

### **GFAP Antibody**

Mouse Monoclonal Antibody (Mab)
Catalog # AM1870B

### **Specification**

#### **GFAP Antibody - Product Information**

Application IF, WB,

IHC-P-Leica, IHC,E

Primary Accession P14136

Other Accession NP 001124491.1

Reactivity
Host
Clonality
Isotype
Human
Mouse
Monoclonal
IgG2b,k

#### **GFAP Antibody - Additional Information**

#### **Gene ID 2670**

#### **Other Names**

Glial fibrillary acidic protein, GFAP, GFAP

# **Target/Specificity**

This GFAP monoclonal antibody is generated from mouse immunized with GFAP recombinant protein.

### **Dilution**

IF~~1:10~50 WB~~1:500~1000 IHC-P-Leica~~1:1000 IHC~~1:2000

#### Format

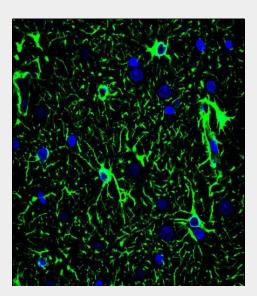
Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

### Storage

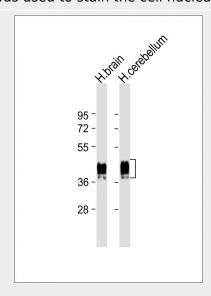
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

GFAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Confocal immunofluorescent analysis of GFAP Antibody (Cat#AM1870b) with brain tissue followed by Alexa Fluor® 488-conjugated goat anti-mouse IgG (green). DAPI was used to stain the cell nuclear (blue).



All lanes: Anti-GFAP Antibody at 1:4000 dilution Lane 1: human brain lysate Lane 2: human cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 50 kDa



### **GFAP Antibody - Protein Information**

#### Name 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.

#### **Cellular Location**

Cytoplasm. Note=Associated with intermediate filaments

#### **Tissue Location**

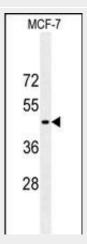
Expressed in cells lacking fibronectin.

## **GFAP Antibody - Protocols**

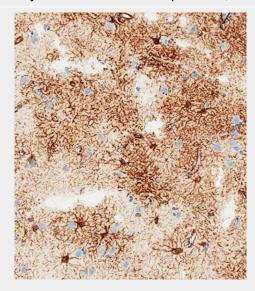
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Blocking/Dilution buffer: 5% NFDM/TBST.

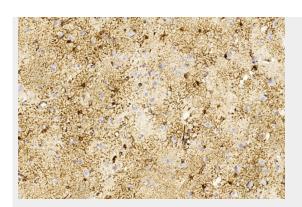


GFAP Antibody (Cat. #AM1870b) western blot analysis in MCF-7 cell line lysates (35µg/lane). This demonstrates the GFAP antibody detected the GFAP protein (arrow).



Immunohistochemical analysis of paraffin-embedded human brain tissue using AM1870B performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature; antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody (1:1000) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.





Immunohistochemical analysis of paraffin-embedded Human brain section using Pink1(Cat#AM1870B). AM1870B was diluted at 1:2000 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

## **GFAP Antibody - Background**

This gene encodes one of the major intermediate filament proteins of mature astrocytes. It is used as a marker to distinguish astrocytes from other glial cells during development. Mutations in this gene cause Alexander disease, a rare disorder of astrocytes in the central nervous system. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

### **GFAP Antibody - References**

van den Berge, S.A., et al. Aging Cell 9(3):313-326(2010) Martins-de-Souza, D., et al. J Psychiatr Res (2010) In press : Bargagna-Mohan, P., et al. J. Biol. Chem. 285(10):7657-7669(2010) Sultana, R., et al. Antioxid. Redox Signal. 12(3):327-336(2010) Middeldorp, J., et al. PLoS ONE 4 (11), E7663 (2009) :