

## Tau(Phospho-Thr231) Antibody

Catalog No: #11110

Package Size: #11110-1 50ul #11110-2 100ul

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## Description

Product Name	Tau(Phospho-Thr231) 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 231.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 231 (V-R-T(p)-P-P) derived from Human Tau.
Target Name	Tau
Modification	Phospho
Other Names	MAPT; MTAPT; MTBT1; Neurofibrillary tangle protein; PHF-tau
Accession No.	Swiss-Prot: P10636NCBI Protein: NP_001116538.1
Uniprot	P10636
GeneID	4137;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), 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.

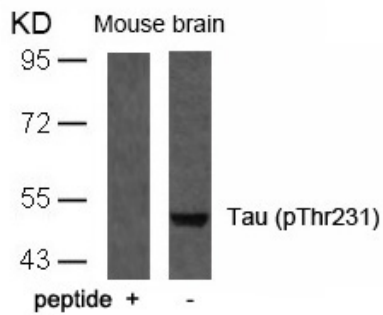
## Application Details

Predicted MW: 48 62 78 kd

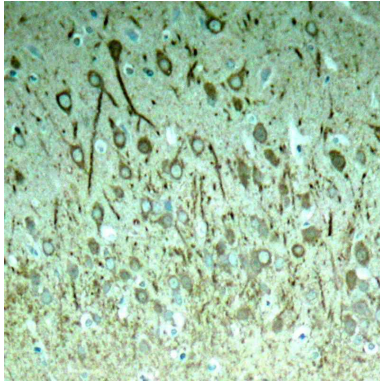
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from mouse brain tissue using Tau(Phospho-Thr231) Antibody #11110 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.

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Beausoleil S.A.et.al. (2004) *Proc. Natl. Acad. Sci. U.S.A.* 101:12130-12135.

Wintjens R.et.al. (2001) *Biol. Chem.* 276:25150-25156.

Babu J.R.et.al.(2005) *Neurochem.* 94:192-203.

Goedert M., Spillantini M.G. (2000) *Biochim. Biophys. Acta* 1502:110-121.

Note: This product is for in vitro research use only