For Research Use Only

# Phospho-TAU (Thr181) Polyclonal antibody

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Catalog Number: 28866-1-AP

11 Publications

#### **Basic Information**

Catalog Number:

28866-1-AP

BC000558

Concentration:

150 ug/ml

Source:

Rabbit

P10636

Isotype:

Full Name:

Isof.

microtubule-associated protein tau

Calculated MW: 37-46, 79-81 kDa Observed MW: 50-80 kDa Purification Method: Protein A purification Recommended Dilutions: WB: 1:500-1:1000 IHC: 1:50-1:500

## **Applications**

Tested Applications: WB, IHC, ELISA Cited Applications:

WB. IF

Species Specificity: human, mouse Cited Species: 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

#### Positive Controls:

WB: PDGF treated SH-SY5Y cells, IHC: mouse brain tissue,

# **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
Ling Cheng	40183841	Neurochem Res	WB
Zhong-Da Li	40184642	Redox Biol	WB

### Storage

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

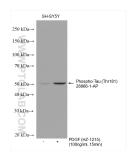
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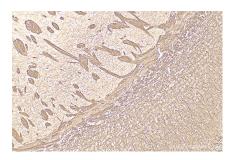
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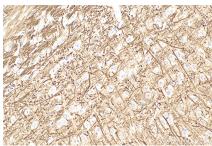
## **Selected Validation Data**



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 paraffinembedded 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 paraffinembedded 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).