

For Research Use Only

# Phospho-TAU (Thr181) Polyclonal antibody

Catalog Number: 28866-1-AP

8 Publications



## Basic Information

<b>Catalog Number:</b> 28866-1-AP	<b>GenBank Accession Number:</b> BC000558	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150 ug/ml	<b>GeneID (NCBI):</b> 4137	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P10636	
<b>Isotype:</b> IgG	<b>Full Name:</b> microtubule-associated protein tau	
	<b>Calculated MW:</b> 37-46, 79-81 kDa	
	<b>Observed MW:</b> 50-80 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, ELISA	<b>Positive Controls:</b> WB : PDGF treated SH-SY5Y cells, IHC : mouse brain tissue,
<b>Cited Applications:</b> WB, IF	
<b>Species Specificity:</b> human, mouse	
<b>Cited Species:</b> human, mouse	

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

Tau (tubulin-associated unit) is a microtubule-associated protein (also known as MAPT), expressed mainly in neurons of the central nervous system. Its primary function is to modulate microtubule dynamics for maintaining axonal cytoskeleton. The Tau protein has six isoforms produced from a single gene through alternative RNA splicing. Isoforms differ in number of inserts at the N-terminal half and the number of repeats at the C-terminal half (3 repeat-3R; 4 repeat-4R). Tau is hyperphosphorylated during aging and in age-related neurodegenerative diseases such as Alzheimer's disease (AD) and fronto-temporal dementia. Hyperphosphorylation of Tau leads to the formation of neurofibrillary tangles (NFT) in the neurons and glia cells, which is one of the hallmarks of AD.

## Notable Publications

Author	Pubmed ID	Journal	Application
Kaixuan Luo	35069727	Neural Plast	WB
Qiusha Li	39111605	Brain Res Bull	WB
Xin Ren	39032765	Eur J Pharmacol	WB,IF

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

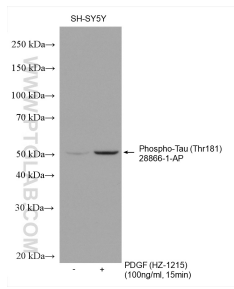
T: 4006900926

E: Proteintech-CN@ptglab.com

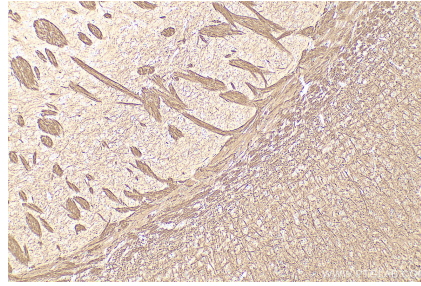
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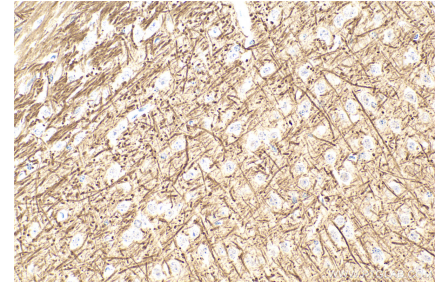
## Selected Validation Data



Non-treated SH-SY5Y and PDGF (HZ-1215) treated SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 28866-1-AP (Phospho-Tau (Thr181) antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 28866-1-AP (Phospho-TAU (Thr181) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 28866-1-AP (Phospho-TAU (Thr181) antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).