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Introduction : Who is SPQI - 4BioDx ?

SPQI (Services et Produits de Qualité et Innovants) develops, produces and commercializes **laboratory reagents** for research (monoclonal antibodies, polyclonal antibodies) under the 4BioDx® brand (www.4BioDx.com). The company SPQI is a spin-off of prestigious research institutes namely INSERM UMRS1172 (“Institut National de la Santé et de la Recherche Médicale”) headed by Pr Luc Buée, the CNRS (“Centre National de la Recherche scientifique”), the University of Lille and the Lille Hospital in North of France (CHRU de Lille). All our antibodies are validated by our scientific teams with more than **25 year experiences in neurodegenerative diseases** and by many peer-reviewed publications.



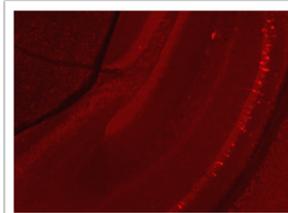
Examples of 4BioDx products and main applications

Anti-Tau [pS422] Mouse Monoclonal Antibody - Ref. 4BDX-1501

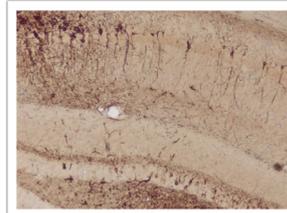
The monoclonal antibody Clone 2H9 (Ref. 4BDX-1501) is directed against phospho-Ser422 Tau, a pathological Tau phospho-epitope in neurological disorders. This antibody is useful by immunoblotting to detect pS422 epitope in brain homogenates from patients presenting a Tauopathy. By immunohistochemistry, this reference has been shown to label **neurofibrillary tangles** in Alzheimer patients and in Tau transgenic mouse brain sections.

This monoclonal antibody is also suitable for **immunotherapy** in experimental models of Tauopathies (Troquier et al. 2012).

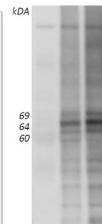
This **specific biomarker of neurofibrillary degeneration** is actually the only one mouse monoclonal antibody on the market.



Immunofluorescence of Thy-Tau22 transgenic mouse model of neurofibrillary degeneration



Immunohistochemistry of Thy-Tau22 transgenic mouse model of neurofibrillary degeneration



Western blotting of human control and two Alzheimer brain extracts

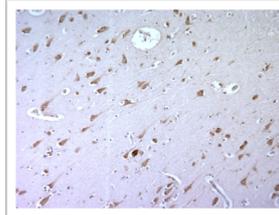
Specificity
Anti-Tau phosphorylated at serine 422

Cross-reactivity
Human, Mouse, Rat

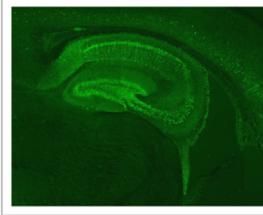
Applications
WB, IHC, IF

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

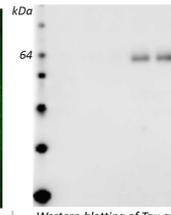
The Anti-Tau [pS199] antibody (Ref. 4BDX-1502) detects specifically Tau hyperphosphorylation at serine 199 **at early steps of neurofibrillary degeneration** in human brain tissue or in animal models of tauopathies. This antibody (Ref. 4BDX-1502) is an **early marker** of neurofibrillary degeneration as described by Immunohistochemistry in Alzheimer's patients (Maurage et al. 2003). Interestingly, the neurons of young individuals are also shown to express the serine 199 phosphorylated tau-epitope as published in an article of Maurage et al. 2001. This polyclonal is suitable for Western Blot, for Immunohistochemistry and Immunofluorescence.



Immunohistochemistry of neurofibrillary degeneration in Alzheimer patient brain tissue



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



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

Specificity
Anti-Tau phosphorylated at serine 199

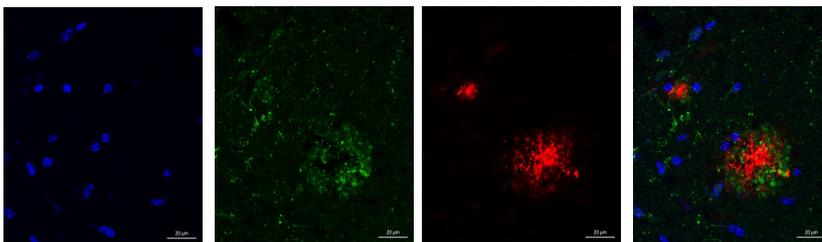
Cross-reactivity
Human, Mouse, Rat

Applications
WB, IHC, IF

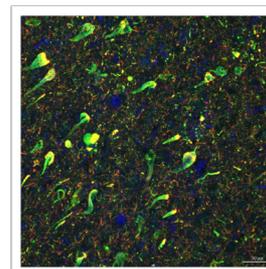
Anti-APP [pT668] Rabbit Polyclonal Antibody - Ref. 4BDX-1503

Rabbit polyclonal antibody pT668 (Ref. 4BDX-1503) recognizes the phosphorylated threonine 668 of Amyloid Precursor Protein (APP) and is suitable for Western Blot, for Immunohistochemistry and Immunofluorescence. Our polyclonal antibody against APP at phosphorylated Thr-668 is useful tool to detect **phosphorylated APP** in rat, mice or human brain. This antibody (Ref. 4BDX-1503) worked greatly in immunohistochemistry and in immunofluorescence protocols and is a **biomarker of neuritic processes** surrounding amyloid deposits.

DAPI (nuclei) Ref. 4BDX-1503 Anti-Aβ peptide 4G8 Merged



Immunofluorescence of amyloid deposits and dystrophic neurites in APP x PS1 transgenic mouse brain



Immunofluorescence of human Alzheimer disease brain section



Western-blotting of APP x PS1 mouse brain extracts

Specificity
Anti-APP phosphorylated at threonine 668

Cross-reactivity
Human, Mouse, Rat

Applications
WB, IHC, IF



More informations about SPQI – 4BioDx Company and innovative products

The main goal of SPQI S.A.S is to provide to researchers worldwide innovative high-quality, robust and innovative laboratory reagents tools in neurodegenerative diseases and in male fertility fields. All 4BioDx® reagents are for Research Use Only and are not intended for Diagnostic or Therapeutic Use. Available worldwide thanks to our partners and distributor (complete list upon request). Check out our website (www.4biodx.com) for more details about our innovative products and any release of new products.

All 4BioDx® products are manufactured in France.

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