purification: Affinity-chromatography using epitope-specific immunogen
Buffer System: PBS(without Mg2+ and Ca2+), pH 7.4 containing 150mM NaCl, 0.02% sodium azide and 50% glycerol

Applications:
Western Blot: 1:500~1000.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
Tau antibody detects endogenous levels of total Tau protein.
Species: Human, Mouse, Rat.
Other species not tested.

Storage:
Store the antibody at -20°C.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. Alonso Adel C, et al. (2004) J Biol Chem. 279(33): 34873-34881.
2. Liu F, et al. (2002) FEBS Lett. 530(1-3): 209-214.
3. Sengupta A, et al. (1998) Arch Biochem Biophys. 357(2): 299-309.

Pictures:

Western blot analysis of extracts from mouse brain tissue using Tau Antibody.