

Purified anti-Tau, 15-25 Antibody

Catalog# / Size	835203 / 25 µg 835204 / 100 µg
Clone	TAU-13
Regulatory Status	RUO
Other Names	Microtubule-associated protein tau, PHF-tau, paired helical filament-tau, neurofibrillary tangle protein, microtubule-associated protein tau, isoform 4, G protein beta1 gamma2 subunit-interacting factor 1
Isotype	Mouse IgG1, κ
Description	Tau protein promotes microtubule assembly and stability. Tau is abundant in neurons of the central nervous system, and is expressed at low levels in astrocytes and oligodendrocytes. Abnormal hyper-phosphorylation, aggregation, and toxic gain of function of tau is associated with several neurological disorders, including Alzheimer's disease (AD). The major building block of neurofibrillary lesions in AD brains consists of paired helical filaments (PHFs) of abnormally hyperphosphorylated tau. Six isoforms of tau are generated by alternative splicing of the MAPT gene. These isoforms are distinguished by the number of tubulin binding domains, 3 (3R) or 4 (4R), in the C-terminal of the protein and by one (1N), two (2N), or no (0N) inserts in the N-terminal domain. Tau isoforms are differentially expressed during development.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Preliminary assignment of its epitope indicates that it maps to amino acid residues 15-25 on the longest isoform of human Tau.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.1 - 0.5 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Product Citations	1. Farmer KM, <i>et al.</i> 2020. Acta Neuropathol Commun. 0.425. PubMed 2. Lo Cascio F, <i>et al.</i> 2020. J Biol Chem. 295:14807. PubMed
RRID	AB_2728542 (BioLegend Cat. No. 835203) AB_2728543 (BioLegend Cat. No. 835204)

Antigen Details

Structure	Unmodified Tau isoforms have an apparent molecular weight ranging from 33-79 kD. Additional high and low molecular weight Tau species have been observed in brain tissues.
Distribution	Tissue distribution: Central nervous system, peripheral ganglia and nerves, kidney, skeletal, and heart muscle.

Cellular distribution: Cytoskeleton, nucleus, plasma membrane, and cytosol.

Function	Tau promotes microtubule assembly and stability. The short tau isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.
Interaction	Tau interacts with Sequestosome-1, Peptidyl-prolyl cis-trans isomerase FKBP4, casein kinase I isoform delta, serine/threonine-protein kinase Sgk1, Laforin, and alpha-synuclein.
Biology Area	Cell Biology, Neurodegeneration, Neuroscience, Protein Misfolding and Aggregation
Molecular Family	Tau
Antigen References	1. Castillo-Carranza DL, et al. 2014 J. Neurosci. 12:4260.
Gene ID	4137

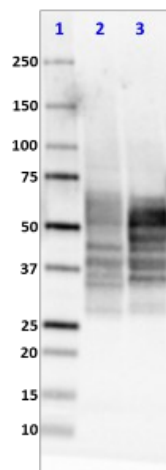
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Anti-Tau, 15-25, Purified anti-Tau, 15-25

Product Data



Western blot of purified anti-Tau, 15-25 antibody (clone TAU-13). Lane 1: Molecular weight marker; Lane 2: 20 μ g of Alzheimer's disease human brain membrane lysate; Lane 3: 20 μ g of normal human brain membrane lysate. The blot was incubated with 0.1 μ g/mL of primary antibody overnight at 4°C, followed by incubation with HRP labeled goat anti-mouse IgG (Cat. No. 405306). Enhanced chemiluminescence was used as the detection system.

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