abcam

ab308439

Anti-Tau (MBD region) antibody [EPR25205-233]

Recombinant | RabMAb | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR25205-233
Purification technique	Affinity purification Protein A
Dissociation constant	4.78 x 10^{-10} M
Concentration	0.536 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Transfected cell lysate - Human
Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Mouse
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Species	Rat
Dilution info	1/1000
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

IHC-Fr

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Rat
Dilution info	1/50
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Mouse
Dilution info	1/50
Notes	-

Species	Human
Dilution info	1/50
Notes	-

Species	Rat

Dilution info	1/50
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Transfected cell lysate - Human
Dilution info	-
Notes	-

Target data

See full target information MAPT

Function	Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity (PubMed:21985311). 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 (PubMed:21985311, PubMed:32961270). 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 whereas the longer isoforms may preferentially play a role in its stabilization.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Tau also known as microtubule-associated protein Tau (MAPT) plays an important role in stabilizing microtubules in neuronal cells. Tau is primarily found in the central nervous system but also exists in peripheral neurons. Human Tau protein comes in six isoforms due to alternative splicing with molecular weights ranging from 48 kDa to 67 kDa. This protein predominantly locates in the axons of neurons where it maintains the stability of microtubule tracks necessary for axonal transport.
Biological function summary	Tau is involved in the assembly and stabilization of microtubules essential for maintaining neuronal structure. It interacts with microtubule-binding domains (MBD) to bind and bundle microtubules facilitating intracellular transport. Tau forms a part of the neuronal cytoskeleton complex working closely with other cytoskeletal proteins to preserve the proper axonal transport and function. Abnormally phosphorylated Tau often termed phospho-Tau disrupts this complex affecting microtubule stability.
Pathways	Tau has critical involvement in several signaling cascades such as the microtubule-binding and transport pathways. Glycogen synthase kinase 3 beta (GSK3β) and cyclin-dependent kinase 5 (CDK5) frequently phosphorylate Tau controlling its interaction with microtubules. Phosphorylated Tau accumulates leading to the formation of neurofibrillary tangles often observed in neurodegenerative conditions. Additionally Tau interacts with GAPDH impacting cellular energy regulation through potential pathway cross-talk involving oxidative stress responses.

Associated diseases and disorders	Tau is closely associated with Alzheimer's disease and frontotemporal dementia. In Alzheimer's disease hyperphosphorylated Tau aggregates into paired helical filaments forming neurofibrillary tangles while similar aggregates are observed in frontotemporal dementia. In these conditions Tau links to amyloid precursor protein (APP) where misregulated phosphorylation-driven interactions contribute to neurodegeneration. Identifying phospho-Tau and its altered interactions with related proteins aids in understanding and potentially treating these disorders.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

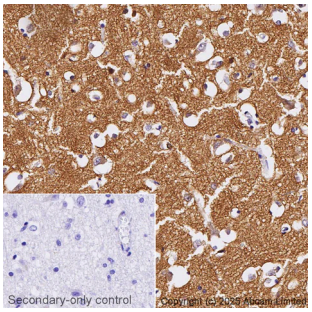
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

23 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human Alzheimer's brain tissue using rabbit Anti-Tau (MBD region) antibody

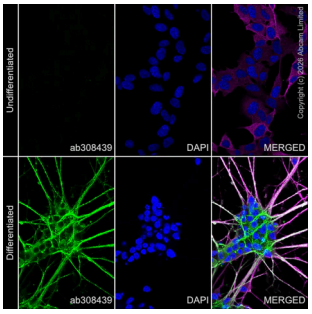
Immunohistochemical analysis of paraffin-embedded human Alzheimer's brain tissue* labelling Tau (MBD region) with ab308439 at 1/5000 (0.1 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).
Positive staining in human Alzheimer's brain.

The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection).

Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0 epitope retrieval solution1) for 20 mins.

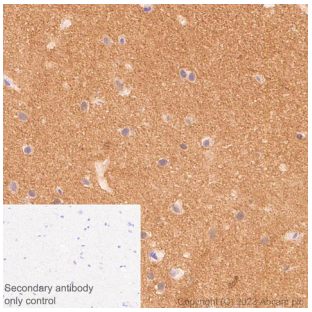
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Immunocytochemistry/ Immunofluorescence - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

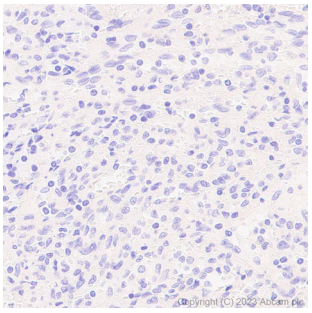
Tau (MBD region) Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-Tau (MBD region) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized SH-SY5Y (human neuroblastoma epithelial cell) Neuronal differentiated SH-SY5Y labelling Tau (MBD region) with ab308439 at 1/50 (9.64 µg/mL) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 µg/mL dilution (Green). Confocal image showing increased cytoplasmic staining in neurnal differentiated SH-SY5Y cells (shown in green). ab78078 Anti-beta III Tubulin mouse monoclonal antibody - Neuronal Marker at 1/200 dilution (2.5 µg/ml) was used as a counterstain observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



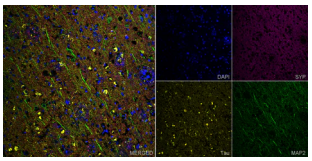
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of paraffin-embedded Human cerebrum tissue labelling Tau (MBD region) with ab308439 at 1/1000 (0.482 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Positive staining in human cerebrum. The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of paraffin-embedded Human spleen tissue labelling Tau (MBD region) with ab308439 at 1/1000 (0.482 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Negative control: no staining in human spleen. The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Human Alzheimer’ s brain using rabbit Anti-Tau (MBD region) antibody

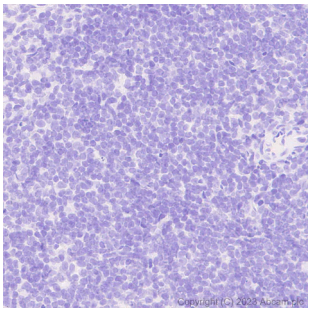
Composite multiplex immunofluorescence staining of SYP, MAP2 and Tau (MBD region) staining in a section of formalin-fixed paraffin-embedded human Alzheimer’ s brain*.

Performed on a Leica BOND. The section was pre-treated using heat mediated antigen retrieval with EDTA (Ph9.0) using retrieval settings of 100°C for 40 minutes. The section was then incubated at room temperature for 1 hour with ab309493 at 1µg/ml dilution (shown in green), ab318993 at 1µg/ml (shown in magenta), and ab308439 at 1µg/ml (shown in yellow). Then incubated for 1 hour with ab150119 Goat Anti-Mouse IgG H&L (Alexa Fluor® 647) preadsorbed 1/1000, ab150086 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 555) preadsorbed 1/1000, and ab150173 Goat Anti-Chicken IgY H&L (Alexa Fluor® 488) preadsorbed 1/1000. Nuclear DNA was labelled with DAPI (shown in blue). The section was then mounted using Dako Fluorescence Mounting Medium ®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For other IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antigen retrieval conditions, antibody concentrations and incubation times.

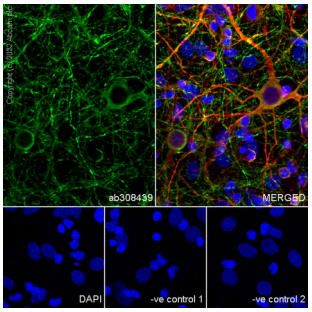
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labelling Tau (MBD region) with ab308439 at 1/5000 (0.096 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Negative control: no staining in mouse spleen. The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

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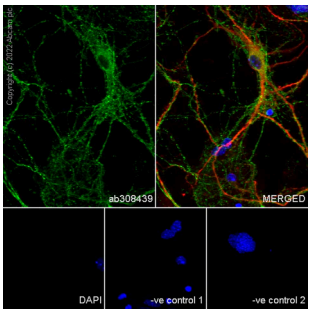


Immunocytochemistry/ Immunofluorescence - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Immunocytochemistry/ Immunofluorescence staining of rat primary neuron using rabbit Anti-Tau (MBD region) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized rat primary neuron cells labelling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/mL dilution (Green). Confocal image showing cytoplasmic staining in rat primary neuron.Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 4ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only

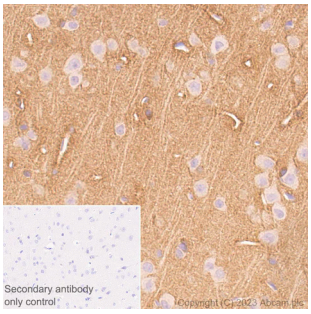
control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/mL dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

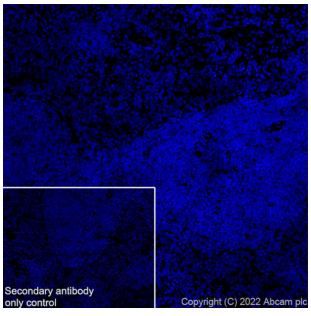
Tau (MBD region) Immunocytochemistry/ Immunofluorescence staining of mouse primary neuron using rabbit Anti-Tau (MBD region) antibody

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neuron cells labelling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/mL dilution (Green). Confocal image showing cytoplasmic staining in mouse primary neuron.Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection ab11267 Anti-MAP2 mouse monoclonal antibody was used to counterstain tubulin at 1/500 4ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue). Secondary antibody only control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2ug/mL dilution.



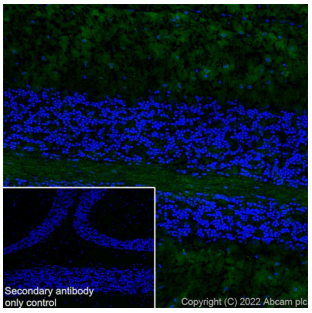
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labelling Tau (MBD region) with ab308439 at 1/5000 (0.096 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Positive staining in rat cerebrum. The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



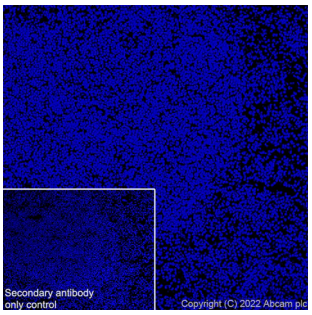
Immunohistochemistry (Frozen sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat spleen (fresh) tissue labeling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Negative control: confocal image showing no staining on rat spleen (PMID: 24309898). The nuclear counterstain was DAPI (Blue). The section was incubated with ab308439 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.



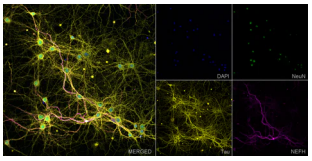
Immunohistochemistry (Frozen sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebellum (fresh) tissue labeling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Confocal image showing positive staining on mouse cerebellum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab308439 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution.



Immunohistochemistry (Frozen sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse spleen (fresh) tissue labeling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Negative control: confocal image showing no staining on mouse spleen (PMID: 24309898). The nuclear counterstain was DAPI (Blue). The section was incubated with ab308439 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution.

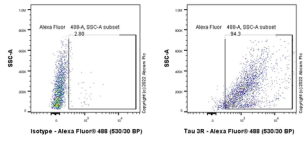


Immunocytochemistry/ Immunofluorescence - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Immunocytochemistry/ Immunofluorescence staining of Mouse Primary Neurons DIV14 cells using rabbit Anti-Tau (MBD region) antibody

Composite multiplex immunofluorescence staining of ab279297, ab317042 and ab308439 staining NeuN, NEFH and Tau (MBD region) in Mouse Primary Neurons DIV14 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab279297 (shown in green), ab317042 (shown in magenta) and ab308439 (shown in yellow) at 1µg/ml. Cells were then incubated with ab150161 Goat F(ab')2 Anti-Rat IgG Fc (Alexa Fluor® 488) preadsorbed, ab150175 Goat Anti-Chicken IgY H&L (Alexa Fluor® 647) preadsorbed and ab150084 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution. Nuclear DNA was labelled with DAPI (shown in blue).

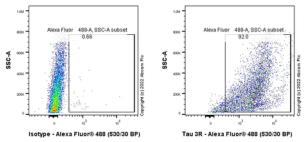
Image was acquired with a confocal microscope (Leica-Microsystems TCS SP8) and a single confocal section is shown.



Flow Cytometry (Intracellular) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

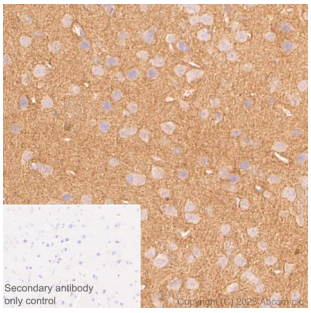
Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized rat primary neuron cells labelling Tau (MBD region) with ab308439 at 1/500 dilution (0.1 ug)/Right (Red)

compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



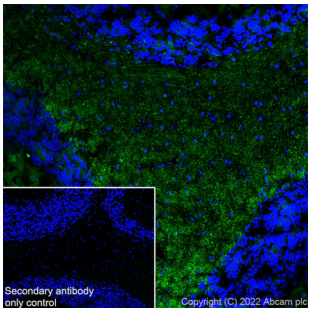
Flow Cytometry (Intracellular) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized mouse primary neuron cells labelling Tau (MBD region) with ab308439 at 1/500 dilution (0.1 ug)/Right (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



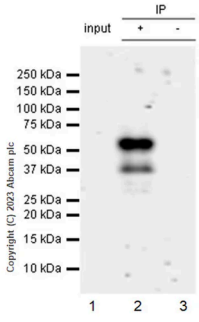
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling Tau (MBD region) with ab308439 at 1/5000 (0.096 ug/ml) followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Positive staining in mouse cerebrum. The section was incubated with ab308439 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin. Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection) was used. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemistry (Frozen sections) - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebellum (fresh) tissue labeling Tau (MBD region) with ab308439 at 1/50 (9.64 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green). Confocal image showing positive staining on rat cerebellum. The nuclear counterstain was DAPI (Blue). The section was incubated with ab308439 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). is observed. The nuclear counterstain was DAPI (Blue). Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution.



Immunoprecipitation - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) was immunoprecipitated from 0.35 mg Mouse brain tissue lysate with ab308439 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab308439 at 1/1000 dilution. VeriBlot for IP secondary antibody (HRP) (ab131366) was used at 1/5000 dilution.
Lane 1: Mouse brain tissue lysate
Lane 2: ab308439 IP in Mouse brain tissue lysate

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab308439 in mouse brain tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 180 seconds
All lanes:
Immunoprecipitation - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439) at 1/1000 dilution

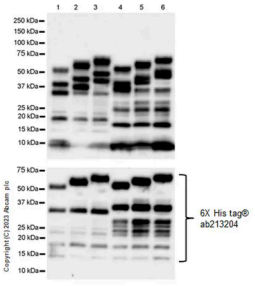
All lanes:
Mouse brain tissue lysate at 10 µg

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Observed band size: 33 kDa, 50 kDa

Exposure time: 180s



Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Western blot staining using rabbit Anti-Tau (MBD region) antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
In Western blot, anti-His antibody (ab213204) staining at 1/5000 dilution.

All lanes:
Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439) at 1/1000 dilution

Lane 1:
HEK-293 transfected with Tau 0N3R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 2:
HEK-293 transfected with Tau 1N3R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 3:
HEK-293 transfected with Tau 2N3R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 4:
HEK-293 transfected with Tau 0N4R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 5:
HEK-293 transfected with Tau 1N4R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

Lane 6:
HEK-293 transfected with Tau 2N4R (WT) expression vector containing a myc-His-tag®, whole cell lysate at 20 µg

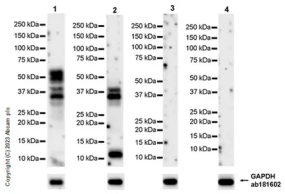
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 78 kDa

Observed band size: 10-70 kDa

Exposure time: 8s



Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Western blot staining using rabbit Anti-Tau (MBD region) antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Negative control: spleen (PMID: 24309898; PMID:24386422), kidney (PMID: 24386422).

In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200,000 dilution.

Exposure times: Lane 1:26 seconds; Lanes 2-4: 81 seconds.

All lanes:
Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439) at 1/1000 dilution

Lane 1:
Human brain tissue lysate at 20 µg

Lane 2:
Human cerebellum tissue lysate at 20 µg

Lane 3:
Human kidney tissue lysate at 20 µg

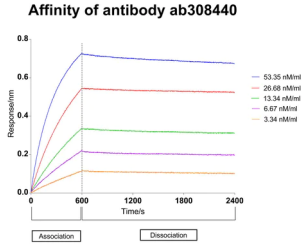
Lane 4:
Human spleen tissue lysate at 20 µg

Secondary

All lanes:
Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

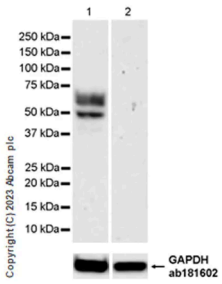
Predicted band size: 78 kDa

Observed band size: 33-50 kDa



Affinity Purification - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Biotinylated Human Tau 2N4R (Protein: P9954) [1µg/ml] is loaded to SA biosensor on Octet RED96e machine, then associate with Anti-Tau (MBD region) antibody [EPR25205-233] (ab308440) in serial concentration points [53.35, 26.68, 13.34, 6.67, 3.34 nM/ml] by 2-fold dilution, then dissociate in blank testing buffer [10mM HEPES (0.05% Tween-20, 3mM EDTA, 100mM NaCl)]. Calculated signals had already subtracted blank control, curve fitting using 1:1 binding model. K_D (M) value of Anti-Tau (MBD region) antibody [EPR25205-233] (ab308440) is 4.78E-10.



Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Blocking and diluting buffer and concentration: 5% NFDM/TBST. Negative control: testis (PMID: 24386422). In Western blot, anti-GAPDH antibody (ab181602) loading control staining at 1/200, 000 dilution. Exposure time: 180 seconds.
All lanes:
Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439) at 1/1000 dilution

Lane 1:
Rat brain tissue lysate at 20 µg

Lane 2:
Rat testis tissue lysate at 20 µg

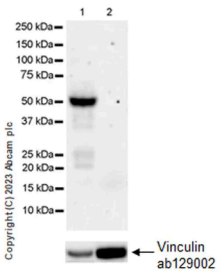
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 78 kDa

Observed band size: 50-70 kDa

Exposure time: 180s



Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439)

Tau (MBD region) Western blot staining using rabbit Anti-Tau (MBD region) antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
Negative control: spleen (PMID: 24309898; PMID:24386422).

In Western blot, anti- Vinculin antibody (ab129002) loading control staining at 1/10, 000 dilution.

This blot was developed using a high sensitivity ECL substrate. The high-sensitivity ECL substrate used allows for the detection of proteins in the mid-femtogram range.

All lanes:
Western blot - Anti-Tau (MBD region) antibody [EPR25205-233] (ab308439) at 1/1000 dilution

Lane 1:
Mouse brain tissue lysate at 20 µg

Lane 2:
Mouse spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Developed using the ECL technique.

Predicted band size: 78 kDa

Observed band size: 50 kDa

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.