

Tau Monoclonal Antibody (T46)

Product Details	
Size	100 µg
Species	Bovine, Chicken, Human, Mouse, Rabbit, Rat, Xenopus
Published Species	Rat, Non-human primate, Mouse, Human
Expression System	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	T46
Conjugate	Unconjugated
Immunogen	Bovine Tau.
Form	Liquid
Concentration	0.5 mg/mL
Purification	purified
Storage buffer	PBS
Contains	0.1% sodium azide
Storage Conditions	-20°C
RRID	AB_2533025

Applications	Tested Dilution	Publications
ELISA (ELISA)	0.1-0.5 µg/mL	-
Immunocytochemistry (ICC)	1:250	4 Publications
Immunofluorescence (IF)	1:250	4 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay Dependent	-
Immunohistochemistry (IHC)	5-25 µg/mL	4 Publications
Immunomicroscopy (IM)	Assay Dependent	-
Immunoprecipitation (IP)	2-5 µg	-
Western Blot (WB)	0.5-1.0 µg/mL	19 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

This antibody recognizes an epitope near the C-terminal region (404-441 aa) of human tau. It reacts with all 7 isoforms of human tau (binding-competent and binding-incompetent), A68 (an abnormal phosphorylated derivative of tau), bovine tau, and human NeuroFibrillary Tangles (NFTs).

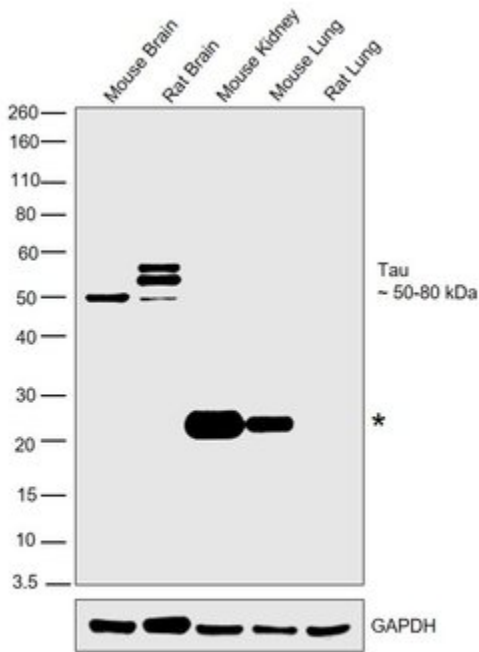
Reactivity is independent of the state of tau phosphorylation. Some cross-reactivity with MAP2 is also observed.

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

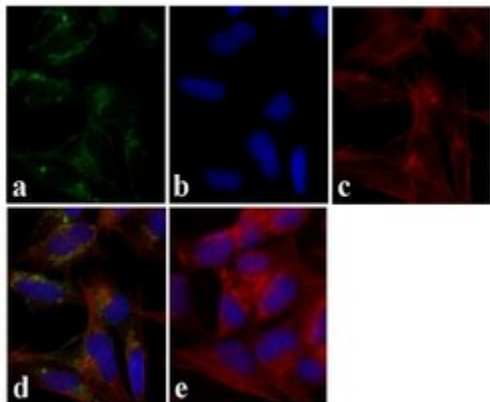
Advanced Verification Data

Tau Antibody (13-6400)

Antibody specificity was demonstrated by detection of differential basal expression of the target across Mouse Brain, Rat Brain, Mouse Kidney, Mouse Lung, Rat Lung owing to their inherent genetic constitution. Relative expression of Tau was observed in Mouse and Rat Brain as compared to Kidney or Lung tissues using Anti-Tau Monoclonal Antibody (T46) (Product # 13-6400) in Western Blot. Relative expression validation info.



Product Images For Tau Monoclonal Antibody (T46)

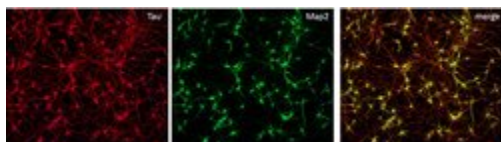


Tau Antibody (13-6400) in IF

Immunofluorescent analysis of Tau was done on 70% confluent log phase SHSY5Y cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with Tau Mouse Monoclonal Antibody (Product # 13-6400) at 1:250 dilution in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Rabbit Anti-Mouse IgG Secondary Antibody (Product # A-11059) at a dilution of 1:400 for 30 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing cytoplasmic localization. Panel e shows no primary antibody control. The images were captured at 20X magnification.

Tau Antibody (13-6400) in IF

Immunofluorescent staining of MAP2 (Green) and Tau (red) on Primary Rat Cortex neurons (E18) (Product # A1084001) cultured for 14 days in the B-27 Plus Neuronal Culture System (Product # A3653401). At day 14 the cells were fixed with 4% paraformaldehyde for 15 min, permeabilized with 0.1% Triton X-100 for 30 min, and blocked with 1% BSA for 30 min at room temperature. Cells were stained with a MAP2 rabbit polyclonal antibody (Product # PA5-17646) at a dilution of 1:250, and a Tau mouse monoclonal antibody clone T46 (Product # 13-6400) at a dilution of 1:100 in 1% BSA staining buffer, overnight at 4C, and then incubated with Alexa Fluor secondary antibodies 488 donkey anti-rabbit (Product # A-21206) and 594 donkey anti-mouse (Product # A-21203) at a dilution of 1:1000 for 30 minutes at room temperature. Wash 3 times with DPBS. Stain with DAPI.



[View more figures on thermofisher.com](https://www.thermofisher.com)

32 References

Western Blot (19)

Frontiers in neuroscience

Impacts of Acute Hypoxia on Alzheimer's Disease-Like Pathologies in APP^{swE}/PS1^{dE9} Mice and Their Wild Type Littermates.

"13-6400 was used in Western Blotting to suggest that acute hypoxia could induce Alzheimer's disease-like pathological damages in the brain of APP^{swE}/PS1^{dE9} mice and wild type mice."

Authors: Zhang F,Zhong R,Qi H,Li S,Cheng C,Liu X,Liu Y,Le W

Species
Mouse

Dilution
1:1000

Year
2020

Frontiers in aging neuroscience

Relevance of Phosphorylation and Truncation of Tau to the Etiopathogenesis of Alzheimer's Disease.

"13-6400 was used in Western Blotting to suggest that tau pathogenesis involves both hyperphosphorylation and dominantly N-terminal truncation of tau in AD."

Authors: Zhou Y,Shi J,Chu D,Hu W,Guan Z,Gong CX,Iqbal K,Liu F

Species
Human

Dilution
Not Cited

Year
2020

[View more WB references on thermofisher.com](#)

Immunocytochemistry (4)

Scientific reports

Suppression of glioblastoma by a drug cocktail reprogramming tumor cells into neuronal like cells.

"13-6400 was used in Immunocytochemistry-immunofluorescence to study the use of a neuronal reprogramming drug cocktail to improve existing treatment for glioblastoma."

Authors: Gao L,Huang S,Zhang H,Hua W,Xin S,Cheng L,Guan W,Yu Y,Mao Y,Pei G

Species
Mouse

Dilution
1:200

Year
2019

Journal of chemical neuroanatomy

Both secreted and the cellular levels of BDNF attenuated due to tau hyperphosphorylation in primary cultures of cortical neurons.

"136400 was used in immunocytochemistry to report the effects of okadaic acid-induced tau hyperphosphorylation on secreted and cellular levels of brain-derived neurotrophic factor in primary cortical neurons"

Authors: Atasoy L,Dursun E,Gezen-Ak D,Metin-Armaan D,Öztürk M,Ylmazer S

Species
Rat

Dilution
1:100

Year
2017

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[IF \(4\)](#) [Misc \(1\)](#) [IHC \(4\)](#)

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