abcam

ab302977

Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Conjugation	Alexa Fluor® 488
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EP672Y
Purification technique	Affinity purification Protein A
Concentration	0.5 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Species	Mouse
Dilution info	1/50 - 1/100
Notes	-

Species	Rat
Dilution info	1/50 - 1/100
Notes	-

ICC/IF

Tested

Species	Rat
Dilution info	1/50
Notes	-

Expected

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

Not recommended

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Expected

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

Target data

See full target information GFAP

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.

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, Store in the dark

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.

Alexa Fluor® is a registered trademark of Molecular Probes, Inc, a Thermo Fisher Scientific Company. The Alexa Fluor® dye included in this product is provided under an intellectual property license from Life Technologies Corporation. As this product contains the Alexa Fluor® dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). As this product contains the Alexa Fluor® dye the sale of this product is expressly conditioned on the buyer not using the product or its components, or any materials made using the product or its components, in any activity to generate revenue, which may include, but is not limited to use of the product or its components: in manufacturing; (ii) to provide a service, information, or data in return for payment (iii) for therapeutic, diagnostic or prophylactic purposes; or (iv) for resale, regardless of whether they are sold for use in research. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com.

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

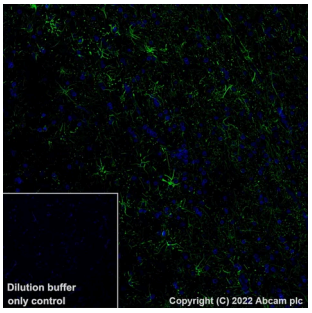
We do not recommend this combination. It is not covered by our product promise.

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.

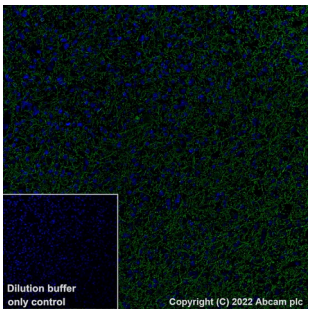
6 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker (ab302977)

GFAP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human cerebrum using rabbit Anti-GFAP antibody

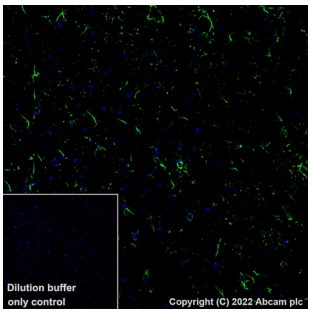
Immunohistochemical analysis of paraffin-embedded human cerebrum tissue labeling GFAP with ab302977 at 1/100 dilution (5.0 µg/mL). Positive staining is observed on astrocytes of human cerebrum. The section was incubated with ab302977 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). 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). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins was used.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker (ab302977)

GFAP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of human astrocytoma using rabbit Anti-GFAP antibody

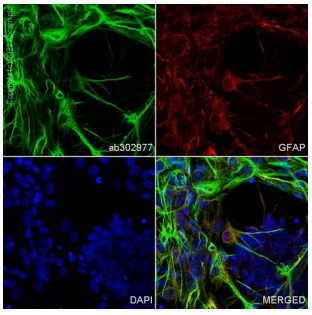
Immunohistochemical analysis of paraffin-embedded human astrocytoma tissue labeling GFAP with ab302977 at 1/100 dilution (5.0 µg/mL). Positive staining is observed on human astrocytoma. The section was incubated with ab302977 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). 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). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins was used.



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GFAP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of rat cerebrum using rabbit Anti-GFAP antibody

Immunohistochemical analysis of paraffin-embedded rat cerebrum tissue labeling GFAP with ab302977 at 1/50 dilution (10.0 µg/mL). Positive staining is observed on astrocytes of rat cerebrum. The section was incubated with ab302977 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). 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). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins was used.

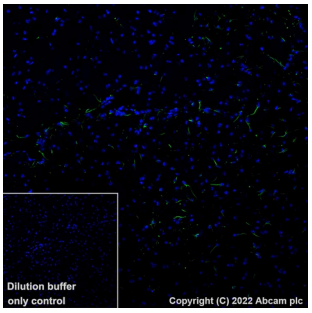


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker (ab302977)

GFAP Immunocytochemistry/ Immunofluorescence staining of rat primary neural/glia cells using rabbit Anti-GFAP antibody

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized rat primary neural/glia cells labeling GFAP with ab302977 at 1/50 dilution (10 µg/ml) (Green).

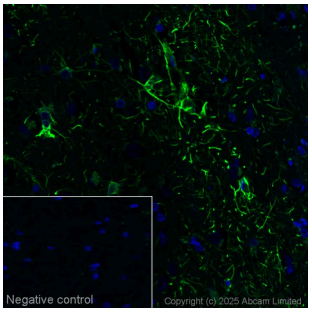
Confocal image showing positive staining in rat primary glia cell. Confocal scanning Z step was set as 0.3 µm followed by image processing with maximum Z projection. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8). Anti-Glial Fibrillary Acidic Protein (GFAP) mouse monoclonal antibody was used as counterstain at 1/100 (1ug/ml) dilution (Red). The nuclear counterstain was DAPI (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker (ab302977)

GFAP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of mouse cerebrum using rabbit Anti-GFAP antibody

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling GFAP with ab302977 at 1/50 dilution (10.0 µg/mL). Positive staining is observed on astrocytes of mouse cerebrum. The section was incubated with ab302977 for 60 mins at room temperature (shown in green). Nuclear DNA was labeled with DAPI (shown in blue). 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). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 40 mins was used.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Alexa Fluor® 488 Anti-GFAP antibody [EP672Y] - Astrocyte marker (ab302977)

GFAP Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-GFAP antibody

Immunofluorescence staining of GFAP 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 ab302977 at 1/500 dilution (shown in green). 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.

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