

**Rabbit Anti-Tau Phosphorylated Ser396/p-Tau S396 [EPR2731]: RM0257, RM0257RTU7**

**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.

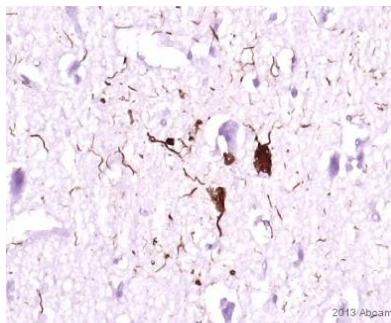
**Specifications**

Clone: EPR2731  
 Source: Rabbit  
 Isotype: IgG  
 Reactivity: Human, mouse, rat  
 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, IF, IP, WB  
 Package:

Description	Catalog No.	Size
Tau Phosphorylated Ser396/p-Tau S396 Concentrated	RM0257	1 ml
Tau Phosphorylated Ser396/p-Tau S396 Prediluted	RM0257RTU7	7 ml

**IHC Procedure**

Positive Control Tissue: Human Alzheimer brain  
 Concentrated Dilution: 100-300  
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using 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 Alzheimer hippocampus stained with anti- p-Tau S396 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.

Doc. 100-RM0257  
Rev. A