

For Research Use Only

# Phospho-TAU (Thr231) Recombinant antibody

Catalog Number: 80101-7-RR



## Basic Information

Catalog Number:

80101-7-RR

Size:

1000 ug/ml

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

CloneNo.:

240632B1

Recommended Dilutions:

WB 1:1000-1:4000

## Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human

Positive Controls:

WB : SH-SY5Y cells,  $\lambda$  phosphatase treated SH-SY5Y cells

## 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.

## 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:

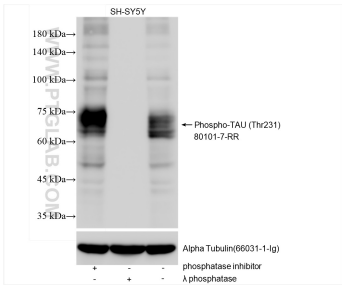
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



1X10<sup>6</sup> SH-SY5Y cells untreated (dashed lines) or treated with λ phosphatase which intracellularly stained with 0.06 ug Phospho-TAU (Thr231) Recombinant antibody (80101-7-RR, Clone:240632B1) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.06 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.

Non-treated SH-SY5Y cells, phosphatase inhibitor treated SH-SY5Y cells and λ phosphatase treated SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 80101-7-RR (Phospho-TAU (Thr231) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control.