

For Research Use Only

Phospho-TAU (Thr181) Polyclonal antibody

Catalog Number: 28866-1-AP

10 Publications



Basic Information

Catalog Number:

28866-1-AP

Size:

100ul, Concentration: 150 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC000558

GeneID (NCBI):

4137

UNIPROT ID:

P10636

Full Name:

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
Zhong-Da Li	40184642	Redox Biol	WB
Fang Wang	39773540	Alzheimers Res Ther	WB

Storage

Storage:

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

Storage Buffer:

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

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

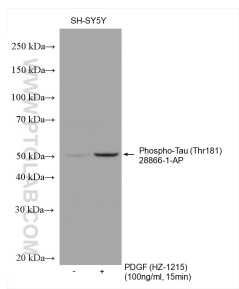
For technical support and original validation data for this product please contact:

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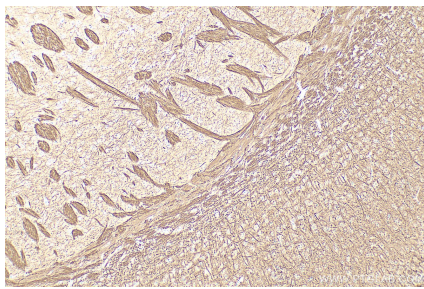
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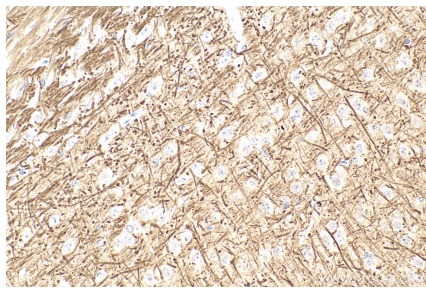
Selected Validation Data



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 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).