INVIVO
BioTech Services GmbH
a BRUKER company

Anti-human phospho-199/202 TAU mAb 9C8

Description:

Tau protein is a microtubule-associated protein mainly found in neurons, that regulates microtubule stability and axonal transport. It is classified as an intrinsically disordered protein, allowing it to adopt multiple conformations and interact with diverse cellular partners. Tau proteins contain numerous potential phosphorylation sites that regulate it´s conformational changes and interactions. In pathological states, especially neurodegenerative disorders, hyperphosphorylation arises, leading to aggregation into neurofibrillary tangles - a hallmark of tauopathies like Alzheimer's disease.

The clone 9C8 is a Monoclonal Mouse antibody against Human Phospho-Tau (Ser199+Ser202), Microtubule-associated protein tau (MAPT) (Uniprot: B3KTM0).

The antibody is produced exclusively from hybridoma and purified through one-step purification with Protein-A affinity chromatography.

Product-ID:	**INV4000034**
Clone:	9C8
Immunogen:	Animals were immunized with Synthetic peptide.
Host:	Mouse
Clonality:	Monoclonal
Isotype:	IgG1k
Formulation:	Clear Liquid, PBS, pH 7.4
Concentration:	> 1.0 mg/ml
Purity:	> 95% by SDS-PAGE
Sizes available:	0.1 mg and 1.0 mg
Storage:	at - 20 °C (repeated thawing and freezing should be avoided)
Tested application(s):	ELISA, Western Blot, Immunhistochemistry

The product is for research use only and not for use in diagnostic or therapeutic procedures.

Literature:

[1] - Mark S. Forman, Virginia M.-Y. Lee, John Q. Trojanowski. New insights into genetic and molecular mechanisms of brain degeneration in tauopathies, Journal of Chemical Neuroanatomy, Volume 20, Issues 3–4, 2000, Pages 225-244, ISSN 0891-0618, https://doi.org/10.1016/S0891-0618(00)00100-9.

[2] - Alonso A, Zaidi T, Novak M, Grundke-Iqbal I, Iqbal K. Hyperphosphorylation induces self-assembly of tau into tangles of paired helical filaments/straight filaments. Proc Natl Acad Sci U S A. 2001 Jun 5;98(12):6923-8. doi: 10.1073/pnas.121119298. Epub 2001 May 29. PMID: 11381127; PMCID: PMC34454.

[3] - Noble W, Hanger DP, Miller CC, Lovestone S. The importance of tau phosphorylation for neurodegenerative diseases. Front Neurol. 2013 Jul 1;4:83. doi: 10.3389/fneur.2013.00083. PMID: 23847585; PMCID: PMC3696910.

InVivo BioTech Services GmbH is certified to ISO 9001 and ISO 13485.

Anti-human phospho-199/202 TAU mAb 9C8 — Supplementary Data

Figure 1
Brain homogenates of mice were separated by SDS-PAGE and blotted on nitrocellulose by Western blotting.
Lane1: homogenate of Balb/c wild type
Lane2: homogenate human TAU transgen P301L mutation, female
Lane3: like lane (2), male
Lane4: human recombinant Tau 441
Bound antibody was detected using horseradish peroxidase conjugated goat anti-mouse IgG and ECL substrate solution.
Mab 9C8 reacted specifically with the phosphorylated human TAU but not with recombinant TAU441.
Analyses were kindly performed by Dr. Max Holzer (University of Leipzig, Paul-Flechsig-Institute, Germany) .