

Basic Information

Product Name	Anti-TAU/MAPT (Phospho-T231) Antibody (Clone#EIH-13)		
Gene Name	MAPT		
Source	Rabbit		
Clonality	Monoclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, IHC, IP		
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.		
Immunogen	A synthesized peptide derived from human Phospho-Tau (T231)		
Concentration	500 ug/ml		
Purification	Affinity-chromatography		
Observed MW	50-80 kDa		
Dilution Ratios	Western blot (WB):	1:500-2000	
	Immunohistochemistry (IHC):	1:50-200	
	ImmunoPrecipitation (IP):	1:20	

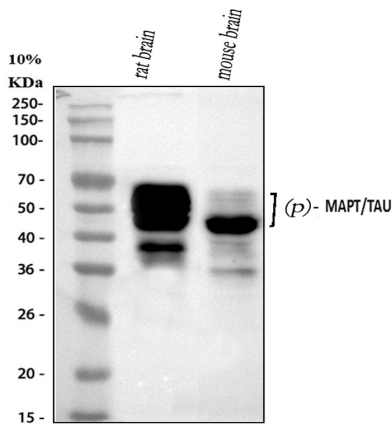
Storage

12 months from date of receipt, -20°C as supplied.

Background 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. 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.

Selected Validation Data

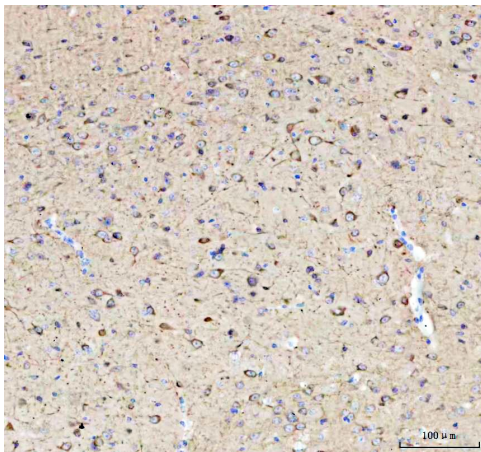


Western blot analysis of anti-TAU/MAPT antibody (BM4464). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat brain tissue lysates,

Lane 2: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TAU/MAPT antigen affinity purified monoclonal antibody (BM4464) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TAU/MAPT at approximately 50-70 kDa. The expected band size for TAU/MAPT is at 79 kDa.



IHC analysis of TAU/MAPT using anti-TAU/MAPT antibody (BM4464). TAU/MAPT was detected in a paraffin-embedded section of mouse brain tissue. The tissue section was incubated with rabbit anti-TAU/MAPT Antibody (BM4464) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.