

## **Product datasheet for TA354893**

## OriGene Technologies, Inc.

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## **Tau (MAPT) Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

Applications: WB

**Recommended Dilution:** WB 0.1-1 μg/ml ELISA 0.01-0.1 μg/ml IP 2-5 μg/ml IHC 2-10 μg/ml FC 5-10 μg/ml

Reactivity: Human, Mouse, Rat

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

**Immunogen:** A synthetic peptide derived from C-terminus of human Tau protein. This sequence is identical

to human, mouse, rat and bovine.

**Formulation:** This affinity purified antibody is supplied in sterile Phosphate buffered saline (pH7.2)

containing antibody stabilizer.

**Purification:** The Rabbit IgG is purified by Epitope Affinity Purification

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

Predicted Protein Size: ~50-80 kDa

**Gene Name:** microtubule associated protein tau

Database Link: NP 001116538

Entrez Gene 17762 MouseEntrez Gene 29477 RatEntrez Gene 4137 Human

P10636





Background:

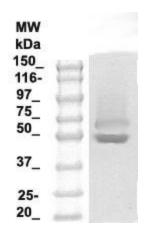
Tau is a microtubule-associated phosphoprotein (MAP), localized in neuronal axons. It promotes tubulin polymerization and stabilizes microtubules. Tau proteins constitute a family of six isoforms which range from 352 to 441 amino acids. The tau variants differ from each other by the presence of either 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.

Synonyms: DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU

**Protein Families:** Druggable Genome

**Protein Pathways:** Alzheimer's disease, MAPK signaling pathway

## **Product images:**



WB: The tissue lysate derived from mouse brain was immunoblotted by Rabbit anti-Tau (CT) at 1:500. Immunoreactive bands are observed at ~50-80 kDa.