abcam

Product datasheet

Anti-TPPP antibody [EPR3316] ab92305

Recombinant RabMAb

13 References 12 Images

Overview

Product name Anti-TPPP antibody [EPR3316]

Description Rabbit monoclonal [EPR3316] to TPPP

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), WB, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human TPPP. The exact sequence is proprietary.

Positive control Human normal brain and fetal brain tissue, Human glioma, Human, mouse and rat cerebral cortex;

Mouse brain and Rat brain lysates; SH-SY5Y and Neuro-2a cells

General notes 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 production

For more information see here.

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

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal Clone number **EPR3316**

Isotype lgG

Applications

The Abpromise guarantee Our Abpromise guarantee cover

Our <u>Abpromise guarantee</u> covers the use of ab92305 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/20 - 1/50. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/10000. Predicted molecular weight: 24 kDa. For unpurified use at 1/500 - 1/1000.
IHC-P		1/50. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. For unpurified use at 1/250 - 1/500. See IHC antigen retrieval protocols.
ICC/IF		1/100 - 1/250.

Target

Function May play a role in the polymerization of tubulin into microtubules, microtubule bundling and the

stabilization of existing microtubules, thus maintaining the integrity of the microtubule network.

May play a role in mitotic spindle assembly and nuclear envelope breakdown.

Tissue specificity Widely expressed.

Sequence similarities Belongs to the TPPP family.

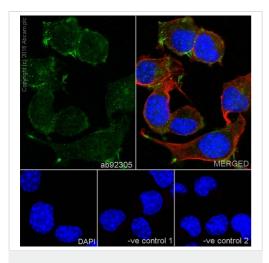
Post-translational Poor substrate for GSK3 (By similarity). Phosphorylated by LIMK1 on serine residues.

modifications Phosphorylation may alter the tubulin polymerization activity.

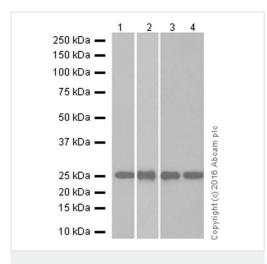
Cellular localization Cytoplasm, cytoskeleton. Nucleus. Localizes to glial Lewy bodies in the brains of

individuals with synucleinopathies.

Images



Immunocytochemistry/ Immunofluorescence - Anti-TPPP antibody [EPR3316] (ab92305)



Western blot - Anti-TPPP antibody [EPR3316] (ab92305)

Immunocytochemistry/Immunofluorescence staining of Neuro-2a (mouse neuroblastoma) cells labelling TPPP with purified ab92305 at a working dilution of 1/100. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (ab150077), used at a dilution of 1/1000. ab7291, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with ab150120 (Alexa Fluor® 594 goat antimouse, 1/1000), shown in the top right hand panel. DAPI was used as nuclear counterstain. The cells were fixed in 4% Paraformaldehyde and permeabilized using 0.1% Triton X-100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, rabbit primary antibody was used followed by an Alexa Fluor® 594 goat anti-mouse antibody (ab150120). For negative control 2, ab7291 (mouse anti-tubulin) was used followed by an Alexa Fluor® 488 goat anti-rabbit secondary (ab150077).

All lanes : Anti-TPPP antibody [EPR3316] (ab92305) at 1/10000 dilution

Lane 1: Human cerebellum tissue lysate

Lane 2: Mouse brain tissue lysate

Lane 3: Mouse cerebral cortex tissue lysate

Lane 4: Rat brain tissue lysate

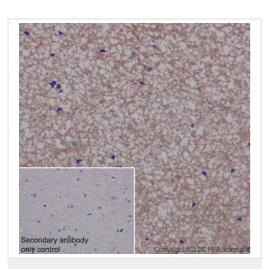
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

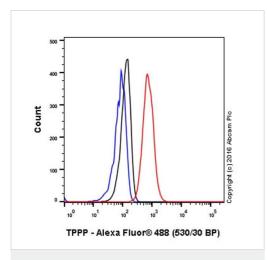
Predicted band size: 24 kDa **Observed band size:** 25 kDa

Blocking/Diluting buffer 5% NFDM /TBST



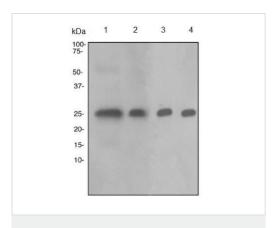
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPPP antibody
[EPR3316] (ab92305)

Immunohistochemical analysis of paraffin-embedded human cerebral cortex tissue sections labelling TPPP with purified ab92305 at dilution of 1/50. The secondary antibody used was **ab97051**; a goat anti-rabbit lgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Flow Cytometry (Intracellular) - Anti-TPPP antibody [EPR3316] (ab92305)

Overlay histogram showing 4% paraformaldehyde fixed Neuro-2a (mouse neuroblastoma) cells labelling TPPP with purified ab92305 at dilution of 1/20. The secondary antibody used was Alexa Fluor[®] 488 goat-anti-rabbit lgG at dilution of 1/2000. A non-specific lgG antibody (rabbit monoclonal) was used as isotype control (black line). The blue line shows cells without incubation with primary antibody and secondary antibody.



Western blot - Anti-TPPP antibody [EPR3316] (ab92305)

All lanes : Anti-TPPP antibody [EPR3316] (ab92305) at 1/1000 dilution

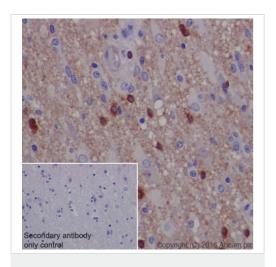
Lane 1 : Fetal brain lysate
Lane 2 : SHSY5Y cell lysate
Lane 3 : Mouse brain lysate
Lane 4 : Rat brain lysate

Lysates/proteins at 10 µg per lane.

Secondary

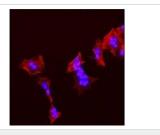
All lanes: HRP labelled goat anti-rabbit antibody at 1/2000 dilution

Predicted band size: 24 kDa



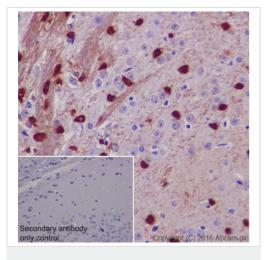
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPPP antibody
[EPR3316] (ab92305)

Immunohistochemical analysis of paraffin-embedded human glioma tissue sections labelling TPPP with purified ab92305 at dilution of 1/50. The secondary antibody used was ab97051; a goat antirabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-TPPP antibody [EPR3316] (ab92305)

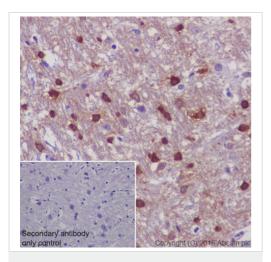
ab92305 at 1/100 dilution staining TPPP in SH-SY5Y cells, by immunofluorescence.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPPP antibody

[EPR3316] (ab92305)

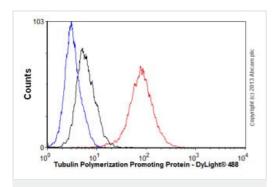
Immunohistochemical analysis of paraffin-embedded mouse cerebral cortex tissue sections labelling TPPP with purified ab92305 at dilution of 1/50. The secondary antibody used was **ab97051**; a goat anti-rabbit lgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPPP antibody

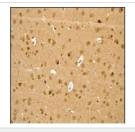
[EPR3316] (ab92305)

Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue sections labelling TPPP with purified ab92305 at dilution of 1/50. The secondary antibody used was ab97051; a goat anti-rabbit IgG H&L (HRP) at dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Flow Cytometry (Intracellular) - Anti-TPPP antibody [EPR3316] (ab92305)

Overlay histogram showing SH-SY5Y cells stained with ab92305 (red line). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab92305, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

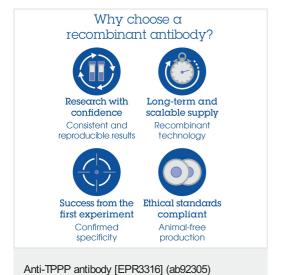


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-TPPP antibody

[EPR3316] (ab92305)

ab92305 at 1/250 dilution staining TPPP in paraffin-embedded Human brain tissue by immunohistochemistry.

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



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