

# Tau (Cleaved Asp421, Asp422) Monoclonal Antibody (TauC3)

## Product Details

Size	50 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	TauC3
Conjugate	Unconjugated
Immunogen	KLH-CSSTGSIDMVD, corresponding to the C terminus of tau truncated at Asp421.
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 1% BSA
Contains	0.1% sodium azide
Storage conditions	-20°C
RRID	AB_2536237

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-dependent	9 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10-1:100	-
Immunocytochemistry (ICC/IF)	1 µg/mL	-
Immunoprecipitation (IP)	Assay-dependent	-
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

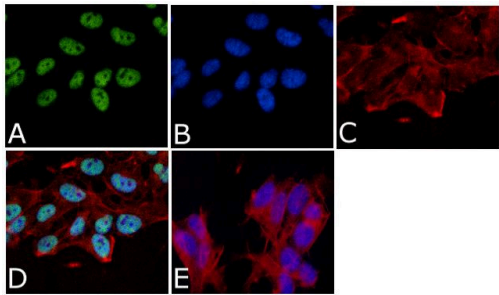
This antibody recognizes tau when truncated at Asp421. Several caspases, including caspase-3, caspase-7, and caspase-8, cleave tau at this site, yielding the truncated form of the protein. This antibody does not react with full-length tau, or with tau truncated at Glu391 or Ala429. This antibody provides a tool for studying neuronal cell apoptosis.

Recommended Positive Control: Tau and caspase-3 cleaved tau.

Product Images For Tau (Cleaved Asp421, Asp422) Monoclonal Antibody (TauC3)

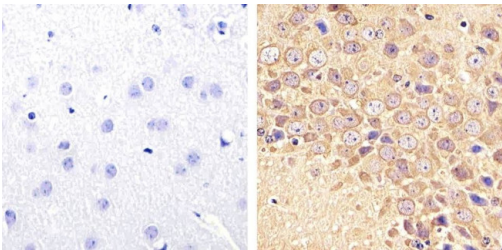
**Tau (Cleaved Asp421, Asp422) Antibody (AHB0061) in ICC/IF**

Immunofluorescent analysis of Tau (Cleavage site 421/422) Antibody (TauC3) 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 (Cleavage site 421/422) Antibody (TauC3) (Product # AHB0061) at 1µg/mL 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 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 localization. Panel e is a no primary antibody control. The images were captured at 40X magnification.



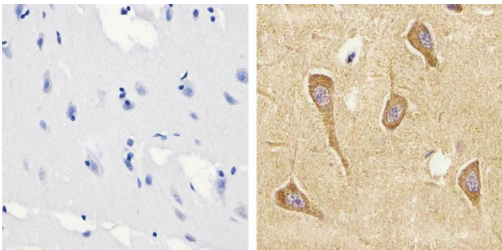
**Tau (Cleaved Asp421, Asp422) Antibody (AHB0061) in IHC (P)**

Immunohistochemistry analysis of Tau (421/422 cleavage site) 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 Tau (421/422 cleavage site) monoclonal antibody (Product # AHB0061) diluted in 3% BSA-PBS at a dilution of 1:20 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.



**Tau (Cleaved Asp421, Asp422) Antibody (AHB0061) in IHC (P)**

Immunohistochemistry analysis of Tau (421/422 cleavage site) showing staining in the cytoplasm of paraffin-embedded human 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 Tau (421/422 cleavage site) monoclonal antibody (Product # AHB0061) diluted in 3% BSA-PBS at a dilution of 1:20 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 (9)

<p>Molecular neurobiology</p> <p><b>Direct and Indirect Effects of Filamin A on Tau Pathology in Neuronal Cells.</b></p> <p>"AHB0061 was used in Western Blotting to indicate that in Tauopathies, FLNA could contribute to Tau pathology by acting on Tau and annexin A2."</p> <p>Authors: Levert S,Pilliod J,Aumont É,Armanville S,Tremblay C,Calon F,Leclerc N</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:1000</p>
<p>Frontiers in aging neuroscience</p> <p><b>Relevance of Phosphorylation and Truncation of Tau to the Etiopathogenesis of Alzheimer's Disease.</b></p> <p>"Published figure using Tau (Cleaved Asp421, Asp422) monoclonal antibody (Product # AHB0061) in Western Blot"</p> <p>Authors: Zhou Y,Shi J,Chu D,Hu W,Guan Z,Gong CX,Iqbal K,Liu F</p>	<p>Year 2022</p> <p>Species Human</p>

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Immunohistochemistry (2)

<p>Aging cell</p> <p><b>Early-life exposure to high-fat diet influences brain health in aging mice.</b></p> <p>"AHB0061 was used in Western Blotting to investigate the effect that maternal high-fat diet during gestation has on brain health of the offspring later in life."</p> <p>Authors: Di Meco A,Praticò D</p>	<p>Year 2019</p> <p>Species Mouse</p> <p>Dilution 1:200</p>
<p>Nature communications</p> <p><b>Pericyte loss influences Alzheimer-like neurodegeneration in mice.</b></p> <p>"Published figure using Tau (Cleaved Asp421, Asp422) monoclonal antibody (Product # AHB0061) in Immunohistochemistry"</p> <p>Authors: Sagare AP,Bell RD,Zhao Z,Ma Q,Winkler EA,Ramanathan A,Zlokovic BV</p>	<p>Year 2014</p> <p>Species Mouse</p>

More applications with references on thermofisher.com

Misc (1)

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