Anti-Phospho-Tau (S199) Antibody [JE46-95]

HA721800

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB
Molecular Wt:	Predicted band size: 79 kDa
Clone number:	JE46-95

Description: The tau proteins (abbreviated from tubulin associated unit are a group of six highly soluble protein isoforms produced by alternative splicing from the gene MAPT (microtubule-associated protein tau). They have roles primarily in maintaining the stability of microtubules in axons and are abundant in the neurons of the central nervous system (CNS), where the cerebral cortex has the highest abundance. They are less common elsewhere but are also expressed at very low levels in CNS astrocytes and oligodendrocytes. Pathologies and dementias of the nervous system such as Alzheimer's disease and Parkinson's disease are associated with tau proteins that have become hyperphosphorylated insoluble aggregates called neurofibrillary tangles. The tau proteins were identified in 1975 as heat-stable proteins essential for microtubule assembly, and since then they have been characterized as intrinsically disordered proteins.

Immunogen: Synthetic phosphopeptide corresponding to residues surrounding Ser199 of human Tau protein.

Positive control: Human brain tissue lysate, mouse brain tissue lysate, rat brain tissue lysate.

Subcellular location: Cytoplasm, cytosol, Cell membrane, cytoskeleton, Cell projection, axon, dendrite, Secreted.

Database links: SwissProt: P10636-8 Human | P10637 Mouse | P19332 Rat

Recommended Dilutions:

WB	1:1,000

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

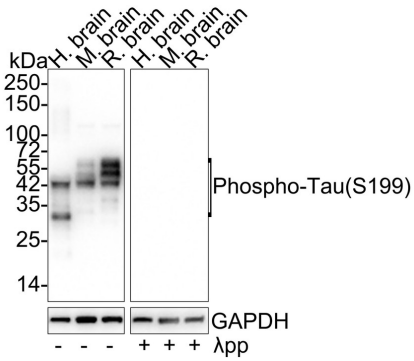

Fig1: Western blot analysis of Phospho-Tau (S199) on different lysates with Rabbit anti-Phospho-Tau (S199) antibody (HA721800) at 1/1,000 dilution.

Lane 1: Human brain tissue lysate
Lane 2: Mouse brain tissue lysate
Lane 3: Rat brain tissue lysate
Lane 4: Human brain tissue lysate, the membrane treated with λpp for 1 hour
Lane 5: Mouse brain tissue lysate, the membrane treated with λpp for 1 hour
Lane 6: Rat brain tissue lysate, the membrane treated with λpp for 1 hour

Lysates/proteins at 20 µg/Lane.

Predicted band size: 79 kDa
Observed band size: 35-70 kDa

Exposure time: 3 seconds;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA721800) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Karikari TK et al. Blood phospho-tau in Alzheimer disease: analysis, interpretation, and clinical utility. Nat Rev Neurol. 2022 Jul
2. Palmqvist S et al. Prediction of future Alzheimer's disease dementia using plasma phospho-tau combined with other accessible measures. Nat Med. 2021 Jun