

Product datasheet for AM26414PU-L

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

MAPT / TAU pThr181 (177-187) Mouse Monoclonal Antibody [Clone ID: 2A4]

Product data:

Product Type: Primary Antibodies

Clone Name: 2A4
Applications: WB

Recommended Dilution: Indirect ELISA: The antibody reacts withphosphorylated 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.

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG2a

Clonality: Monoclonal

Immunogen: KLH conjugated with a short peptide corresponding to the amino acid sequence 177-187 on

the phosphorylated Tau protein

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.

Formulation: 0.01M PBS pH7.2

State: Aff - Purified

State: Lyophilized Ig fraction

Reconstitution Method: Double distillated water is recommended to reconstitute the antibody.

Purification: Affinity Chromatography on Protein G

Conjugation: Unconjugated

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.

Stability: Shelf life: one year from despatch.

Gene Name: microtubule associated protein tau



MAPT / TAU pThr181 (177-187) Mouse Monoclonal Antibody [Clone ID: 2A4] - AM26414PU-L

Database Link: Entrez Gene 4137 Human

P10636

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

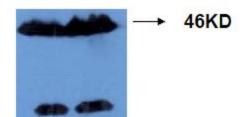
function of Tau is to promote tubulin polymerisation and stabilise microtubules, but it also serves to link certain signalling pathways to the cytoskeleton. Tau, in its hyperphosphorylated form, is the major component of paired helical filaments (PHF) and neurofibrillary lesions in Alzheimer's disease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



Detect the mouse brain tissue lysates using antibody (Tau-pho 181 2A4) at 1:20000.5ug/ml dilution