

**Mouse Anti-Tau Phosphorylated Thr217/p-Tau T217 [MD414]: MC0682**

**Intended Use:** For Research Use Only

**Description:** Tau is a neuronal microtubule-associated protein found predominantly on axons. The function of Tau is to promote tubulin polymerization and stabilize microtubules. 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/MAPT localization in the neuronal cell in the domain of the cell body defined by the centrosome. The short isoforms allow plasticity of the cytoskeleton while the longer isoforms may preferentially play a role in its stabilization. In its hyper-phosphorylated form, Tau is the major component of paired helical filaments (PHF), the building block of neurofibrillary lesions in Alzheimer's diseases (AD) brain. Phosphorylated tau at the 217 amino acid position (p-Tau T217), indicating the presence of amyloid plaques and tau tangles, the hallmark pathologies of AD, is a highly accurate blood-based biomarker for detecting AD pathology. It is used primarily in symptomatic adults (50+ with cognitive impairment) alongside other diagnostics, it helps identify AD and monitor treatment, not as a standalone screening tool, with elevated levels suggesting AD-related changes.

**Specifications**

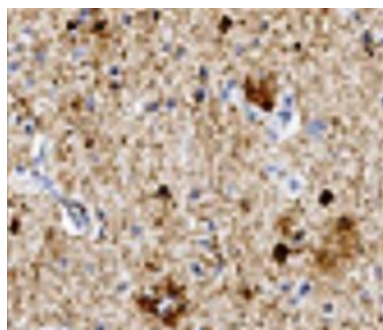
Clone:	MD414
Source:	Mouse
Isotype:	IgG2b/k
Reactivity:	Human
Immunogen:	Tau phosphorylated Thr217 tryptic peptide
Localization:	Cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN <sub>3</sub> )
Storage:	Store at 2°- 8°C
Applications:	IHC, ELISA, IP
Package:	

Description	Catalog No.	Size
Tau Phosphorylated Thr217 (p-Tau T217) Concentrated	MC0682	1 ml

**IHC Procedure**

Positive Control Tissue:	Human Alzheimer brain
Concentrated Dilution:	100-1000
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 temporal brain tissue stained with anti-p-Tau T217 using DAB

**References:**

1. Performance of novel tau antibodies across multiple modalities for Alzheimer's disease assessment. Latimer CS, et al. Alzheimer's & dementia: the journal of the Alzheimer's Association 21.7, July, 2025: e70481.
2. Phosphorylated tau in the retina correlates with tau pathology in the brain in Alzheimer's disease and primary tauopathies. Frederique J Hart de Ruyter, et al. Acta Neuropathol. Feb;145(2):197-218, 2023. Epub 2022 Dec 8.