

AM26414PU-L**Monoclonal Antibody to MAPT / TAU pThr181 (177-187) - Aff - Purified**

Alternate names:	MAPTL, MTBT1, Microtubule-associated protein tau, Neurofibrillary tangle protein, PHF-tau, Paired helical filament-tau
Quantity:	0.5 mg
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 / Isotype:	Mouse / IgG2a
Clone:	2A4
Immunogen:	KLH conjugated with a short peptide corresponding to the amino acid sequence 177-187 on the phosphorylated Tau protein AA Sequence: Ala-Pro-Lys-Thr(p)-Pro-Pro-Ser-Ser-Gly-Glu-Cys
Format:	State: Lyophilized Ig fraction Purification: Affinity Chromatography on Protein G Buffer System: 0.01M PBS pH7.2 Reconstitution: Double distilled water is recommended to reconstitute the antibody.
Applications:	Indirect ELISA: The antibody reacts with phosphorylated peptide [Ala-Pro-Lys-Thr(p)-Pro-Pro-Ser-Ser-Gly-Glu-Cys] coated ELISA plate in indirect ELISA. The antibody cross- reacts with unphosphorylated peptide. Western blot: The antibody detected a 46kD band in mouse brain tissue lysate. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody recognizes the aa177-187 on phosphorylated Tau protein and its KLH conjugate, but not recognizes KLH alone. The antibody detected a 46kD band in mouse brain tissue lysate.
Species Reactivity:	Tested: Human, Mouse.

Storage:

Store lyophilized at 2-8°C for 6 months or at -20°C long term.
After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

Pictures:

Detect the mouse brain tissue lysates using antibody (Tau-pho 181 2A4) at 1:2000 \square 0.5ug/ml \square dilution

