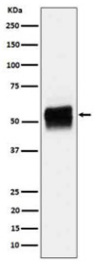
Phospho-Tau (pSer202) Antibody / MAPT [clone 31M22] (FY13349)

Catalog No.	Formulation	Size
FY13349	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

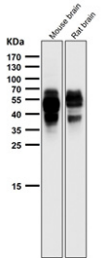
Recombinant RABBIT MONOCLONAL

Bulk quote request

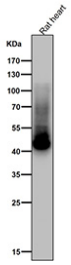
Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31M22
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P10636
Applications	Western blot: 1:500-1:2000
Limitations	This Phospho-Tau (pSer202) antibody is available for research use only.



Western blot analysis of Phospho-Tau (pS202) expression in mouse hippocampus cell lysate using Phospho-Tau (pSer202) antibody. The expected molecular weight of phosphorylated Tau (Ser202) is approximately 45-70 kDa, corresponding to the major Tau isoforms.



Western blot testing of mouse and rat brain tissue lysate using the Phospho-Tau (pSer202) antibody at 1:2000 dilution for 1 hour at room temperature. The expected molecular weight of phosphorylated Tau (Ser202) is approximately 45-70 kDa, corresponding to the major Tau isoforms, and lower molecular weight bands around ~35 kDa may represent truncated Tau fragments commonly observed in brain tissue.



Western blot testing of mouse and rat samples using the Phospho-Tau (pSer202) antibody at 1:2000 dilution for 1 hour at room temperature. The expected molecular weight of phosphorylated Tau (Ser202) is approximately 45-70 kDa, corresponding to the major Tau isoforms, and lower molecular weight bands around ~35 kDa may represent truncated Tau fragments commonly observed in brain tissue.

Description

Phospho-Tau (pSer202) antibody detects Tau protein phosphorylated at serine 202, encoded by the MAPT gene. Tau is a microtubule associated protein that stabilizes neuronal microtubules and regulates axonal transport. Phospho-Tau (pSer202) antibody provides researchers with a critical reagent to study neurodegeneration, Alzheimer disease, and tauopathies associated with abnormal Tau phosphorylation.

Tau normally binds and stabilizes microtubules in axons, promoting neuronal structure and intracellular transport. Research using Phospho-Tau (pSer202) antibody has shown that phosphorylation at Ser202 reduces Tau binding to microtubules, leading to destabilization and cytoskeletal disorganization. This modification is an early hallmark of pathological Tau in Alzheimer disease.

Studies with Phospho-Tau (Ser202) antibody have revealed that hyperphosphorylation at Ser202 and neighboring residues contributes to Tau aggregation into neurofibrillary tangles. These aggregates impair neuronal function and survival, driving neurodegeneration. Detection of Ser202 phosphorylation therefore provides an important marker for disease progression in tauopathies.

In Alzheimer disease, Phospho-Tau (pSer202) antibody has demonstrated strong immunoreactivity in affected brain regions such as the hippocampus and cortex. This phosphorylation is mediated by kinases including GSK3 beta and CDK5, linking Tau pathology to signaling pathways dysregulated in disease. Monitoring Ser202 phosphorylation offers insight into how signaling cascades contribute to neuronal dysfunction.

Beyond Alzheimer disease, Tau phosphorylation at Ser202 is implicated in other neurodegenerative conditions such as progressive supranuclear palsy, corticobasal degeneration, and frontotemporal dementia. Research using Phospho-Tau (pSer202) antibody has shown that this site is consistently phosphorylated across tauopathies, making it a reliable disease marker.

Phospho-Tau (pSer202) antibody is widely used in immunohistochemistry, western blotting, and immunofluorescence. Immunohistochemistry highlights phosphorylated Tau aggregates in brain tissue, western blotting distinguishes pathological from normal isoforms, and immunofluorescence demonstrates subcellular accumulation in neurons. These approaches make the antibody essential for neurodegeneration research.

By supplying validated Phospho-Tau (pSer202) antibody reagents, NSJ Bioreagents supports studies into Alzheimer disease, tauopathies, and neuronal dysfunction. Detection of Tau phosphorylated at Ser202 provides insight into the molecular events driving neurodegeneration.

Application Notes

Optimal dilution of the Phospho-Tau (pSer202) antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Phospho-Tau (pS202) was used as the immunogen for the Phospho-Tau (pSer202) antibody.

Storage

Store the Phospho-Tau (pSer202) antibody at -20oC.

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