

Product datasheet

Anti-GFAP antibody [EPR1034Y] - BSA and Azide free ab218309

Recombinant RabMAb

★★★★★ [1 Abreviews](#) [2 References](#) [23 Images](#)

Overview

Product name	Anti-GFAP antibody [EPR1034Y] - BSA and Azide free
Description	Rabbit monoclonal [EPR1034Y] to GFAP - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: mIHC, ICC/IF, IP, WB, IHC-P, IHC-Fr, Flow Cyt (Intra)
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	mIHC: Human cerebrum tissue and human cerebellum tissue.
General notes	<p>ab218309 is the carrier-free version of ab68428.</p> <p>Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.</p> <p>This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.</p> <p>Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.20 Constituent: 59% PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR1034Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab218309 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
mIHC		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 50 kDa (predicted molecular weight: 50 kDa).
IHC-P	★★★★★ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <u>IHC antigen retrieval protocols</u> .
IHC-Fr		Use at an assay dependent concentration.
Flow Cyt (Intra)		Use at an assay dependent concentration.

Target

Function	GFAP, a class-III intermediate filament, is a cell-specific marker that, during the development of the central nervous system, distinguishes astrocytes from other glial cells.
Tissue specificity	Expressed in cells lacking fibronectin.
Involvement in disease	Defects in GFAP are a cause of Alexander disease (ALEXD) [MIM:203450]. Alexander disease is a rare disorder of the central nervous system. It is a progressive leukoencephalopathy whose hallmark is the widespread accumulation of Rosenthal fibers which are cytoplasmic inclusions in astrocytes. The most common form affects infants and young children, and is characterized by progressive failure of central myelination, usually leading to death usually within the first decade. Infants with Alexander disease develop a leukoencephalopathy with macrocephaly, seizures, and

psychomotor retardation. Patients with juvenile or adult forms typically experience ataxia, bulbar signs and spasticity, and a more slowly progressive course.

Sequence similarities

Belongs to the intermediate filament family.

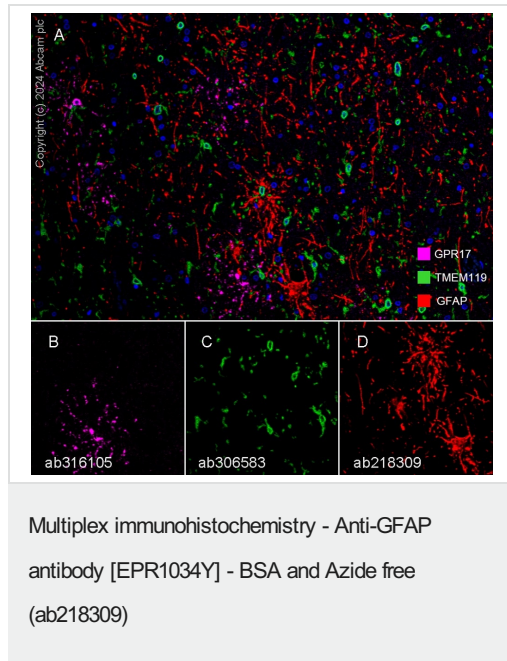
Post-translational modifications

Phosphorylated by PKN1.

Cellular localization

Cytoplasm. Associated with intermediate filaments.

Images



Fluorescence multiplex immunohistochemical analysis of human cerebrum tissue (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-GPR17 (magenta; Opal™690), anti-TMEM119 (green; Opal™520) and anti-GFAP (red; Opal™570) on human cerebrum.

Panel B: anti-GPR17 staining oligodendrocytes in human cerebrum.

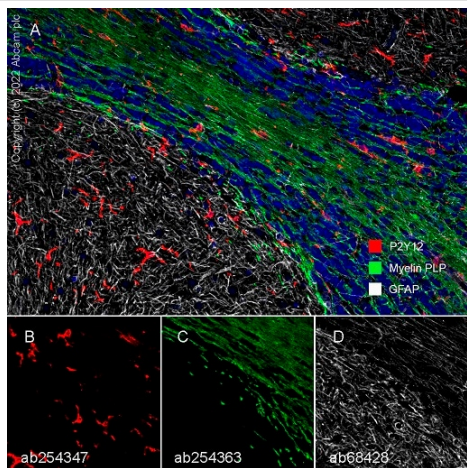
Panel C: anti-TMEM119 staining microglia in human cerebrum.

Panel D: anti-GFAP staining astrocytes in human cerebrum.

The section was incubated in three rounds of staining: in the order of **ab316105** at 1/500 dilution, **ab306583** at 1:2000 dilution, and **ab218309** at 1:1000 dilution for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. The secondary was Opal Polymer HRP Ms + Rb and counterstaining with DAPI.

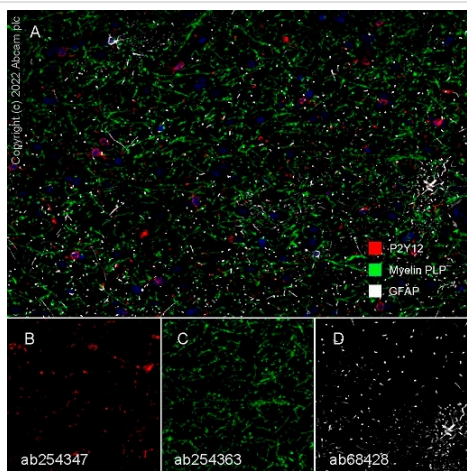
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



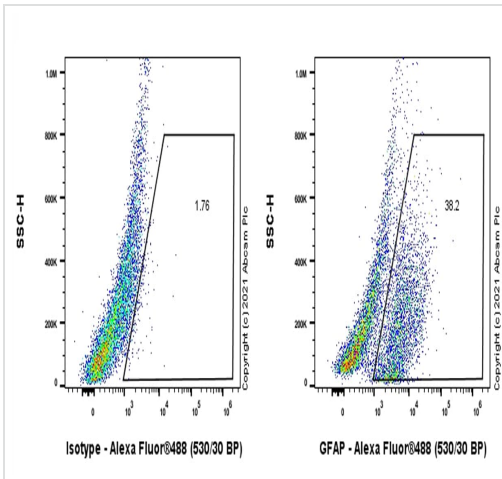
Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Fluorescence multiplex immunohistochemical analysis of the human cerebellum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-GFAP ([ab68428](#), gray; Opal™690), anti-Myelin PLP ([ab254363](#), green; Opal™520) and anti-P2Y12 ([ab254347](#) red; Opal™570) on human cerebellum. Panel B: anti-P2Y12 stained on microglial cells. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of [ab68428](#) (1/50 dilution), [ab254363](#) (1/2000 dilution), and [ab254347](#) (1/1000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope. This data was developed using [ab68428](#), the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

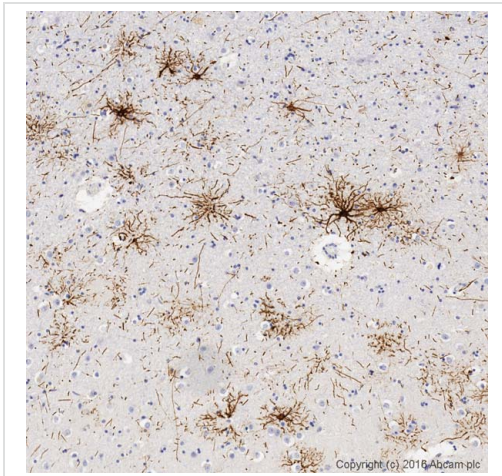
Fluorescence multiplex immunohistochemical analysis of the human cerebrum (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-GFAP ([ab68428](#), gray; Opal™690), anti-Myelin PLP ([ab254363](#), green; Opal™520) and anti-P2Y12 ([ab254347](#), red; Opal™570) on human cerebrum. Panel B: anti-P2Y12 stained on microglial cells. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of [ab68428](#) (1/50 dilution), [ab254363](#) (1/2000 dilution), and [ab254347](#) (1/1000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope. This data was developed using [ab68428](#), the same antibody clone in a different buffer formulation.



Flow Cytometry (Intracellular) - Anti-GFAP antibody
[EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using **ab68428**, the same antibody clone in a different buffer formulation.

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Mouse primary brain cells cells labelling GFAP with **ab68428** at 1/500 dilution (0.1ug)/ Right compared with a Rabbit monoclonal IgG (**ab172730**) / Left isotype control. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.

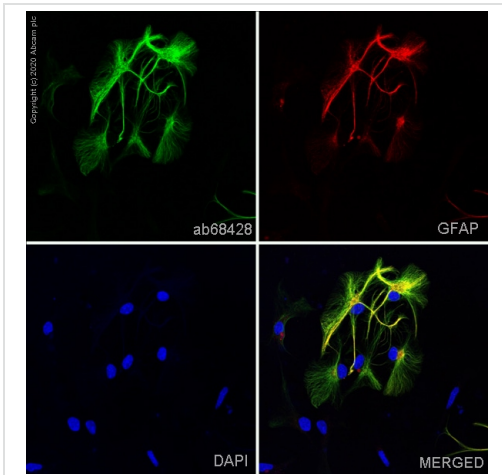


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody
[EPR1034Y] - BSA and Azide free (ab218309)

IHC image of GFAP staining in a formalin fixed, paraffin embedded normal human hippocampus tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab68428** at 1/100 dilution for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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

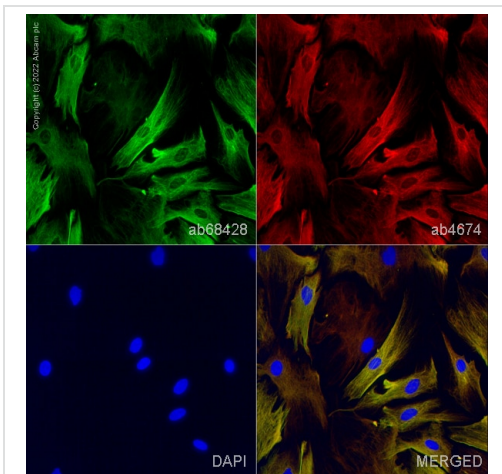
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).



Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural mix culture cells labelling GFAP with **ab68428** at 1/250 dilution, followed by **ab150077** AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. **ab10062** anti-GFAP antibody [GF5] at 1/100 dilution followed by **ab150120** Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at 1/1000 (2µg/ml) was used as a counterstain. The Nuclear counterstain was DAPI (Blue).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).



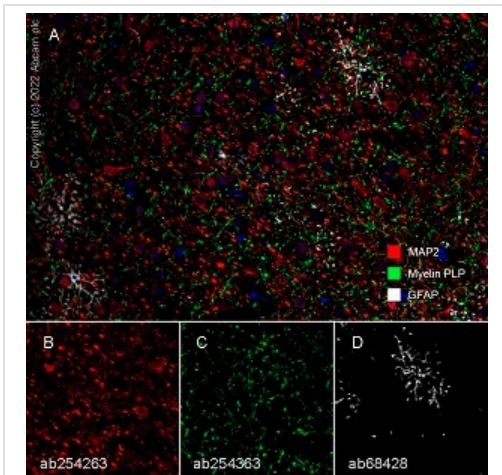
Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Immunofluorescence staining of GFAP using **ab68428** in primary rat hippocampal mixed glia, (prepared from P2 rat hippocampal brain area, obtained from Transnetyx Tissue by BrainBits, LLC, cat.no. SDPHP4m), DIV4. The cells were fixed with 100% MeOH (5 min), permeabilized with 0.1% Triton-X-100 (in PBS) for 5 mins 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 **ab68428** at 0.1 µg/ml and **ab4674**, Anti-GFAP antibody, at 1/1000 dilution. Cells were then incubated with **ab150081**, Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150176**, Goat Anti-Chicken IgY H&L (Alexa Fluor® 594) preadsorbed at 1/1000 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Images were acquired with the Perkin Elmer Operetta HCA and a maximum intensity projection of confocal sections is shown. The antibody **ab68428** gave comparable results using 4% formaldehyde fixation (10 min).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and

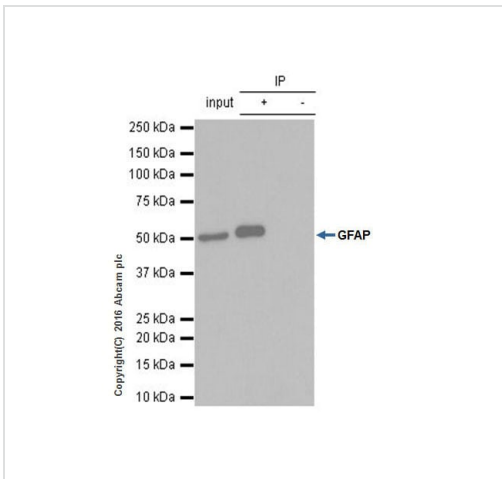
sodium azide (**ab68428**).



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Fluorescence multiplex immunohistochemical analysis of human cerebrum tissue (formalin/PFA-fixed paraffin-embedded section). Panel A: merged staining of anti-GFAP (**ab68428**, gray; Opal™690), anti-Myelin PLP (**ab254363**, green; Opal™520) and anti-MAP2 (**ab254263**, red; Opal™570) on human cerebrum tissue. Panel B: anti-MAP2 stained cell body and dendrites of neurons. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of **ab68428** (1/50 dilution), **ab254363** (1/2000 dilution), and **ab254263** (1/4000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was used for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using **ab68428**, the same antibody clone in a different buffer formulation.



Immunoprecipitation - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

ab68428 at 1/20 dilution immunoprecipitating GFAP in rat brain whole cell lysate observed at 50 KDa (lanes 1 and 2).

Lane 1 (input): Rat brain whole cell lysate 10ug

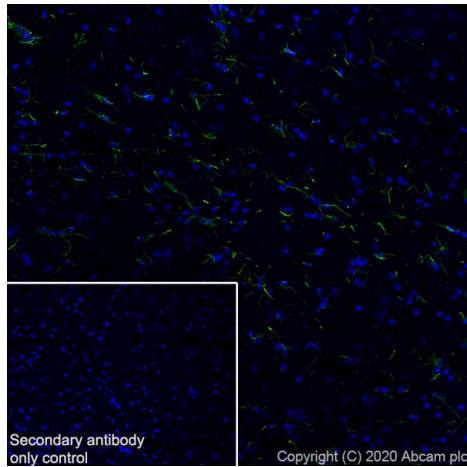
Lane 2 (+): **ab68428** + Rat brain whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of **ab68428** in Rat brain whole cell lysate

For western blotting, **ab68428** was used followed by VeriBlot for IP (HRP) (**ab131366**) for detection at a dilution of 1/10,000.

Blocking and Diluting buffer and concentration: 5% NFD/MTBST.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).



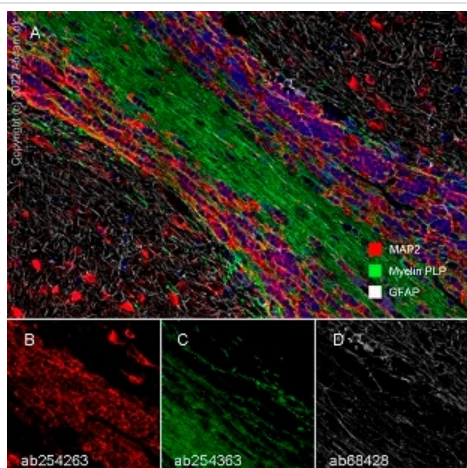
Immunohistochemistry (Frozen sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using [ab68428](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat cerebrum tissue labeling GFAP with [ab68428](#) at 1/1000 dilution (2.011 µg/mL) followed by [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2 µg/mL) (Green). Positive staining on rat cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2 µg/mL).

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

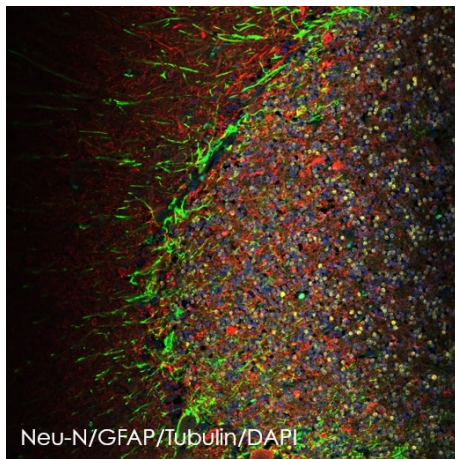
Fluorescence multiplex immunohistochemical analysis of human cerebellum tissue (formalin/PFA-fixed paraffin-embedded section).

Panel A: merged staining of anti-GFAP ([ab68428](#), gray; Opal™690), anti-Myelin PLP ([ab254363](#), green; Opal™520) and anti-MAP2 ([ab254263](#), red; Opal™570) on human cerebellum tissue.

Panel B: anti-MAP2 stained cell body and dendrites of neurons. Panel C: anti-Myelin PLP stained on myelin sheaths of oligodendrocytes. Panel D: anti-GFAP stained on astrocytes. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of [ab68428](#) (1/50 dilution), [ab254363](#) (1/2000 dilution), and [ab254263](#) (1/4000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) was used for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

This data was developed using [ab68428](#), the same antibody clone in a different buffer formulation.

This data was developed using [ab68428](#), the same antibody clone in a different buffer formulation.



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using the same antibody clone in a different buffer formulation ([ab68428](#)).

Fluorescence multiplex immunohistochemical analysis of human cerebellum tissue (formalin-fixed paraffin-embedded section).

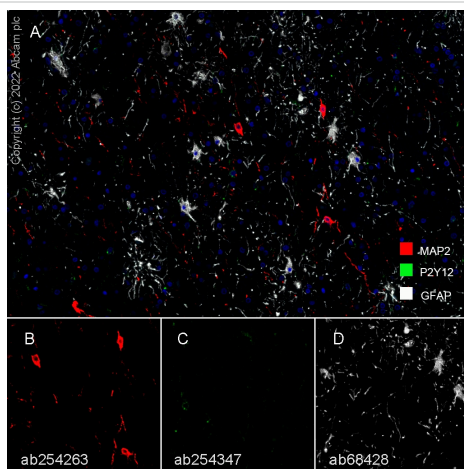
Merged staining of Neu-N ([ab177487](#); yellow; Opal™570), anti-beta III Tubulin ([ab52623](#); red; Opal™690) and anti-GFAP ([ab68428](#); green; Opal™520).

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ kit.

The section was incubated in three rounds of staining with [ab177487](#) (1/1000 dilution), [ab52623](#) (1/200 dilution) and [ab68428](#) (1/250 dilution); each using a separate fluorescent tyramide signal amplification system.

Sodium citrate antigen retrieval (pH 6.0) was used in between rounds of tyramide signal amplification to remove the antibody from the previous round, to avoid any cross-reactivity.

DAPI (blue) was used as a nuclear counter stain.



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using the same antibody clone in a different buffer formulation ([ab68428](#)).

Fluorescence multiplex immunohistochemical analysis of the Human cerebrum (Formalin/PFA-fixed paraffin-embedded sections).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Opal Polymer HRP Ms + Rb was used as a secondary antibody. DAPI (blue) was used as a nuclear counter stain.

Panel A: Merged staining of anti-GFAP (gray; Opal™690), anti-P2Y12 (green; Opal™520) and anti-MAP2 (red; Opal™570) on human cerebrum.

Panel B: Anti-MAP2 stained cell body and dendrites of neurons.

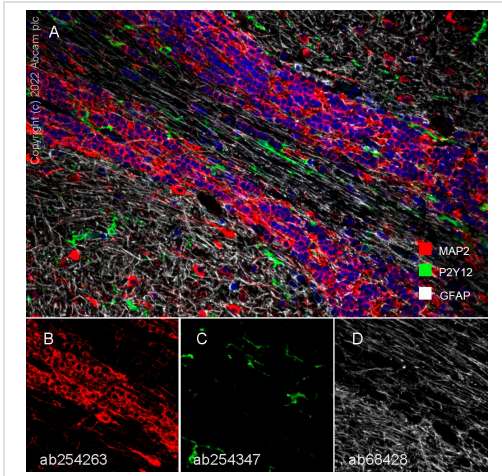
Panel C: Anti-P2Y12 stained on microglial cells.

Panel D: Anti-GFAP stained on astrocytes.

The section was incubated in three rounds of staining: in the order of [ab68428](#), [ab254347](#), and [ab254263](#) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition

was performed with Leica SP8 confocal microscope.



Multiplex immunohistochemistry - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using the same antibody clone in a different buffer formulation (**ab68428**).

Fluorescence multiplex immunohistochemical analysis of the Human cerebellum (Formalin/PFA-fixed paraffin-embedded sections).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

Opal Polymer HRP Ms + Rb was used as a secondary antibody. DAPI (blue) was used as a nuclear counter stain.

Panel A: Merged staining of anti-GFAP (gray; Opal™690), anti-P2Y12 (green; Opal™520) and anti-MAP2 (red; Opal™570) on human cerebellum.

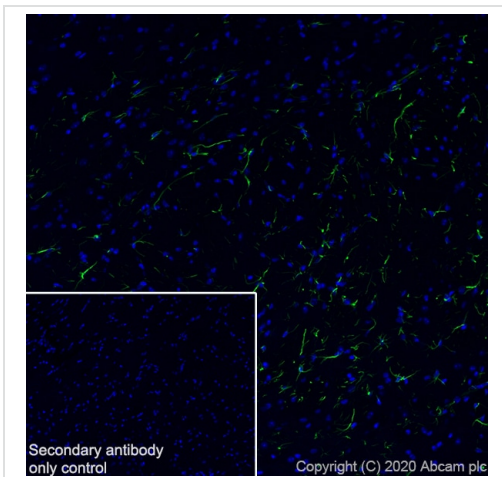
Panel B: Anti-MAP2 stained cell body and dendrites of neurons.

Panel C: Anti-P2Y12 stained on microglial cells.

Panel D: Anti-GFAP stained on astrocytes.

The section was incubated in three rounds of staining: in the order of **ab68428**, **ab254347**, and **ab254263** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



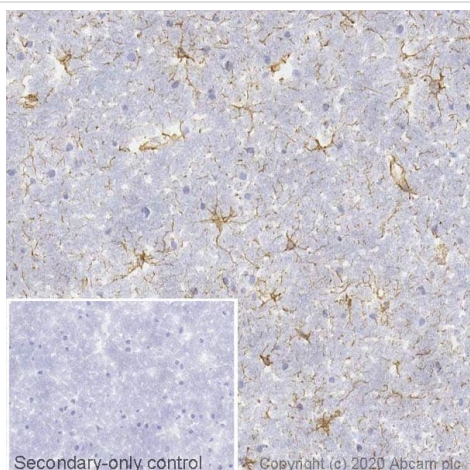
Immunohistochemistry (Frozen sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using **ab68428**, the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse cerebrum tissue labeling GFAP with **ab68428** at 1/1000 dilution (2.011 µg/mL) followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2 µg/mL) (Green). Positive staining on mouse cerebrum is observed. The nuclear counterstain was DAPI (Blue).

Secondary antibody control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution (2 µg/mL).<p>

Heat mediated antigen retrieval using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20).

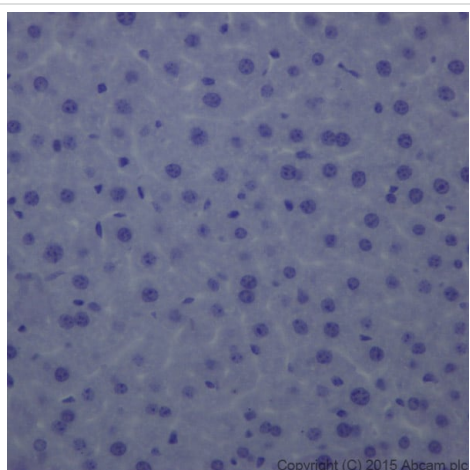


Immunohistochemistry (Frozen sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

This data was developed using the same antibody clone in a different buffer formulation ([ab68428](#)).

IHC image of GFAP staining in a section of frozen normal human cerebral cortex performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with [ab68428](#), 1/250 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody.

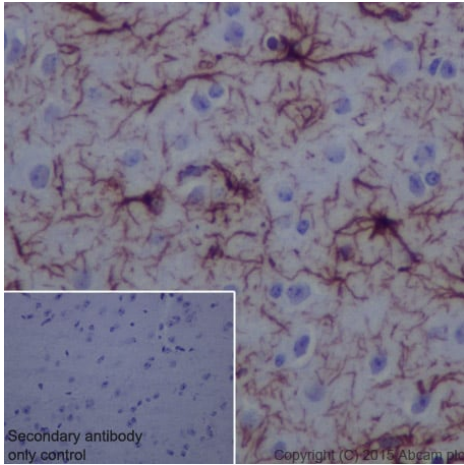
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue sections labelling GFAP with purified [ab68428](#) at a dilution of 1/500. The secondary antibody used was [ab97051](#), Goat Anti-Rabbit IgG H&L (HRP) at a dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0.

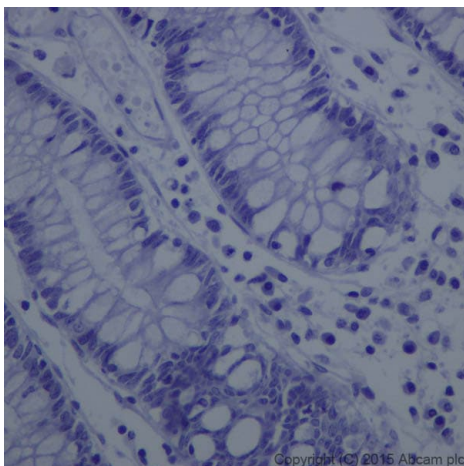
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide ([ab68428](#)).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Immunohistochemical analysis of paraffin-embedded mouse cerebral cortex tissue sections labelling GFAP with purified **ab68428** at a dilution of 1/500. The secondary antibody used was **ab97051**, Goat Anti-Rabbit IgG H&L (HRP) at a 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.

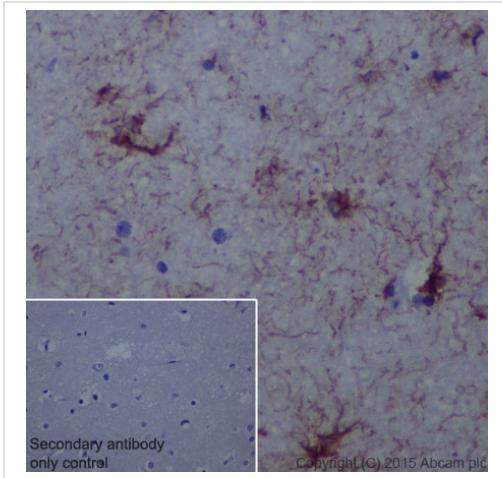
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

Immunohistochemical analysis of paraffin-embedded human colon tissue sections labelling GFAP with purified **ab68428** at a dilution of 1/500. The secondary antibody used was **ab97051**, Goat Anti-Rabbit IgG H&L (HRP) at a dilution of 1/500. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0.

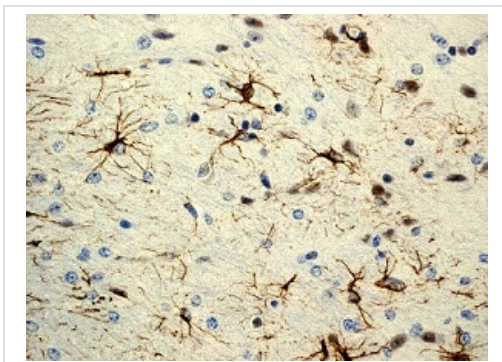
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).



Immunohistochemical analysis of paraffin-embedded human cerebral cortex tissue sections labelling GFAP with purified **ab68428** at a dilution of 1/500. The secondary antibody used was **ab97051**, Goat Anti-Rabbit IgG H&L (HRP) at a 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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

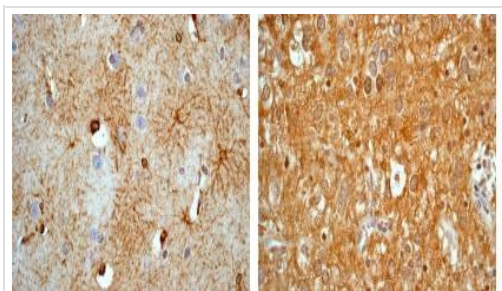


Immunohistochemical analysis of formalin-fixed paraffin-embedded mouse brain tissue section labelling GFAP with unpurified **ab68428** at dilution of 1/250.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)



Immunohistochemical analysis of formalin-fixed paraffin-embedded human brain (left) and human glioma (right) tissue sections labelling GFAP with unpurified **ab68428** at dilution of 1/250.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab68428**).

Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

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Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



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Anti-GFAP antibody [EPR1034Y] - BSA and Azide free (ab218309)

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