



## Mouse Anti-human Thr181 phosphorylated Tau Antibody Datasheet

**Product Name:** mAb anti-human Thr181 phosphorylated Tau

**Clone No.:** 2A4

**Lot No.:**

**Catalogue No.:** MO-M40099D

**Quantity:** 0.5 mg/vial

**Expiration:**

**Description:** Mouse monoclonal antibody against Thr181 phosphorylated Tau protein

**Purification:** Protein G affinity purified

**Target Protein:** Human Thr181 phosphorylated Tau

**Immunogen:** KLH conjugated with a short peptide [Ala-Pro-Lys-Thr(p)-Pro-Pro-Ser-Ser-Gly-Glu-Cys], corresponding to the amino acid sequence 177-187 on the phosphorylated Tau protein.

**Fusion Myeloma:** Sp2/0-Ag14

**Specificity:** This antibody reacts with the unconjugated Thr181 phosphorylated Tau peptide.

**Cross-reactivity:** Cross-reactivity with un-phosphorylated peptide [Ala-Pro-Lys-Thr-Pro-Pro-Ser-Ser-Gly-Glu-Cys] was observed.

**Species Reactivity:** Human, mouse

**Host / Isotype:** Mouse/ IgG2a, κ

**Formulation:** Lyophilized from a solution in 0.01M PBS pH7.2

**Reconstitution:** Double distilled water is recommended to adjust the final concentration to 1.00mg/mL. Avoid repeated freeze and thaw cycle.

**Storage:** Store at -20°C

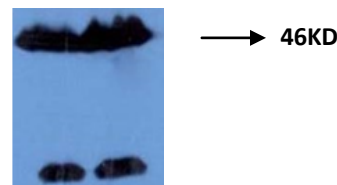
**Research Area:** Alzheimer's disease and other neurodegenerative diseases

**Background:** Tau is a highly soluble microtubule associated protein found in high concentration in neuron of central nervous

system. The main function of the protein is stabilizing the microtubule in nerve fibre (axon). There are six tau isoforms which are formed by alternate splicing. Hyperphosphorylation of Tau protein results in aggregation and formation of neurofibrillary tangles, which is significantly associated with cognitive impairment in Alzheimer's disease. Tau Thr181 phosphorylation has been used as a biomarker for the differentiation of Alzheimer's disease and other primary dementia such as dementia with Lewy bodies.

**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 un-phosphorylated peptide.

**Western Blot:** The antibody detected a 46kD band in mouse brain tissue lysate.



Detect the mouse brain tissue lysates using antibody (Tau-pho181 2A4) at 1:2000 (0.5 µg/mL) dilution.

**References:** If research is published using this product, please inform Anogen in order to cite the reference on this datasheet. Anogen will provide one unit of product in the same category as gratitude.

This product is for **LABORATORY RESEARCH USE** and further manufacture **ONLY**, and cannot be administrated to human and animals for use in diagnostic and therapeutic procedures.

Manufactured by ANOGEN - A Division of YES Biotech Laboratories Ltd.