

## Product datasheet for **TA354881**

### 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 surrounding of -YSSPG- of human Tau protein with a phosphorylation site Serine 199. This sequence is identical to human, mouse, rat and bovine.
Formulation:	This affinity purified antibody is supplied in sterile Tris-buffered saline (pH7.2) containing antibody stabilizer.
Purification:	The Rabbit IgG is purified by site-modified 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:	<a href="#">NP_001116538</a> <a href="#">Entrez Gene 17762 Mouse</a> <a href="#">Entrez Gene 29477 Rat</a> <a href="#">Entrez Gene 4137 Human</a> <a href="#">P10636</a>



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**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:**

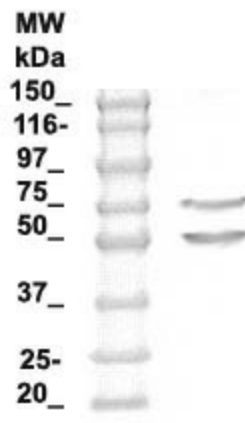
DDPAC; FTDP-17; MAPTL; MSTD; MTBT1; MTBT2; PPND; PPP1R103; TAU

**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 (pS199) at 1:500. Immunoreactive bands are observed at ~5080 kDa.