For Research Use Only

## CoraLite® Plus 488-conjugated Phospho-TAU (Thr231) Recombinant antibody



Catalog Number: CL488-80101-7

**Basic Information** 

Catalog Number: CL488-80101-7 Concentration:

1000 μg/ml Source: Rabbit Isotype:

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

Excitation/Emission maxima wavelengths:

493 nm / 522 nm

**Applications** 

**Tested Applications:** 

FC (Intra)

Species Specificity:

human

## **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

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

## **Selected Validation Data**

1X10^6 SH-SY5Y cells untreated (dashed lines) or treated with  $^{\lambda}$  phosphatase which intracellularly stained with 0.25 ug Coralite® Plus 488 Phospho-TAU (Thr231) Recombinant Antibody (CL488-80101-7, Clone:240632B1)(red), or 0.25 ug Coralite® Plus 488 Rabbit IgG Isotype Control RecAb (CL488-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.