

Tau(Phospho-Thr181) Antibody

Catalog No: #11107

Package Size: #11107-1 50ul #11107-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

Product Name	Tau(Phospho-Thr181) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of Tau only when phosphorylated at threonine 181.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 181 (P-K-T(p)-P-P) derived from Human Tau.
Conjugates	Unconjugated
Target Name	Tau
Modification	Phospho
Other Names	MAPT; MTAPT; MTBT1; Neurofibrillary tangle protein; PHF-tau
Accession No.	Swiss-Prot: P10636NCBI Protein: NP_001116538.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

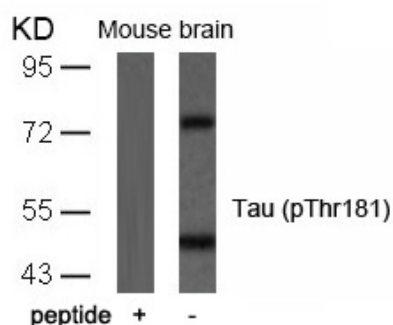
Application Details

Predicted MW: 48 62 78 kd

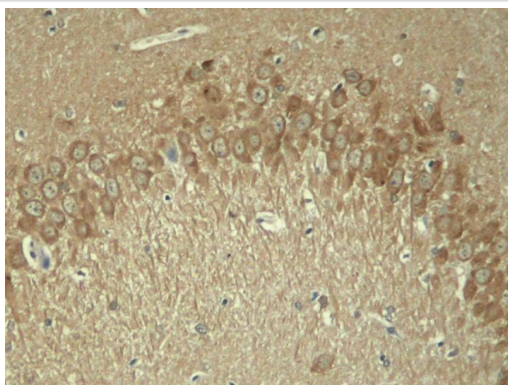
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from mouse brain tissue using Tau(Phospho-Thr181) Antibody #11107 and the same antibody preincubated with blocking peptide.



Immunohistochemical analysis of paraffin-embedded rat hippocampal region tissue from a model with Alzheimer

Background

Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. The C-terminus binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau functions as a linker protein between both. Axonal polarity is predetermined by tau localization (in the neuronal cell) in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton whereas the longer isoforms may preferentially play a role in its stabilization.

Puig B, et al.(2005) Acta Neuropathol (Berl). 110(3):261-268.

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Published Papers

Lara Ordóñez-Gutiérrez, Juan María Torres, Rosalina Gavarrón et al., Cellular prion protein modulates b-amyloid deposition in aged APP/PS1 transgenic mice., Neurobiology of Aging., xxx:1-12(2013)

[PMID:23831375](#)

et al., Trillium tschonoskii maxim extract attenuates abnormal Tau phosphorylation.Neural Regen Res.In Neural Regen Res.On 2018 May by Luo HB, Shang N. et al..PMID: 29863023, , (2018)

[PMID:29863023](#)

et al., Ribosylation-Derived Advanced Glycation End Products Induce Tau Hyperphosphorylation Through Brain-Derived Neurotrophic Factor Reduction. In J Alzheimers Dis on 2019 by Wu B, Wang Y, et al..PMID:31381511, , (2019)

[PMID:31381511](#)

et al., Cellular prion protein modulates ϵ^{Y} -amyloid deposition in aged APP/PS1 transgenic mice. In Neurobiol Aging on 2013 Dec by Juan María Torres, Rosalina Gavarrón, et al..PMID: 23831375, , (2013)

[PMID:23831375](#)

et al., Resveratrol Attenuates Formaldehyde Induced Hyperphosphorylation of Tau Protein and Cytotoxicity in N2a Cells.In Front Neurosci on 2017 Jan 31 by Xiaping He, Zhenhui Li,et al..PMID: 28197064, , (2017)

[PMID:28197064](#)

et al., Ribosylation triggering Alzheimer's disease-like Tau hyperphosphorylation via activation of Cdk5/MKII.In Aging Cell on 2015 Oct by Yan Wei, Chanshuai Han et al..PMID:26095350, , (2015)

[PMID:26095350](#)

et al., A Novel Mechanism for Endogenous Formaldehyde Elevation in SAMP8 Mouse .In J Alzheimers Dis On 2014 by Min Qiang, Rong Xiao et al..PMID:24583407, , (2014)

[PMID:24583407](#)

et al., Role of PrPC Expression in Tau Protein Levels and Phosphorylation in Alzheimer's Disease Evolution.In Mol Neurobiol on 2015 by C Vergara, L Ordóñez-Gutiérrez et al..PMID: 24965601, , (2015)

[PMID:24965601](#)

el at., Alzheimer's Disease and Methanol Toxicity (Part 1): Chronic Methanol Feeding Led to Memory Impairments and Tau Hyperphosphorylation in Mice. In J Alzheimers Dis on 2014 by Meifeng Yang, Jing Lu,et al..PMID:24787915, , (2014)

[PMID:24787915](#)

el at., A Novel Mechanism for Endogenous Formaldehyde Elevation in SAMP8 Mouse. In J Alzheimers Dis on 2014 by Min Qiang, Rong Xiaoi ?et al..PMID:24583407, , (2014)

[PMID:24583407](#)

el at., Role of PrPC in tau protein levels and phosphorylation in Alzheimer's disease evolution. In Mol Neurobiol on 2015 by C Vergara, L Ordθ“Eε'E½ez-Gutiθ rrezi ε t al..PMID:24965601, , (2015)

[PMID:24965601](#)

el at., Two widely used RSK inhibitors, BI-D1870 and SL0101, alter mTORC1 signaling in a RSK-independent manner. In Cell Signal on 2015 Aug by Marti n Roffθ , Fernanda C Lupinacci,et al..PMID:25889895, , (2015)

[PMID:25889895](#)

el at., Interneuron Accumulation of Phosphorylated tau Impairs Adult Hippocampal Neurogenesis by Suppressing GABAergic Transmission. In Cell Stem Cell

on 2020 Mar 5 by Jie Zheng, Hong-Lian Li,et al..PMID:31978364, , (2020)

[PMID:31978364](#)

el at., Differences in Tau Seeding in Newborn and Adult Wild-Type Mice. In Int J Mol Sci on 2022 Apr 26 by Isidro Ferrer, Pol Andrí@s-Benito,et al..PMID:35563179, , (2022)

[PMID:35563179](#)

Caixia Yan;Qilin Diao;Yuxi Zhao;Cheng Zhang;Xiaoya He;Ruijie Huang;Yan Li el at., Fusobacterium nucleatum infection-induced neurodegeneration and abnormal gut microbiota composition in Alzheimer's disease-like rats, , (2022)

[PMID:36188448](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.