

Phospho-Tau (Ser214) Polyclonal Antibody

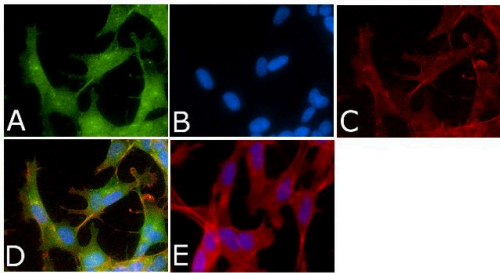
Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Dog, Tag, Rat, Cat, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human Tau that contains serine 214. The sequence is conserved in many species including mouse, rat, rhesus monkey, baboon, cow and goat.
Form	Liquid
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 1mg/mL BSA
Contains	0.05% sodium azide
Storage conditions	-20°C
RRID	AB_2533740

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	17 Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:20-1:200	3 Publications
Immunocytochemistry (ICC/IF)	1 µg/mL	-
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	-	1 Publication
Dot blot (DB)	-	1 Publication
Miscellaneous PubMed (Misc)	-	2 Publications

Product Images For Phospho-Tau (Ser214) Polyclonal Antibody

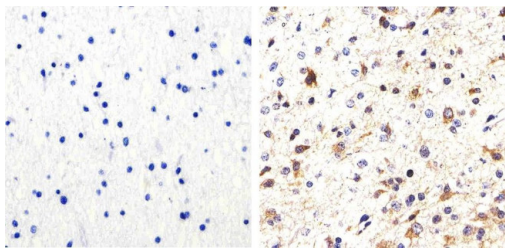
Phospho-Tau (Ser214) Antibody (44-742G) in ICC/IF

Immunofluorescent analysis of Phospho-Tau pSer214 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 pSer214 Antibody (Product # 44-742G) 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 (Product # A-11008) 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 (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor 594 Phalloidin (Product # A12381). Panel d is a merged image showing nuclear and cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 40X magnification.



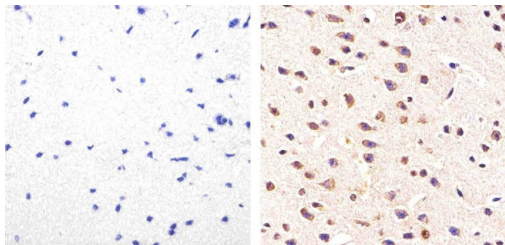
Phospho-Tau (Ser214) Antibody (44-742G) in IHC (P)

Immunohistochemistry analysis of Phospho-Tau (pS214) 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 (pS214) polyclonal antibody (Product # 44-742G) 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 (Ser214) Antibody (44-742G) in IHC (P)

Immunohistochemistry analysis of Phospho-Tau (pS214) 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 (pS214) polyclonal antibody (Product # 44-742G) 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](https://www.thermofisher.com)

Western Blot (17)

CNS neuroscience & therapeutics	Year 2022
Tau antibody 77G7 targeting microtubule binding domain suppresses proteopathic tau to seed tau aggregation.	Species Mouse
"44-742G was used in Immunohistochemistry and Western Blotting to indicate that 77G7 can effectively suppress the seeding activity of AD O-tau and thus could be developed as a potential immunotherapeutic drug to inhibit the propagation of tau pathology in AD and related tauopathies."	
Authors: Li L,Miao J,Chu D,Jin N,Tung YC,Dai CL,Hu W,Gong CX,Iqbal K,Liu F	
Frontiers in aging neuroscience	Year 2022
Relevance of Phosphorylation and Truncation of Tau to the Etiopathogenesis of Alzheimer's Disease.	Species Human
"Published figure using Phospho-Tau (Ser214) polyclonal antibody (Product # 44-742G) in Western Blot"	
Authors: Zhou Y,Shi J,Chu D,Hu W,Guan Z,Gong CX,Iqbal K,Liu F	
	Dilution 1:200

View more WB references on thermofisher.com

Immunohistochemistry (5)

CNS neuroscience & therapeutics	Year 2022
Tau antibody 77G7 targeting microtubule binding domain suppresses proteopathic tau to seed tau aggregation.	Species Mouse
"44-742G was used in Immunohistochemistry and Western Blotting to indicate that 77G7 can effectively suppress the seeding activity of AD O-tau and thus could be developed as a potential immunotherapeutic drug to inhibit the propagation of tau pathology in AD and related tauopathies."	
Authors: Li L,Miao J,Chu D,Jin N,Tung YC,Dai CL,Hu W,Gong CX,Iqbal K,Liu F	
Frontiers in aging neuroscience	Year 2022
Enriched environment ameliorates propagation of tau pathology and improves cognition in rat model of tauopathy.	Species Rat
"44-742G was used in Immunohistochemistry to show that EE seems to be able to slow down tau pathology progression, indicating the possible utility of similar interventions in early stages of AD where tangle loads are still low."	
Authors: Mate V,Smolek T,Kazmerova ZV,Jadhav S,Brezovakova V,Jurkanin B,Uhrinova I,Basheer N,Zilka N,Katina S, Novak P	
	Dilution 1:1000

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

- IHC (P) (3)
- ELISA (1)
- IP (1)
- DB (1)
- Misc (2)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.