

Mouse Anti-Tau Phosphorylated Thr231/p-Tau T231 [PHF6]: MC0296

Intended Use: For Research Use Only

Description: 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.

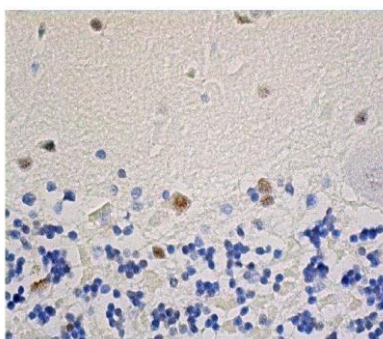
Specifications

Clone:	PHF6
Source:	Mouse
Isotype:	IgG1k
Reactivity:	Human
Immunogen:	Purified human PHF-Tau
Localization:	Cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, IF, IP, WB
Package:	

Description	Catalog No.	Size
Tau Phosphorylated Thr231/p-Tau T231 Concentrated	MC0296	1 ml

IHC Procedure

Positive Control Tissue:	Human Alzheimer brain
Concentrated Dilution:	50-200
Pretreatment:	Citrate pH6.0 or EDTA pH8.0, 15 min Pressure Cooker or 30-60 min water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual
* Result should be confirmed by an established diagnostic procedure.	



FFPE human cerebellum tissue stained with anti- p-Tau T231 using DAB

References:

1. Dyrk1 inhibition improves Alzheimer's disease-like pathology. Branca C, et al. Aging Cell 16:1146-1154, 2017.
2. Open-gate mutants of the mammalian proteasome show enhanced ubiquitin-conjugate degradation. Choi WH, et al. Nat Commun 7:10963, 2016.
3. Abnormal interaction of oligomeric amyloid- β with phosphorylated tau: implications to synaptic dysfunction and neuronal damage. Manczak M & Reddy PH. J Alzheimers Dis 36:285-95, 2013.