

# GFAP

Cat#: EM140707

**Product Type:** Mouse monoclonal IgG, primary antibodies

**Isotype:** IgG1 **Clone ID:** 1-D4

**Species reactivity:** Human, mouse, rat

**Applications:** WB, IHC, ICC, FC

**Molecular Wt.:** 50 kDa

## Description

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. In particular, vimentin filaments are present at early developmental stages, while GFAP filaments are characteristic of differentiated and mature brain astrocytes. In addition, GFAP intermediate filaments are also present in nonmyelin-forming Schwann cells in the peripheral nervous system.

## Specificity/Source

This antibody is produced by immunizing mice with a synthetic peptide (KLH-coupled) corresponding to a region of GFAP.

## Positive control:

Mouse brain tissue, rat brain tissue, human brain tissue, A172, N2A, HeLa.

## Subcellular location:

Cytoplasm, intermediate filament

## Database links:

SwissProt: P14136(Human) P03995(Mouse) P47819(Rat)

## Recommended Dilutions:

**WB:** 1:2,000-1:5,000 **ICC:** 1:200

**IHC:** 1:200 **FC:** 1:200

## Storage Buffer:

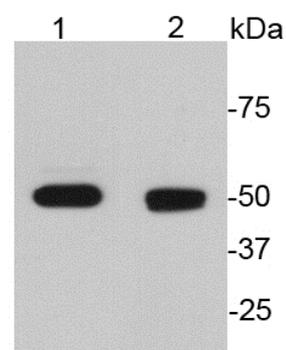
1\*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.

## Storage Instruction:

Store at +4°C after thawing. Aliquot store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

## Purity:

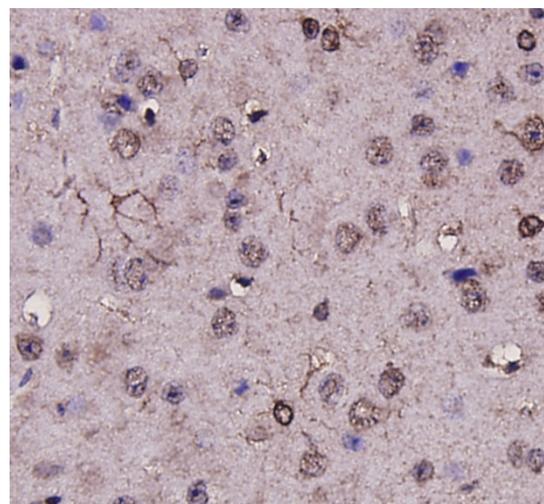
ProA affinity purified



**Fig1:** Western blot analysis of GFAP on different cell lysates using anti-GFAP antibody at 1/5000 dilution.

**Positive control:**

**Line 1: Rat brain Line 2: Human brain**



**Fig2:** Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-GFAP antibody. Counter stained with hematoxylin.

Hangzhou HuaAn Biotechnology Co.,Ltd.

Orders: 0086-571-88062880

Support: 0086-571-89986345

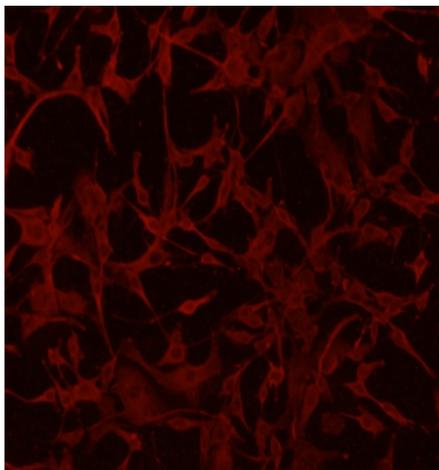
Service mail: tech@huabio.com

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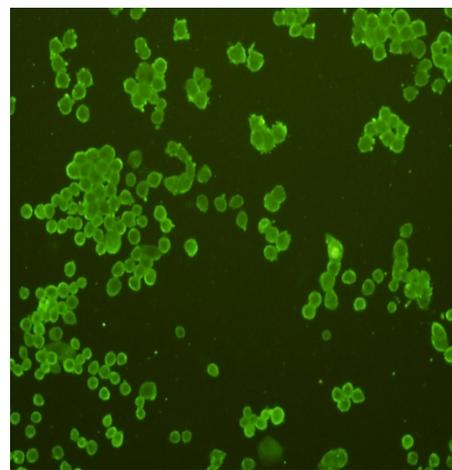


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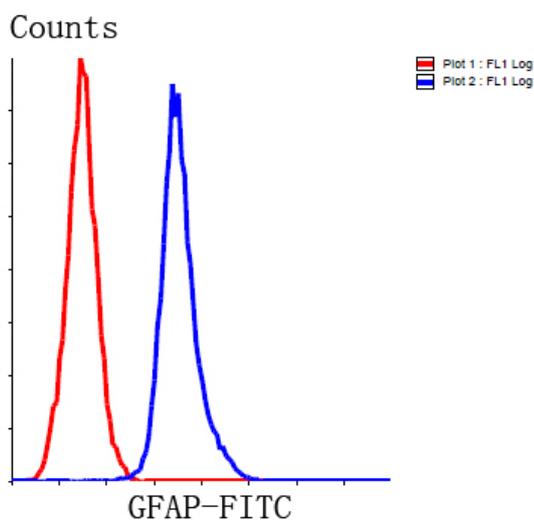
Applications: WB=Western IP=Immunoprecipitation IHC=Immunohistochemistry IF=Immunofluorescence FC=Flow cytometry  
Species Cross-Reactivity: H=human M=mouse R=rat Hm=hamster Mk=monkey Mi=mink C=chicken Dm=D.melanogaster X=Xenopus Z=zebrafish  
B=bovine Dg=dog Pg=pig Sc=S.



**Fig3:** ICC staining of GFAP in A172 cells (red). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig4:** ICC staining of GFAP in N2A cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



**Fig5:** Flow cytometric analysis of HeLa cells with GFAP antibody at 1/100 dilution (blue) compared with an unlabelled control (cells without incubation with primary antibody; red). Goat anti mouse IgG (FITC) was used as the secondary antibody.

## Background References

1. "A new splice variant of glial fibrillary acidic protein GFAP epsilon, interacts with the presenilin proteins." Nielsen A.L., Holm I.E., Johansen M., Bonven B., Jorgensen P., Jorgensen A.L. J. Biol. Chem. 277:29983-29991(2002)
2. "Mutations in GFAP, encoding glial fibrillary acidic protein, are associated with Alexander disease." Brenner M., Johnson A.B., Boespflug-Tanguy O., Rodriguez D., Goldman J.E., Messing A. Nat. Genet. 27:117-120(2001)

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