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Anti-Tau [pS199] Rabbit Polyclonal Antibody Ref. 4BDX-1502

Biomolecule

Anti-Tau [pS199] rabbit polyclonal antibody

Size 80 μl

Formulation

Rabbit serum diluted in glycerol with 0.09% sodium azide

Storage +4°C / -20°C

Immunogen Peptide

at serine 199

Specificity Anti-Tau phosphorylated

Cross-reactivity

Human, Mouse, Rat

Applications WB, IHC, IF

• Preparation

This polyserum was obtained by immunizing a rabbit with a 12 amino acid peptide containing the phosphorylated serine 199 (SGYSSPGSPGT). The phosphorylated threonine is underlined.

• Specificity

Determined by its ability to recognise human Tau phosphorylated at serine 199.

• <u>Storage</u>

Store at +4°C for short term use (1-2 weeks) - Store at -20°C for long term use.

• Applications

Recommended concentration of use are:

Western-blot: 1:4000 in Tris HCl pH 8.0 Tween-20 0.05% and 5% dry skimmed milk.

IHC /IF: 1:200 in PBS with 5% BSA.

• General information



Tau proteins are encoded by a single gene (Gene ID: 4137). The neurofibrillary degeneration is characterized by an accumulation of fibrils made of hyper and abnormally phosphorylated Tau proteins. The Tau phosphorylation at serine 199 is observed early during the process of neurofibrillary degeneration. On human brain tissue or in animal models of tauopathies, this antibody detects specifically neurons in neurofibrillary degeneration. The serine 199 is phosphorylated by the following kinases: CDK5 (cyclin dependent kinase 5), CK2 (casein kinase 2), PKA (protein kinase A), GSK3 (glycogen synthase kinase 3), ERK/MAPK (mitogen activated kinases) and MARK (Microtubule-associated protein/microtubule affinity-regulating kinase).

<u>References</u>

Troquier L, Caillierez R, Burnouf S, Fernandez-Gomez FJ, Grosjean ME, Zommer N, Sergeant N, Schraen-Maschke S, Blum D and Buee L (2012) Targeting phospho-Ser422 by active Tau Immunotherapy in the THY-Tau22 mouse model: a suitable therapeutic approach. Curr Alzheimer Res. 9(4):397-405.

Sergeant N, Bretteville A, Hamdane M, Caillet-Boudin ML, Grognet P, Bombois S, Blum D, Delacourte A, Pasquier F, Vanmechelen E, Schraen-Maschke S, and Buée L (2008) Biochemistry of Tau in Alzheimer's disease and related neurological disorders. Expert review of proteomics 5: 207–224.

• Application exemples



Western-blotting of Tau at phospho-serine 199 in SY5Y Tau inducible expressing cells.



Immunohistochemistry of neurofibrillary degeneration in Alzheimer brain tissue.

TO PLACE AN ORDER



Immunofluorescence of hyperphosphorylated Tau at phospho-serine 199 in mouse Thy-Tau22

