

Phospho-Tau (Ser214) Polyclonal Antibody

Product Details

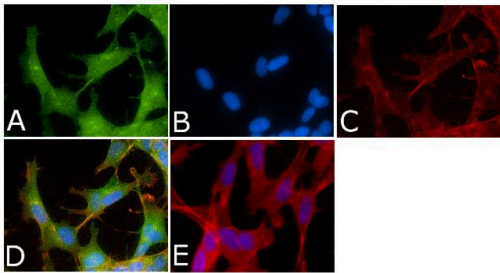
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Dog, Tag, Rat, Cat, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human Tau 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	16 Publications
Immunohistochemistry (IHC)	-	4 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

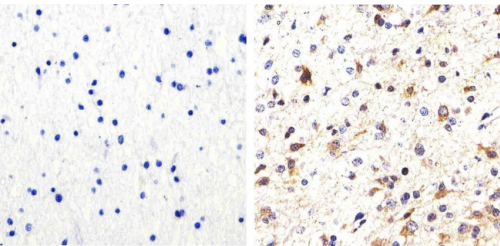
Phospho-Tau (Ser214) Antibody (44-742G) in ICC/IF

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.



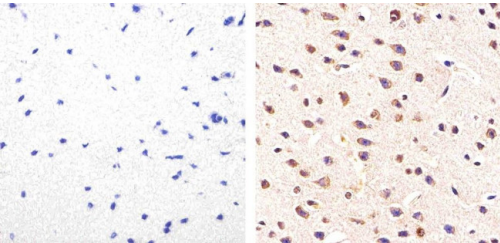
Phospho-Tau (Ser214) Antibody (44-742G) in IHC (P)

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.



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Western Blot (16)

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"	Dilution 1:200
Authors: Zhou Y, Shi J, Chu D, Hu W, Guan Z, Gong CX, Iqbal K, Liu F	

Acta neuropathologica	Year 2022
Genome-wide association study and functional validation implicates JADE1 in tauopathy.	Species Human
"44-742G was used in Western Blotting to investigate if Primary age-related tauopathy has a genetic architecture that partially overlaps with Alzheimer disease and other tauopathies and suggests a novel role for JADE1 as a modifier of neurofibrillary degeneration."	Dilution 1:1000
Authors: Farrell K, Kim S, Han N, Iida MA, Gonzalez EM, Otero-Garcia M, Walker JM, Richardson TE, Renton AE, Andrews SJ, Fulton-Howard B, Humphrey J, Vialle RA, Bowles KR, de Paiva Lopes K, Whitney K, Dangoor DK, Walsh H, Marcora E, Hefti MM, Casella A, Sissoko CT, Kapoor M, Novikova G, Udine E, Wong G, Tang W, Bhangale T, Hunkapiller J, Ayalon G, Graham RR, Cherry JD, Cortes EP, Borukov VY, McKee AC, Stein TD, Vonsattel JP, Teich AF, Gearing M, Glass J, Troncoso JC, Frosch MP, Hyman BT, Dickson DW, Murray ME, Attems J, Flanagan ME, Mao Q, Mesulam MM, Weintraub S, Woltjer RL, Pham T, Kofler J, Schneider JA, Yu L, Purohit DP, Haroutunian V, Hof PR, Gandy S, Sano M, Beach TG, Poon W, Kawas CH, Corrada MM, Rissman RA, Metcalf J, Shuldborg S, Salehi B, Nelson PT, Trojanowski JQ, Lee EB, Wolk DA, McMillan CT, Keene CD, Latimer CS, Montine TJ, Kovacs GG, Lutz MI, Fischer P, Perrin RJ, Cairns NJ, Franklin EE, Cohen HT, Raj T, Cobos I, Frost B, Goate A, White Iii CL, Cray JF	

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Immunohistochemistry (4)

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."	Dilution 1:1000
Authors: Mate V, Smolek T, Kazmerova ZV, Jadhav S, Brezovakova V, Jurkanin B, Uhrinova I, Basheer N, Zilka N, Katina S, Novak P	

Cell reports	Year 2019
Tau-Mediated Disruption of the Spliceosome Triggers Cryptic RNA Splicing and Neurodegeneration in Alzheimer's Disease.	
"Published figure using Phospho-Tau (Ser214) polyclonal antibody (Product # 44-742G) in Immunohistochemistry"	
Authors: Hsieh YC, Guo C, Yalamanchili HK, Abreha M, Al-Ouran R, Li Y, Dammer EB, Lah JJ, Levey AI, Bennett DA, De Jager PL, Seyfried NT, Liu Z, Shulman JM	

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)

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