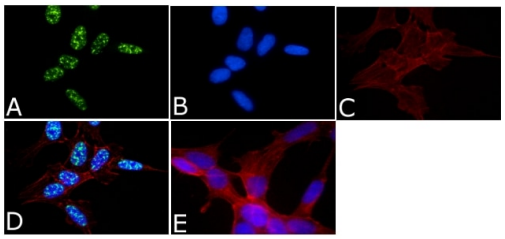
Phospho-Tau (Thr231) Polyclonal Antibody

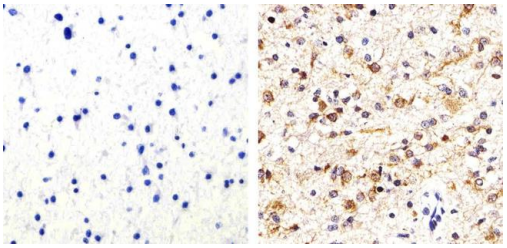
Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Published Species	Tag, Rat, Mouse, Human
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human Tau that contains threonine 231. The sequence is conserved in mouse and rat.
Form	Liquid
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 50% glycerol, 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20°C
RRID	AB_2533742

Applications	Tested	Dilution	Published
Immunohistochemistry (Paraffin) (IHC (P))	✓	1:20-1:200	1 Publication
Immunohistochemistry (IHC)	-		2 Publications
Western Blot (WB)	✓	1:1000	7 Publications
Immunocytochemistry (ICC)	✓	1 µg/mL	1 Publication
Immunofluorescence (IF)	✓	1 µg/mL	1 Publication
ELISA (ELISA)	-		1 Publication

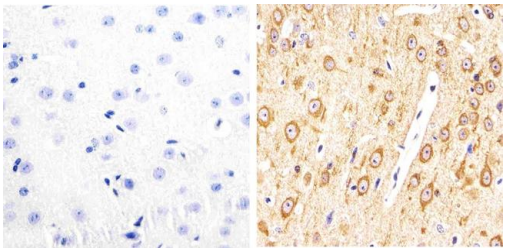
Product Images For Phospho-Tau (Thr231) Polyclonal Antibody



Phospho-Tau (Thr231) Antibody (44-746G) in IF
Immunofluorescence analysis of Phospho-Tau pThr231 Antibody 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 Phospho-Tau pThr231 Antibody (44746g) at 1µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488 Goat Anti-Rabbit IgG Secondary Antibody (A11008) at a dilution of 1:400 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (A12381). Panel d is a merged image showing nuclear localization. Panel e is a no primary antibody control. The images were captured at 40X magnification.



Phospho-Tau (Thr231) Antibody (44-746G) in IHC (P)
Immunohistochemistry analysis of Phospho-Tau [pT231] showing staining in the cytoplasm of paraffin-embedded human astroglioma tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Phospho-Tau [pT231] polyclonal antibody (44746G) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Phospho-Tau (Thr231) Antibody (44-746G) in IHC (P)
Immunohistochemistry analysis of Phospho-Tau [pT231] showing staining in the cytoplasm of paraffin-embedded mouse brain tissue (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a Phospho-Tau [pT231] polyclonal antibody (44746G) diluted in 3% BSA-PBS at a dilution of 1:100 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

View more figures on thermofisher.com

13 References

Immunohistochemistry (Paraffin) (1)

Nature communications

The neuritic plaque facilitates pathological conversion of tau in an Alzheimer's disease mouse model.

"44-746G was used in immunohistochemistry - paraffin section to elucidate the pathological conversion of tau facilitated by the neuritic plaque in an Alzheimer's disease mouse model"

Authors: Li T,Braunstein KE,Zhang J,Lau A,Sibener L,Deeble C,Wong PC

Species
Not Applicable

Dilution
Not Cited

Year
2016

Immunohistochemistry (2)

Nature communications

The neuritic plaque facilitates pathological conversion of tau in an Alzheimer's disease mouse model.

"44-746G was used in immunohistochemistry - paraffin section to elucidate the pathological conversion of tau facilitated by the neuritic plaque in an Alzheimer's disease mouse model"

Authors: Li T,Braunstein KE,Zhang J,Lau A,Sibener L,Deeble C,Wong PC

Species
Not Applicable

Dilution
Not Cited

Year
2016

Endocrinology

Increased tau phosphorylation and cleavage in mouse models of type 1 and type 2 diabetes.

"44-746G was used in immunohistochemistry and western blot to assess tau modification in type 1 and type 2 mouse models of diabetes"

Authors: Kim B,Backus C,Oh S,Hayes JM,Feldman EL

Species
Not Applicable

Dilution
Not Cited

Year
2009

Western Blot (7)

Journal of neurochemistry

Activation of Cdk5/p25 and tau phosphorylation following chronic brain hypoperfusion in rats involves microRNA-195 down-regulation.

"44-746G was used in western blot to investigate the involvement of microRNA-195 in the effect of chronic brain hypoperfusion on rodent Cdk5/p25 and tau phosphorylation"

Authors: Sun LH,Ban T,Liu CD,Chen QX,Wang X,Yan ML,Hu XL,Su XL,Bao YN,Sun LL,Zhao LJ,Pei SC,Jiang XM, Zong DK,Ai J

Species
Rat
Not Applicable

Dilution
1:1000
Not Cited

Year
2015

View more WB references on thermofisher.com

More applications with references on thermofisher.com

ICC (1) IF (1) ELISA (1)