Phospho-Tau-T181 Rabbit mAb

Catalog No.: AP1662

Recombinant

Basic Information

Observed MW
50-80 kDa

Calculated MW
33-80 kDa

Category
Monoclonal Antibodies

Applications
WB, IP, IF/ICC, IF-F, IHC-P, ELISA

Cross Reactivity
Human, Mouse, Rat

Clone No.
ARC4161

Background

This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy.

Recommended Dilutions

WB	1:10000 - 1:25000
IP	0.5 μg - 4 μg antibody for 400 μg - 600 μg extracts of whole cells
IF/ICC	1:500 - 1:3000
IF-F	1:500 - 1:3000
IHC-P	1:100 - 1:400
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
4137

Swiss-Prot
P10636

Immunogen
This information is considered to be commercially sensitive.

Synonyms
TAU; FTD1; MSTD; PPND; DDPAC; MAPTL; MTBT1; MTBT2; tau-40; FTDP-17; PPP1R103; Tau-PHF6

Contact

400-999-6126

cn.market@abclonal.com.cn

www.abclonal.com.cn

Product Information

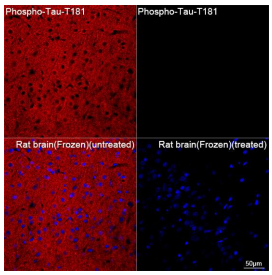
Source
Rabbit

Isotype
IgG

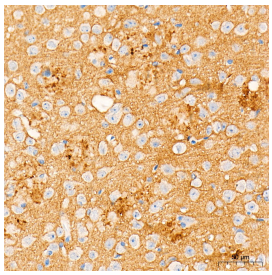
Purity
Affinity purification

Storage
Store at -20℃

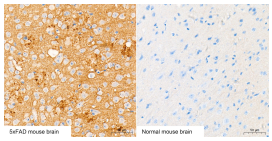
Validation Data



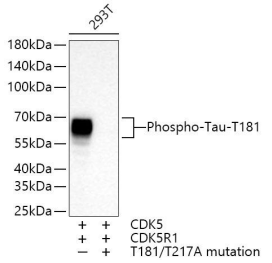
Confocal imaging of frozen sections of Rat brain tissue (untreated) and Rat brain tissue (treated with λPP) using Phospho-Tau-T181 Rabbit mAb (AP1662, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



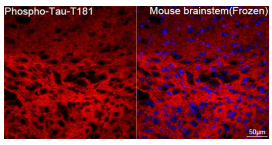
Immunohistochemistry analysis of paraffin-embedded 5xFAD mouse brain tissue using Phospho-Tau-T181 Rabbit mAb (AP1662) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



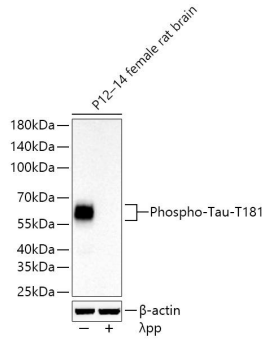
Immunohistochemistry analysis of paraffin-embedded 5xFAD mouse brain (left) and Normal mouse brain tissue (right) using Phospho-Tau-T181 Rabbit mAb (AP1662) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



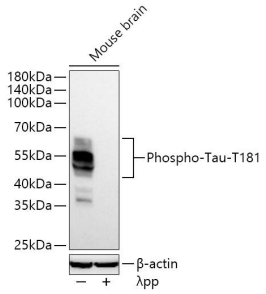
Western blot analysis of lysates from 293T cells transfected with CDK5, CDK5R1, and Tau or CDK5, CDK5R1, and mutant Tau (T181/T217A) using Phospho-Tau-T181 Rabbit mAb (AP1662) at 1:20000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 20 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.



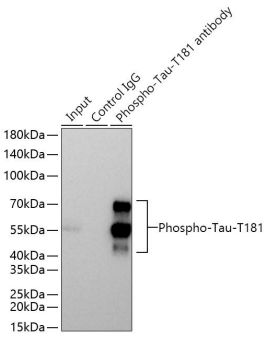
Confocal imaging of frozen sections of Mouse brainstem tissue using Phospho-Tau-T181 Rabbit mAb (AP1662, dilution 1:2000) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



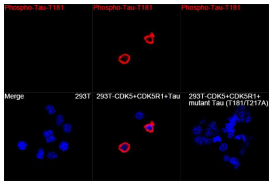
Western blot analysis of lysates from P12–14 female rat brain using Phospho-Tau-T181 Rabbit mAb (AP1662) at 1:20000 dilution incubated overnight at 4℃. P12–14 female rat brain were treated with λpp (2 U/μL) at 30℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.



Western blot analysis of lysates from Mouse brain using Phospho-Tau-T181 Rabbit mAb (AP1662) at 1:24000 dilution incubated overnight at 4℃. Mouse brain were treated with λpp (2 U/μL) at 30℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1: 10000 dilution.
Lysates/proteins: 30 μg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 45 s.



Immunoprecipitation of Phospho-Tau-T181 from 600 μg extracts of Mouse brain tissue was performed using 0.5 μg of Phospho-Tau-T181 Rabbit mAb (AP1662). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Phospho-Tau-T181 Rabbit mAb (AP1662) at a dilution of 1:20000.



Confocal imaging of 239T cells transfected with CDK5, CDK5R1 and Tau or CDK5, CDK5R1 and mutant Tau (T181/T217A) using Phospho-Tau-T181 Rabbit mAb (AP1662, dilution 1:500) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.