

Tau(phospho-Ser416) Antibody

Catalog No: #11570



Package Size: #11570-1 50ul #11570-2 100ul #11570-4 25ul

Overview

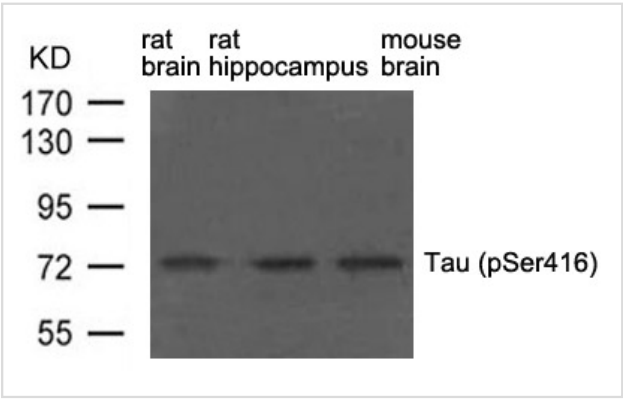
Product Name	Tau(phospho-Ser416) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB
Species Reactivity	Rt
Immunogen Type	Peptide-KLH
Target Name	Tau
Modification	Phospho-Ser416
Alternative Names	Mtapt; Mapt;

Application Details

Predicted MW: 48 62 78kd

Western blotting: 1:500~1:1000

Images



Western blot analysis of extract from rat brain, rat hippocampus and mouse brain using Tau(phospho-Ser416) Antibody #11570.

Descriptions

Immunogen	Peptide sequence around phosphorylation site of serine 416 (T-G-S(p)-I-D) derived from Rat Tau.
Specificity	The antibody detects endogenous levels of Tau only when phosphorylated at serine 416.
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.
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.
Accession NO.	Swiss-Prot: P19332NCBI Protein: NP_058908.2

Related Information

Tau is a heterogeneous microtubule-associated protein that promotes and stabilizes microtubule assembly, especially in axons. Six isoforms with different amino-terminal inserts and different numbers of tandem repeats near the carboxy-terminus have been identified, and tau is hyperphosphorylated at approximately 25 sites by ERK, GSK-3 and CDK5 (1-2). Phosphorylation decreases the ability of tau to bind to microtubules. Neurofibrillary tangles are a major hallmark of Alzheimer's disease and these tangles are bundles of paired helical filaments composed of hyperphosphorylated tau. In particular, phosphorylation of Ser396 by GSK-3 or CDK5 destabilizes microtubules in Alzheimer's disease. Furthermore, inclusions of tau are found in a number of other neurodegenerative diseases, collectively known as tauopathies (1,3).

Johnson , G.V. and Stoothoff , W.H. (2004) J. Cell Sci. 117, 5721-5729.

Hanger, D. P. et al. (1998) J. Neurochem. 71, 2465-2476.

Bramblett, G. T. et al. (1993) Neuron 10, 1089-1099.

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