

Anti-Glial Fibrillary Acidic Protein (GFAP)

Polyclonal Antibody

Cat. # AB5804

Lot # JC1639185

pack size: 50 µL

Store at -20°C

FOR RESEARCH USE ONLY



Certificate of Analysis

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Applications	Species Cross-Reactivity	Antibody Isotype	Epitope/Region	Host Species	Molecular Weight	Accession #
IC, IH, IH(P)	B, Ca, H, R	N/A	N/A	Rb	50 kDa	NM_002055.2

Background

Glial fibrillary acidic protein is a class-III intermediate filament. GFAP is the main constituent of intermediate filaments in astrocytes and serves as a cell specific marker that distinguishes differentiated astrocytes from other glial cells during the development of the central nervous system.

Presentation

Rabbit serum. Liquid. Contains no preservative.

Specificity

Recognizes Glial Fibrillary Acidic Protein (GFAP).

Species Cross-reactivity

Human, rat, bovine and canine. It is expected that the antibody will react with most mammalian GFAP due to homology. Reactivity with other species has not been confirmed.

Immunogen

Purified bovine GFAP

Molecular Weight

50 kDa

Storage and Handling

Stable for 1 year at -20°C undiluted aliquots from date of receipt.

Handling Recommendations: Upon receipt, and prior to removing the cap, centrifuge the vial and gently mix the solution. Aliquot into microcentrifuge tubes and store at -20°C. Avoid repeated freeze/thaw cycles, which may damage IgG and affect product performance.

Control

Mouse brain tissue, rat astrocytes, rat neurons.

Quality Control Testing

Routinely evaluated by immunohistochemistry on brain tissue, astrocytes, and neurons.

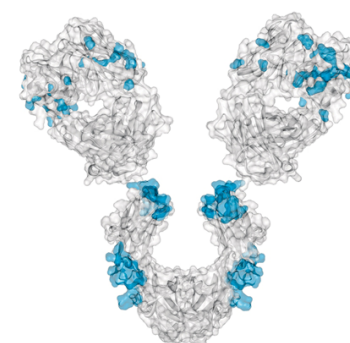
Immunohistochemistry(paraffin) Analysis:

GFAP (IHC2078) staining of Human Brain. Tissue pretreated with Citrate Buffer, pH 6.0. Pre-diluted polyclonal antibody, using IHC-Select® Detection with HRP-DAB. Glial cells stain strongly (brown) (Page 2).

Additional Research Applications

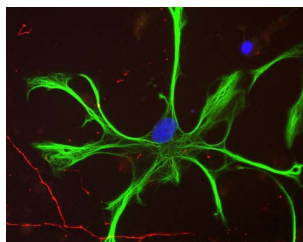
Immunocytochemistry:

1:1,000 dilution of anti-GFAP was used in immuno staining. Optimal working dilutions must be determined by the end user.



References

1. Benarroch, Eduardo E., et al. (2007). *Brain*. 130: 469-75.
2. Gascón, Sergio, et al. (2007). *J. Neurosci. Res.* 85: 1713-1723.
3. Elmariah, S. B., et al. (2005). *J. Neurosci.* 25: 3638-3650.
4. Zhou, C. J., Zhao, C. and Pleasure, S. J., (2004). *J. Neurosci.* 24(1): 121-126.
5. Gascón, Sergio, et al. (2008). *Mol. Psychiatry.* 13 :99-114.
6. Hammerie, B., et al. (2003). *European J. Neuroscience.* 17 : 2277-2286.



Rabbit anti-GFAP (Catalog Number AB5804) and Chicken anti-NF-H (Catalog Number AB5539). Staining of cultured neonatal rat forebrain with the anti-GFAP (green) and anti-NF-H (red). The blue is Hoechst DNA stain.

APPLICATION LEGEND: WB Western Blotting IP Immunoprecipitation IC Immunocytochemistry IF Immunofluorescence IH(P) Immunohistochemistry (Paraffin) IH Immunohistochemistry (Tissue)

SPECIES LEGEND: B Bovine Ca Canine (Dog) H Human M Mouse R Rat Rb Rabbit WR Most Common Vertebrates

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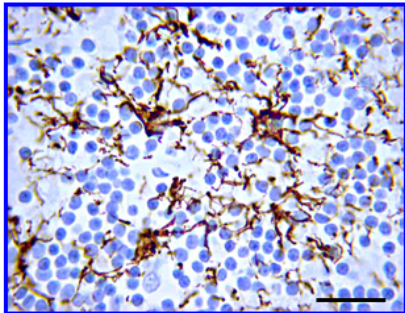
Rev.B/2009-09-16/AB5804CA/JM

Immunohistochemistry(paraffin):

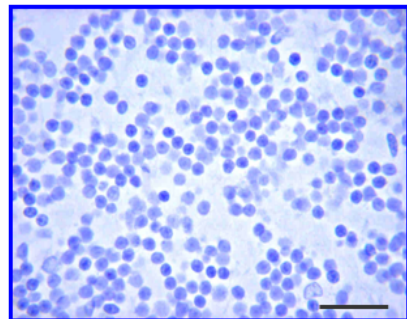
Representative images from a previous lot.

Pictures of Optimal Staining With Citrate Buffer Epitope

Retrieval: Human Brain



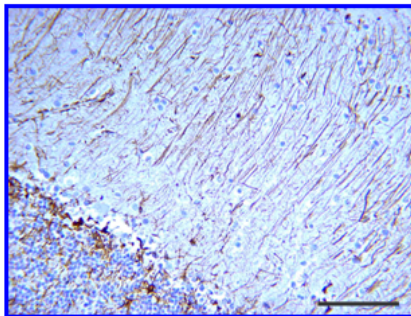
GFAP (IHC2078) staining of Human Brain. Tissue pretreated with Citrate Buffer, pH 6.0. Pre-diluted polyclonal antibody, using IHC-Select[®] Detection with HRP-DAB. Glial cells stain strongly (brown). Bar = 25 µm.



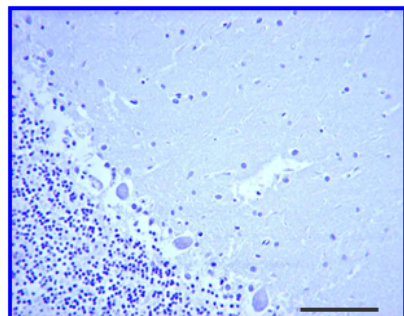
Negative Control staining of Human Brain. Tissue pretreated with Citrate Buffer, pH 6.0. Negative Control Reagent, IHC-Select[®] Detection with HRP-DAB. No background staining is detected. Bar = 25 µm.

Pictures of Optimal Staining With TE Buffer Epitope Retrieval:

Human Brain



GFAP (IHC2078) staining of Human Brain. Tissue pretreated with TE Buffer, pH 9.0. Pre-diluted polyclonal antibody, IHC-Select[®] Detection with HRP-DAB. Glial cells stain very strongly (brown). Bar = 100 µm.



Negative Control staining of Human Brain. Tissue pretreated with TE Buffer, pH 9.0. Negative Control Reagent, IHC-Select[®] Detection with HRP-DAB. No background staining is detected. Bar = 100 µm.

Important Note: During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µL or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.

PROTOCOL

Immunohistochemistry

1. Use standard deparaffinization techniques on tissue specimens.
2. Pretreat tissues using a citrate buffer, pH 6.0 and high heat epitope retrieval techniques.
3. Apply the blocking reagent to the tissue specimen and incubate in an enclosed chamber for 5 minutes.
4. While holding the slide at a 45° angle, gently rinse the specimen with 1X Rinse Buffer for a minimum of 15 seconds. Tap the end of the slide onto a paper towel to remove excess Rinse Buffer.
5. Apply a dilution of primary antibody over the entire tissue specimen and incubate in an enclosed chamber at room temperature for 60 minutes.
6. Rinse specimen as performed in Step 3.
7. Apply the biotinylated secondary antibody to the tissue specimen and incubate in an enclosed chamber for 10 minutes.
8. Rinse specimen as performed in Step 3.
9. Apply the Streptavidin-HRP solution to the tissue specimen and incubate in an enclosed chamber for 10 minutes.
10. Rinse specimen as performed in Step 3.
11. Apply the DAB (chromogen reagent) to the tissue specimen and incubate in an enclosed chamber for 10 minutes.
12. Rinse specimen as performed in Step 3.
13. Apply the Hematoxylin counterstain solution to the tissue specimen and incubate in an enclosed chamber for 1 minute.
14. Rinse specimen as performed in Step 3.
15. Place the tissue slides directly into a container filled with deionized water until mounting.
16. Mount a coverslip using an aqueous-based mounting media or for permanent mounting, dehydrate tissue through a graded series of alcohols, immerse in xylene, then apply a xylene-based mounting media (e.g. Permount) and coverslip.

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Anti-Glial Fibrillary Acidic Protein (GFAP)Cat # AB5804
Lot # JC1639185

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RELATED PRODUCTS (specific)

cat #	description
AB1540	■ Anti-Glial Fibrillary Acidic Protein
AB5541	■ Anti-Glial Fibrillary Acidic Protein
MAB5628	■ Anti-Glial Fibrillary Acidic Protein
MAB3402	■ Anti-Glial Fibrillary Acidic Protein, clone GA5
MAB360	■ Anti-Glial Fibrillary Acidic Protein, clone GA5
MAB3402X	■ Anti-Glial Fibrillary Acidic Protein, Clone GA5, AlexaFluor® 488 Conjugated
CBL411	■ Anti-Glial Fibrillary Acidic Protein, clone GF12-24
AB1540-100UG	■ Glial Fibrillary Acidic Protein
IHCR2078-6	■ IHC Select® Anti-Glial Fibrillary Acidic Protein, prediluted
IHCR2079-6	■ IHC Select® Anti-Glial Fibrillary Acidic Protein, prediluted, clone GA5
AG230	■ Glial Fibrillary Acidic Protein, porcine
IHC2078-6	■ IHC Select® Anti-Glial Fibrillary Acidic Protein, prediluted
IHC2079-6	■ IHC Select® Anti-Glial Fibrillary Acidic Protein, prediluted, clone GA5
AB9598	■ Anti-Glial fibrillary acidic protein delta
07-650	■ Anti-GFAP ¹
AP132P	■ Goat anti-Rabbit IgG, Peroxidase Conjugated

RELATED PRODUCTS (non-specific)

cat #	description
IPVH00010	■ Immobilon-P 26.5 cm x 3.75 m Roll PVDF 0.45 um
IPFL00010	■ Immobilon-FL 26.5 cm x 3.75 m Roll PVDF 0.45 um
IPVH07850	■ Immobilon-P 7 x 8.4 cm PVDF 0.45 mm (sheet) 50/pk
ISEQ00010	■ Immobilon-P SQ 26.5 cm x 3.75 m 1 roll PVDF 0.2 um
ISEQ07850	■ Immobilon-P 7 x 8.4 cm PVDF 0.2 mm (sheet) 50/pk
IPFL07810	■ Immobilon-FL 7 x 8.4 cm PVDF 0.45 mm (sheet) 10/pk
WBKLS0050	■ IMMOBILON WESTERN CHEMILUM HRP SUBSTRATE 50 mL
17-373SP	■ Spray & Glow™ ECL Western Blotting 40 mL
2060	■ Re-Blot Western Blot Recycling Kit
2500	■ Re-Blot Plus Western Blot Recycling Kit
B2080-175GM	■ Blot Quick Blocker Membrane Blocking Agent 175G
2170	■ CHEMIBLOCKER-1LT
20-200	■ IMMUNOBLOT BLOCKING REAGENT 20G

■ antibodies ■ Multiplex products ■ biotools ■ cell culture ■ enzymes ■ kits ■ proteins/peptides ■ siRNA/cDNA products

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