


Anti-GFAP antibody

Rabbit Polyclonal GFAP antibody. Suitable for IHC-P, ICC/IF, IP, WB, IHC (PFA fixed) and reacts with Mouse, Rat samples. Cited in 1204 publications. Immunogen corresponding to Recombinant Full Length Protein corresponding to Human GFAP.

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.03% Sodium azide
Form	Liquid
Clonality	Polyclonal
Immunogen	Recombinant Full Length Protein corresponding to Human GFAP. Database link P14136 
Purity	Whole antiserum
Specificity	Specifically recognizes mammalian GFAP on western blots and immunocytochemically. Detects a band of 55kDa corresponding to GFAP and also a GFAP derived 48kDa band. Some customers have successfully used ab7260 on Zebrafish lysates; however we have conflicting data to suggest that not all batches will be suitable for work on Zebrafish. For further information, please contact Abcam Scientific Support.

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/1000 - 1/2000

Notes Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Species Rat

Dilution info 1/1000 - 1/2000

Notes Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Predicted

Species Horse, Cow, Human, Pig, Mammals

Dilution info -

Notes -

ICC/IF

Tested

Species Mouse

Dilution info 1/5000

Notes -

Species Rat

Dilution info 1/5000

Notes -

Predicted

Species Horse, Cow, Human, Pig, Mammals

Dilution info -

Notes -

IP

Tested

Species Mouse

Dilution info 1/30

Notes -

Expected

Species Rat

Dilution info Use at an assay dependent concentration.

Notes -

Predicted

Species Horse, Cow, Human, Pig, Mammals

Dilution info -

Notes -

WB

Tested

Species Rat

Dilution info 1/10000

Notes This lower 48kDa band is thought to be a degradation product.

Expected

Species Mouse

Dilution info Use at an assay dependent concentration.

Notes -

Predicted

Species Horse, Cow, Human, Pig, Mammals

Dilution info -

Notes -

IHC (PFA fixed)

Tested

Species	Mouse
Dilution info	-
Notes	-

Expected

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

Predicted

Species	Horse, Cow, Human, Pig, Mammals
Dilution info	-
Notes	-

Storage

Shipped at conditions	Blue Ice
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

In some cases, the antibody may appear red in color. This is due to small amounts of hemolysis, and does not affect antibody performance.

Abcam is leading the way to address reproducibility in scientific research with our highly validated recombinant monoclonal and recombinant multiclonal antibodies. Search & select one of Abcam's thousands of recombinant alternatives to eliminate batch-variability and unnecessary animal use.

If you do not find a host species to meet your needs, our catalogue and custom Chimeric range provides scientists the specificity of Abcam's RabMAbs in the species backbone of your choice. Remember to also review our range of edited cell lines, proteins and biochemicals relevant to your target that may help you further your research goals.

Abcam antibodies are extensively validated in a wide range of species and applications, so please check the reagent specifications meet your scientific needs before purchasing. If you have any questions or bespoke requirements, simply visit the Contact Us page to send us an inquiry or contact our Support Team ahead of purchase.

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

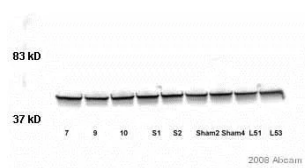
We do not recommend this combination. It is not covered by our product promise.

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.

14 product images



Western blot - Anti-GFAP antibody (ab7260)

All lanes:
Western blot - Anti-GFAP antibody (ab7260) at 1/5000 dilution

Lanes 1 - 3:
Rat thoracotomy, spinal cord homogenate at 30 µg

This image is courtesy of an anonymous customer review

Lanes 4 - 5:
Rat thoracotomy sham, spinal cord homogenate at 30 µg

Lanes 6 - 7:
Rat nerve transect sham, spinal cord homogenate at 30 µg

Lanes 8 - 9:
Rat nerve transect, spinal cord homogenate at 30 µg

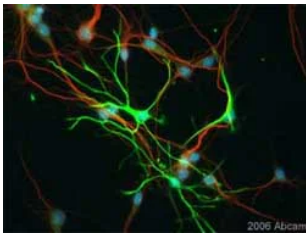
Secondary

All lanes:
HRP conjugated goat anti-rabbit at 1/3000 dilution
Developed using the ECL technique.

Predicted band size: 49 kDa

Observed band size: 53 kDa

Exposure time: 1min

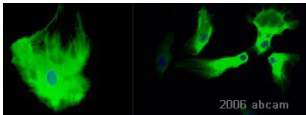


Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody (ab7260)

ab7260 at 1/10000 dilution staining mouse cortical astrocytes by Immunocytochemistry.

The cells were permeabilized with Triton/HEPES buffer prior to primary application. The antibody was incubated with the cells for 18 hours and then bound antibody was detected with an Alexa Fluor[®] 488 conjugated goat anti-rabbit antibody.

This image is courtesy of an Abreview submitted by **Charmaine Noonan**.

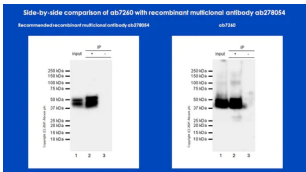


Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody (ab7260)

ab7260 staining rat pup cortical preps by ICC/IF.

The preps were grown for 14 days in culture and plated onto coverslips. The preps were acid/alcohol fixed and blocked prior to incubation with ab7260. Bound antibody was detected using an Alexa Fluor[®] 488 conjugated goat polyclonal antibody. Nuclei were visualized using DAPI.

This image is courtesy of a customer review submitted by Ms Nancy Nutile-McMenemy



Immunoprecipitation - Anti-GFAP antibody (ab7260)

Immunoprecipitation side-by-side comparison with the recombinant multiclonal antibody [ab278054](#)

This immunoprecipitation image is a comparison between ab7260 and the alternative recombinant multiclonal antibody [ab278054](#).

Left side - Recombinant multiclonal to GFAP - [ab278054](#)

GFAP was immunoprecipitated from 0.35 mg mouse brain lysate with [ab278054](#) at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using [ab278054](#) at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/5000 dilution.

Lane 1: Mouse brain lysate 10 µg.

Lane 2: [ab278054](#) IP in mouse brain lysate.

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of [ab278054](#) in mouse brain lysate.

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

Exposure time: 3 seconds.

Right side - Polyclonal antibody to [GFAP] - [ab7260](#)

Same testing conditions as [ab278054](#).

Why choose a recombinant antibody?

Research with confidence - consistent and reproducible results with every batch

Long-term and scalable supply - powered by recombinant technology for fast production

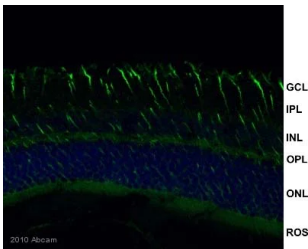
Success from the first experiment - confirmed specificity through extensive validation

Ethical standards compliant - production is animal-free

All lanes:

Immunoprecipitation - Anti-GFAP antibody ([ab7260](#))

Predicted band size: 49 kDa



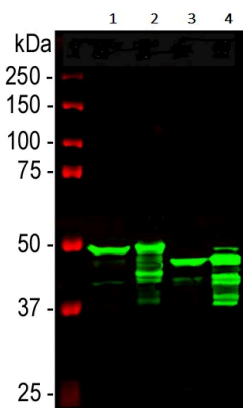
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody ([ab7260](#))

[ab7260](#) staining GFAP in mouse eye tissue sections by Immunohistochemistry (paraffin embedded sections).

Tissue was fixed with paraformaldehyde and a heat mediated antigen retrieval step was performed using citrate buffer pH 6.0. Samples were then permeabilized using 0.5% Triton X-100 and blocked with 5% serum for 20 minutes at 25°C; followed by incubation with the primary antibody, at a 1/500 dilution, for 16 hours at 4°C. The secondary antibody used was a goat anti-rabbit IgG conjugated to Alexa Fluor® 488 used at a 1/5000 dilution.

The retinal layers are: ganglion cells layer (GCL), inner plexiform layer (IPL), inner nuclear layer (INL), outer plexiform layer (OPL), outer nuclear layer (ONL), and photoreceptor outer segments (ROS). Nuclei were counterstained with DAPI.

This image was kindly supplied by Dr Vladimir Milenkovic by customer review



Western blot - Anti-GFAP antibody ([ab7260](#))

All lanes:

Western blot - Anti-GFAP antibody ([ab7260](#)) at 1/5000 dilution

Lane 1:

Rat brain lysate

Lane 2:

Rat spinal cord lysate

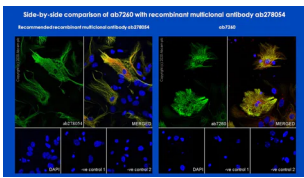
Lane 3:

Mouse brain lysate

Lane 4:

Mouse spinal cord lysate

Predicted band size: 49 kDa



Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody (ab7260)

ICC/IF side-by-side comparison with the recombinant multiclonal antibody [ab278054](#)

This ICC/IF image is a comparison between ab7260 and the alternative recombinant multiclonal antibody [ab278054](#).

Left side - Recombinant multiclonal to GFAP - [ab278054](#)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized mouse primary neural/glia cells labelling GFAP with [ab278054](#) at 1/500 (0.938 µg/ml) dilution, followed by [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green).

Confocal image showing cytoplasmic staining in mouse primary astrocytes. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection.

[ab10062](#) Anti-GFAP mouse monoclonal antibody at 1/200 dilution, followed by [ab150120](#) Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) at a 1/500 dilution (Red) to counterstain. The nuclear counterstain was DAPI (Blue).

Negative control 1: [ab278054](#) at a 1/500 dilution followed by [ab150120](#) at a 1/500 dilution.

Negative control 2: [ab10062](#) at a 1/500 dilution followed by [ab150077](#) at a 1/1000 dilution.

Right side - Polyclonal antibody to [GFAP] - ab7260

Same testing conditions as [ab278054](#).

Why choose a recombinant antibody?

Research with confidence - consistent and reproducible results with every batch

Long-term and scalable supply - powered by recombinant technology for fast production

Success from the first experiment - confirmed specificity through extensive validation

Ethical standards compliant - production is animal-free



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody (ab7260)

IHC-P side-by-side comparison with the recombinant multiclonal antibody [ab278054](#)

This IHC-P image is a comparison between ab7260 and the alternative recombinant multiclonal antibody [ab278054](#).

Left side - Recombinant multiclonal to GFAP - [ab278054](#)

IHC image of GFAP staining in a formalin fixed, paraffin embedded normal rat brain 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 (pH 6, epitope retrieval solution 1) for 20 mins. The section was then incubated with [ab278054](#) at 1/2000 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 hematoxylin and mounted with DPX.

Right side - Polyclonal antibody to [GFAP] - ab7260

Same testing conditions as [ab278054](#).

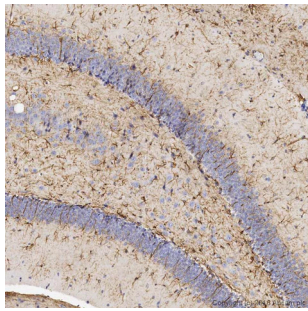
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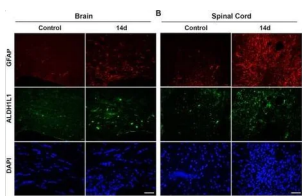


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody (ab7260)

IHC image of GFAP staining in a formalin fixed, paraffin embedded normal mouse brain tissue section, performed on a Leica Bond™ system using the standard protocol B.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab7260 at 1/2000 dilution for 15 mins at room temperature. A goat anti-rabbit biotinylated secondary antibody was used to detect the primary, and visualized using an HRP conjugated ABC system. DAB was used as the chromogen. The section was then counterstained with hematoxylin 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody (ab7260)

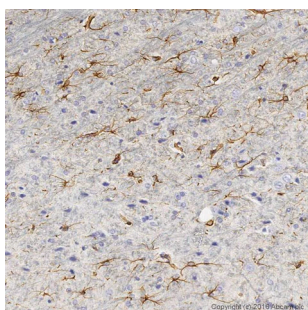
Increases in GFAP after demyelinating injury are greater in the spinal cord compared to brain

Photomicrographs show immunoreactivity for GFAP or ALDH1L1 in (A) the corpus callosum, or (B) the dorsal column white matter of adult mice at base line, and at 14 d after microinjection of the demyelinating agent lysolecithin. Histograms show the percent area of GFAP immunofluorescence, and expression of GFAP/ALDH1L1+ astrocyte, was significantly greater in the spinal cord compared to the corpus callosum 14d post-lysolecithin lesion.

GFAP was detected using ab7260.

(From Figure 4A and 4B of Hoon et al)

Yoon, H. et al PLoS One. 2017 Jul 10;12(7):e0180697. doi: 10.1371/journal.pone.0180697. eCollection 2017
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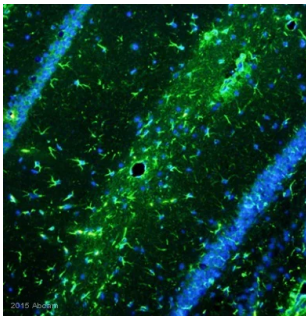


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody (ab7260)

IHC image of GFAP staining in a formalin fixed, paraffin embedded normal rat brain 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 (pH 6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab7260 at 1/2000 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 hematoxylin 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.

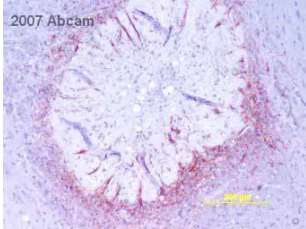


Immunocytochemistry/ Immunofluorescence - Anti-GFAP antibody (ab7260)

ab7260 staining GFAP in cells from mouse brain tissue sections by ICC/IF (Immunocytochemistry/immunofluorescence).

Cells were fixed with paraformaldehyde, permeabilized with 0.1% Tween 20 in PBS and blocked with 1% BSA for 40 minutes at 25°C. Samples were incubated with primary antibody (1/1200 in TBS) for 24 hours at 4°C. Goat Anti-Rabbit IgG H&L (DyLight® 488) ([ab96883](#)) was used as the secondary antibody at a dilution of 1/200.

This image is courtesy of a customer review submitted by Chia-Li Lin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-GFAP antibody (ab7260)

ab7260 staining rat brain tissue sections by IHC-P.

Sections were fixed in formaldehyde and blocked with a commercially available blocking agent prior to incubating with ab7260, diluted 1/5000 for 20 hours at 4°C. An HRP conjugated mouse polyclonal (universal HRP polymer detection) antibody was used as the secondary.

This image is courtesy of a customer review submitted by Mr Osama Mohsen



Immunohistochemistry (PFA fixed) - Anti-GFAP antibody (ab7260)

GFAP antibody ab7260 was used with Tissue Clearing Kit [ab243298](#) to penetrate, stain and clear a 1 mm coronal section of mouse brain. Blue: DAPI, Green: GFAP.

Learn more about tissue clearing kits, reagents, and protocols designed to make it easier to stain thick tissue sections and get more data from each valuable tissue section.

To use this antibody with tissue clearing, use Tissue Clearing Kit [ab243298](#). For 1 mm brain sections, we recommend a starting dilution of 1:1000, and also using Goat Anti-Rabbit IgG H&L Alexa Fluor® 488 ([ab150077](#)) at a dilution of 1:400.

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