For Research Use Only

CoraLite® Plus 647-conjugated Phospho-TAU (Thr231) Recombinant antibody



Catalog Number: CL647-80101-7

Basic Information

Catalog Number: CL647-80101-7 Concentration: 1000 µg/ml

Source: Rabbit Isotype:

Calculated MW:

50-80 kDa

Full Name: microtubule-associated protein tau

BC000558

4137

P10636

GeneID (NCBI):

UNIPROT ID:

37-46, 79-81 kDa Observed MW:

GenBank Accession Number:

Purification Method:

Protein A purification

CloneNo.: 240632B1

Excitation/Emission maxima wavelengths:

654 nm / 674 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 647 Phospho-TAU (Thr231) Recombinant Antibody (CL647-80101-7, Clone:240632B1)(red), or 0.25 ug Coralite® Plus 647 Rabbit IgG Isotype Control RecAb (CL647-98136, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.