

For Research Use Only

# Phospho-TAU (Ser409) Recombinant monoclonal antibody

Catalog Number: 87019-1-RR



## Basic Information

|                                                                |                                                         |                                                                          |
|----------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------------|
| <b>Catalog Number:</b><br>87019-1-RR                           | <b>GenBank Accession Number:</b><br>BC000558            | <b>Purification Method:</b><br>Protein A purification                    |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>4137                           | <b>CloneNo.:</b><br>252113B1                                             |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>P10636                            | <b>Recommended Dilutions:</b><br>WB: 1:5000-1:50000<br>IF-P: 1:150-1:600 |
| <b>Isotype:</b><br>IgG                                         | <b>Full Name:</b><br>microtubule-associated protein tau |                                                                          |
|                                                                | <b>Calculated MW:</b><br>37-46, 79-81 kDa               |                                                                          |
|                                                                | <b>Observed MW:</b><br>45-60 kDa                        |                                                                          |

## Applications

|                                                |                                                                      |
|------------------------------------------------|----------------------------------------------------------------------|
| <b>Tested Applications:</b><br>WB, IF-P, ELISA | <b>Positive Controls:</b>                                            |
| <b>Species Specificity:</b><br>human, mouse    | <b>WB :</b> mouse brain tissue,<br><b>IF-P :</b> mouse brain tissue, |

## Background Information

Phosphorylation of tau at Ser409 is an early, disease-specific event in Alzheimer's brain. Catalyzed by PKA, this modification weakens tau-microtubule binding and acts as a molecular switch that initiates tau self-aggregation into paired helical filaments. Consequently, p-Ser409-tau is recognized as an early diagnostic epitope and a potential target for interrupting PKA-driven, oxidative-stress-linked tau pathology.

## Storage

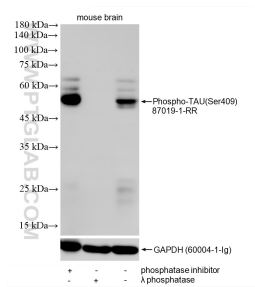
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

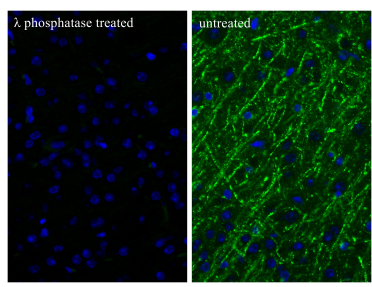
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
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## Selected Validation Data



Non-treated mouse brain tissue, phosphatase inhibitor treated mouse brain tissue and  $\lambda$  phosphatase treated mouse brain tissue were subjected to SDS PAGE followed by western blot with 87019-1-RR (Phospho-TAU(Ser409) antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as a loading control.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded  $\lambda$  phosphatase treated mouse brain tissue using Phospho-TAU (Ser409) antibody (87019-1-RR, Clone: 252113B1 ) at dilution of 1:300 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).