

Tau (Phospho-Ser516/199) Antibody

Catalog No: #12123

Package Size: #12123-1 50ul #12123-2 100ul

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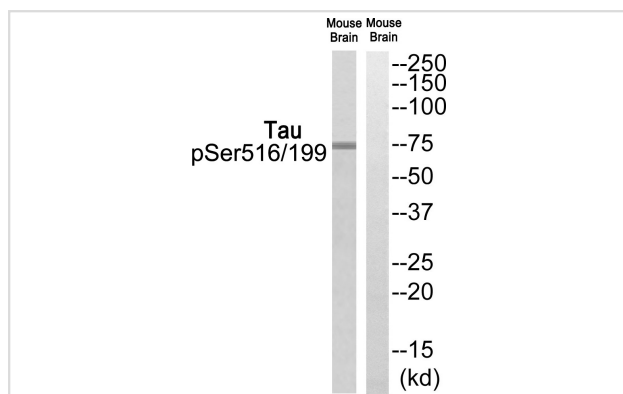
Description

Product Name	Tau (Phospho-Ser516/199) 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
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of Tau only when phosphorylated at serine 516/199.
Immunogen Type	peptide
Immunogen Description	Peptide sequence around phosphorylation site of serine 516/199 (Y-S-S(p)-P-G) derived from Human Tau.
Conjugates	Unconjugated
Target Name	Tau
Modification	Phospho
Other Names	MAPT; Microtubule-associated protein tau; MTBT1; Neurofibrillary tangle protein; Paired helical filament-tau; PHF-tau
Accession No.	Swiss-Prot#:P10636;NCBI Gene#:4137
SDS-PAGE MW	74kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG 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

Application Details

Western blotting: 1:500~1:3000

Images



Western blot analysis of extracts from Mouse brain cells, using Tau (Phospho-Ser516/199) antibody #12123. The lane on the right is treated with the synthesized 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/MAPT 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.

Published Papers

el at., Neurotrophin receptor p75 mediates amyloid β -Induced tau pathology. In Neurobiol Dis on 2019 Dec by Shen LL, Li WW, et al..PMID:31394202, , (2019)

[PMID:31394202](#)

el at., Capsaicin consumption reduces brain amyloid-beta generation and attenuates Alzheimer's disease-type pathology and cognitive deficits in APP/PS1 mice. In Transl Psychiatry on 2020 Jul 13 by Jun Wang, Bin-Lu Sun,et al..PMID:32661266, , (2020)

[PMID:32661266](#)

ZhiHao Liu;YuDi Bai;ZhongYuan Yu;HuiYun Li;Jie Liu;ChengRong Tan;GuiHua Zeng;YunFeng Tu;PuYang Sun;YuJuan Jia;JinCai He;YanJiang Wang;XianLe Bu el at., Improving Blood Monocyte Energy Metabolism Enhances Its Ability to Phagocytose Amyloid- β and Prevents Alzheimer's Disease-Type Pathology and Cognitive Deficits, , (2023)

[PMID:37316674](#)

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