

Rabbit anti Tau(pS384) Polyclonal Antibody

Alternative Name(s): microtubule-associated protein tau; MAPT

Order Information

Description: Tau(pS384)
Catalogue: 620-730
Lot: See label
Size: 100ug/200ul
Host: Rabbit
Clone: nan

• Application: IHC(P), WB • Reactivity: Hu, Ms, Rt

ANTIGEN PREPARATION

A synthetic peptide surrounding of SNVS-S-TGSI of human Tau protein with a phosphorylation site Serine 384. This sequence is identical to human, mouse, rat and bovine.

BACKGROUND

Tau is a microtubule-associated phosphoprotein (MAP), localized in neuronal axons. It promotes tubulin polymerization and stabilizes microtubules. Tau proteins constitute a family of six isoforms which range from 352 to 441 amino acids. The tau variants differ from each other by the presence of either three or four repeat-regions in the carboxy-terminal part of the molecule and the absence or presence of one or two inserts in the amino-terminal part. Tau is hyperphosphorylated by ERK, GSK-3, TPKII and CDK5, at least thirty phosphorylation sites have been described, including Thr39, Ser46, Thr50, Thr69, Thr153, Thr175, Thr 181, Ser198, Ser199, Ser202, Thr205, Ser208, Ser210, Thr212, Ser214, Thr217, Thr231, Ser235, Ser237, Ser241, Ser262, Ser285, Ser305, Ser324, Ser352, Ser356, Ser396, Ser400, Thr403, Ser404, Ser409, Ser412, Ser413, Ser416 and Ser422. These sites are among the major abnormal phosphorylation sites of Tau. Phosphorylation on these sites reduces the ability of a given Tau species to promote microtubule self-assembly. Hyperphosphorylated Tau is the major protein of the paired helical filaments (PHFs), which make up the pathological neurofibrillary tangles of Alzheimer's disease (AD). The PHFs are also found in the lesions of other central nervous system disorders.

PURIFICATION

The Rabbit IgG is purified by site-modified Epitope Affinity Purification.

FORMULATION

This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes phosphorylated Serine 384 of human Tau protein. It does not recognize the non-phosphorylated Tau or other phosphorylation sites.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

- Western Blot: 0.1-1 μg/ml
- ELISA: 0.01-0.1 µg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: Not tested
- Molecular Weight: ~46-80
- · Positive Control: Kidney Tissue

FOR RESEARCH USE ONLY.

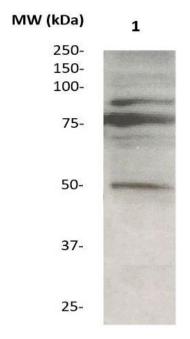


• Cellular Location: Cell Membrane

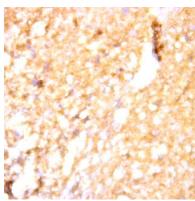
*Optimal dilutions should be determined by researchers for the specific applications.



DATA ATTACHMENTS



Western Blot: The whole lysate derived from U118MG (20 ug/lane) immunoblotted by Rabbit anti – Tau (pS384) (Cat# 620-730) at 1:500. Observed major immunoreactive bands at molecular weight ~48-80kDa.



Immunohistochemistry: Human brain tissue (FFPE) stained with Rabbit anti-Tau (pS384) (Cat# 620-730) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES