

Tau(Phospho-Ser214) Antibody

Catalog No: #11109

Package Size: #11109-1 50ul #11109-2 100ul

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

Description

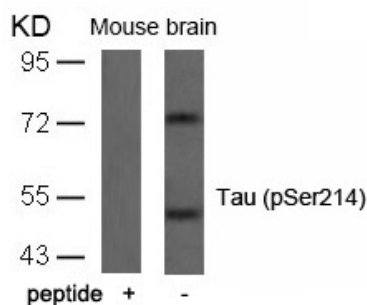
Product Name	Tau(Phospho-Ser214) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	IgG
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of Tau only when phosphorylated at serine 214.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 214 (T-P-S(p)-L-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

Images



Western blot analysis of extracts from mouse brain tissue using Tau(Phospho-Ser214) Antibody #11109 and the same antibody preincubated with blocking peptide.

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.

Smet C, et al. (2005) FEBS Lett; 579(19): 4159-64.

Puig B, et al. (2005) Acta Neuropathol (Berl).

Gvtz J, et al. (2001) Science; 293(5534): 1491-5.

Illenberger S, et al. (1998) Mol Biol Cell; 9(6): 1495-512.

Published Papers

el at., Protection of melatonin against acidosis induced neuronal injuries.In J Cell Mol Med on 2020 May 4 by Shi Y, Cai EL, et al..PMID: 32364678, , (2020)

[PMID:32364678](#)

el at., Tau-Induced Ca²⁺/Calmodulin-Dependent Protein Kinase-IV Activation Aggravates Nuclear Tau Hyperphosphorylation .In Neurosci Bull. On 2018 Apr by Wei YP, Ye JW et al..PMID: 28646348, , (2018)

[PMID: 28646348](#)

el at., Bip enhanced the association of GSK-3 ϵ° Y with tau during ER stress both in vivo and in vitro. In J Alzheimers Dis on 2012 by Zan-Chao Liu, Zheng-Qi Fu, et al..PMID:22460328, , (2012)

[PMID:22460328](#)

el at., Olfactory Deprivation Hastens Alzheimer-Like Pathologies in a Human Tau-Overexpressed Mouse Model via Activation of cdk5.In Mol Neurobiol.On 2016 Jan by Li K, Liu FF et al..PMID:25465240, , (2016)

[PMID:25465240](#)

el at., Novel multipotent AChEI-CCB attenuates hyperhomocysteinemia-induced memory deficits and Neuropathologies in rats.In J Alzheimers Dis on 2014 by Yiyuan Xia, Rong Liu et al..PMID: 25024319, , (2014)

[PMID:25024319](#)

el at., Extra-virgin olive oil attenuates amyloid- ϵ° Y and tau pathologies in the brains of TgSwDI mice. In J Nutr Biochem on 2015 Dec by Hisham Qosa, Loqman A Mohamed,et al..PMID:26344778, , (2015)

[PMID:26344778](#)

el at., Golgin-84-associated Golgi fragmentation triggers tau hyperphosphorylation by activation of cyclin-dependent kinase-5 and extracellular signal-regulated kinase. In Neurobiol Aging on 2014 Jun by Qian Jiang, Lu Wang,et al..PMID: 24368089, , (2014)

[PMID:24368089](#)

el at., MAPT/Tau accumulation represses autophagy flux by disrupting IST1-regulated ESCRT-III complex formation: a vicious cycle in Alzheimer neurodegeneration. In Autophagy on 2020 Apr by Qiong Feng, Yu Luo, et al..PMID:31223056, , (2020)

[PMID:31223056](#)

el at., A novel small-molecule PROTAC selectively promotes tau clearance to improve cognitive functions in Alzheimer-like models. In Theranostics on 2021 Mar 11 by Weijin Wang, Qiuzhi Zhou, et al..PMID:33859747, , (2021)

[PMID:33859747](#)

el at., Tau Aggregation-Dependent Lipid Peroxide Accumulation Driven by the hsa_circ_0001546/14-3-3/CAMK2D/Tau Complex Inhibits Epithelial Ovarian Cancer Peritoneal Metastasis. In Adv Sci (Weinh) on 2024 Jun by BinShu Chai, Yong Wu,et al..PMID:38634567, , (2024)

[PMID:38634567](#)

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