

Tau

Cat.No. 314 002; Polyclonal rabbit antibody, 200 µl antiserum (lyophilized)

Data Sheet

Reconstitution/ Storage	200 µl antiserum, lyophilized. For reconstitution add 200 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: 1 : 1000 (AP staining) IP: yes ICC: 1 : 1000 IHC: yes IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 3 to 214 from mouse Tau (UniProt Id: P10637)
Reactivity	Reacts with: rat (P19332), mouse (P10637). Weaker signal: human (P10636). Other species not tested yet.
Specificity	Specific for tau.
matching control	314-0P
Remarks	The antibody binds phosphorylated and non-phosphorylated tau proteins. For human tissue antibody 2, cat.no. 314 012, is highly recommended.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

There are two major classes of heat stable microtubule associated proteins (MAPS): MAP 2 (280 kD), and **tau** (55-65 kD). Both protein classes are involved in the regulation of microtubule polymerization in cells. Tau is a neuronal protein that mainly localizes to axons. Hyperphosphorylated tau has been shown to be a major element of paired helical filaments in Alzheimer's disease.

Selected References SYSY Antibodies

The frontotemporal dementia mutation R406W blocks tau's interaction with the membrane in an annexin A2-dependent manner.

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HuD is a Neural Translation Enhancer Acting on mTORC1-Responsive Genes and Counteracted by the Y3 Small Non-coding RNA.
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Mammalian target of rapamycin (mTOR) activation increases axonal growth capacity of injured peripheral nerves.
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Selected General References

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A spatial gradient of tau protein phosphorylation in nascent axons.

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Tubulin requires tau for growth onto microtubule initiating sites.

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