



Qty: 100 µg/200 µl

Mouse anti-Tau
(C-Terminal)

Catalog No. 13-6400

Lot No. See product label

Mouse anti-Tau

FORM

Liquid. Purified antibody (from mouse ascites fluid) supplied as a 200 µl aliquot in PBS containing 0.1% sodium azide (NaN₃) at a concentration of 0.5 mg/ml.

CLONE: T46⁽¹⁾

ISOTYPE: IgG₁

IMMUNOGEN: Bovine tau

CLONING PARTNER: Sp/2

B CELL DONOR: BALB/c mouse

SPECIFICITY

This antibody recognizes an epitope near the C-terminal region (404-441 aa) of human tau.^(1,2) It reacts with all 7 isoforms of human tau (binding-competent and binding-incompetent), A68 (an abnormal phosphorylated derivative of tau)⁽³⁾, bovine tau, and human NeuroFibrillary Tangles (NFTs).⁽⁴⁾ Reactivity is independent of the state of tau phosphorylation. Some cross-reactivity with MAP2 is also observed.

APPLICATION

All 6 tau isoforms of the CNS are expressed mainly in axons of the normal brain, but to a lesser extent tau may also be found in astrocytes. A 7th isoform, 'Big Tau', is expressed in peripheral nervous system. Tau is altered in Alzheimer's disease to form paired helical filaments in neurofibrillary tangles, neurofilament threads and senile plaque neurites.

USAGE

Optimal dilutions should be determined by the researcher for each application.

Electron Microscopy: ⁽³⁾	5-25 µg/ml
Immunohistochemistry: ⁽¹⁾	5-25 µg/ml
Immunoblotting: ^(1,2,3)	0.5-1.0 µg/ml
Immunofluorescence: ⁽¹⁾	
Immunoprecipitation: ⁽⁷⁾	2-5 µg
ELISA:	0.1-0.5 µg/ml

*This antibody is suitable for immunohistochemical staining of Bouin's-fixed or alcohol-fixed, paraffin-embedded or frozen tissue sections.

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long term storage. Do not repeatedly freeze and thaw.

BACKGROUND

Tau is a type II microtubule associated protein or MAP. Alternative splicing gives rise to 4-5 different forms of the tau protein (55-62 kDa). Tau is located in the axons and dendrites of nerve cells where it accelerates tubulin polymerization and cross-links microtubule fibers into stabilized bundles. In this way, the tau protein promotes axon growth. Tau can also induce axon-like projections when expressed at high level in non-neuronal cells.

(cont'd)

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REFERENCES

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2. Bramblett GT et al; *Lab Invest* 66:212-222 (1992).
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7. Merrick, S.E. et al; *J Biol Chem* 271(10): 5589-5594 (1996).

RELATED PRODUCTS

<u>Product</u>	<u>Clone/PAD</u>	<u>Cat. No.</u>
Ms x Tau	T14	13-1400
<u>Product</u>	<u>Conjugate</u>	<u>Cat. No.</u>
Goat anti-Mouse IgG (H+L) (ZyMAX™ Grade)	Purified	81-6500
	FITC	81-6511
	TRITC	81-6514
	Cy™3	81-6515
	Cy™5	81-6516
	HRP	81-6520
	AP	81-6522
	Biotin	81-6540
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

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