

GFAP Monoclonal Antibody (GA5), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Chicken, Human, Mouse, Pig, Rabbit, Rat
Published Species	Mouse, Human
Host/Isotope	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	GA5
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_10598206

Applications	Tested	Dilution	Published
Immunofluorescence (IF)	✓	5 µg/mL	3 Publications
Immunohistochemistry (IHC)	-	1:500	1 Publication
Flow Cytometry (Flow)	✓	Assay-Dependent	2 Publications
Immunocytochemistry (ICC)	✓	5 µg/mL	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	✓	5 µg/mL	1 Publication
Western Blot (WB)	✓	0.5-5 µg/mL	

Product Specific Information

Description: This GA5 monoclonal antibody reacts with human, mouse, rat, chicken, rabbit, and pig glial fibrillary acidic protein (GFAP). This 49-kDa type III intermediate filament protein is expressed in neural tissues and distinguishes astrocytes from other glial cells during central nervous system development. Three alternative splice variants of GFAP exist; however, alpha-GFAP is the predominant form expressed in astrocytes. GFAP can co-assemble with vimentin and nestin in astrocytes, but such associations are not required for assembly. Like other intermediate filaments, GFAP assembly is dependent on phosphorylation and dephosphorylation of the N-terminal domain. Studies have demonstrated that mutations in the GFAP gene lead to Alexander disease. Moreover, GFAP has also been shown to be overexpressed in certain glial-derived tumors.

Applications Reported: This GA5 antibody has been reported for use in immunocytochemistry, western blotting, immunohistochemical staining of formalin-fixed paraffin embedded tissue sections, and flow cytometric analysis.

Applications Tested: This GA5 antibody has been tested by immunoblotting of lysate prepared from mouse brain, immunocytochemistry of fixed and permeabilized C6 cells, and immunohistochemistry of FFPE human tissue using low pH antigen

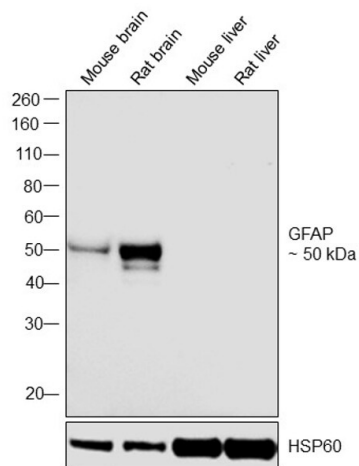
retrieval. This can be used at less than or equal to 5 µg/mL.

Purity: Greater than 90%, as determined by SDS-PAGE.

Aggregation: Less than 10%, as determined by HPLC.

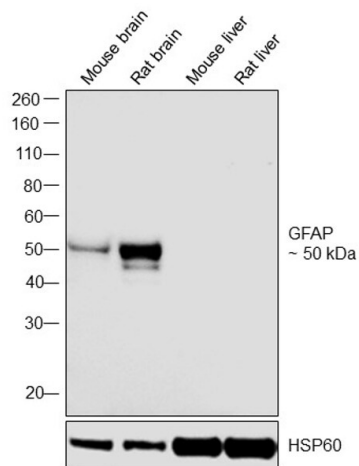
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



GFAP Antibody (14-9892-82)

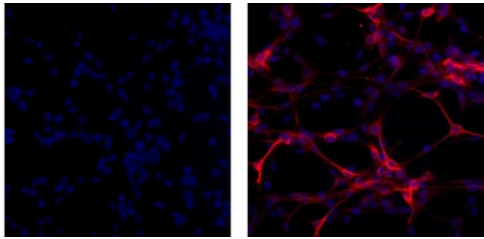
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue tested owing to their inherent genetic constitution. Relative expression of GFAP was observed in Mouse brain, Rat brain in comparison to Mouse liver and Rat liver using Anti-GFAP Monoclonal Antibody (GA5), eBioscience™ (Product # 14-9892-80) in Western Blot. Relative expression validation info.



GFAP Antibody (14-9892-82)

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Product Images For GFAP Monoclonal Antibody (GA5), eBioscience™



GFAP Antibody (14-9892-82) in ICC

Immunocytochemistry of fixed and permeabilized C6 cells using 1 µg/mL of Mouse IgG1 K Isotype Control Purified (Product # 14-4714-82) (left) or 1 µg/mL of Anti-GFAP Purified (right) followed by Anti-Mouse TRITC. Nuclei are counterstained with DAPI.

[View more figures on thermofisher.com](https://www.thermofisher.com)

8 References

Immunofluorescence (3)

Nature communications

FGL2 promotes tumor progression in the CNS by suppressing CD103⁺ dendritic cell differentiation.

"Published figure using GFAP monoclonal antibody (Product # 14-9892-82) in Immunofluorescence"

Authors: Yan J,Zhao Q,Gabrusiewicz K,Kong LY,Xia X,Wang J,Ott M,Xu J,Davis RE,Huo L,Rao G,Sun SC,Watowich SS,Heimberger AB,Li S

Species
Not Applicable

Dilution
Not Cited

Year
2019

Frontiers in molecular neuroscience

Roles of Pannexin-1 Channels in Inflammatory Response through the TLRs/NF-Kappa B Signaling Pathway Following Experimental Subarachnoid Hemorrhage in Rats.

"Published figure using GFAP monoclonal antibody (Product # 14-9892-82) in Immunofluorescence"

Authors: Wu LY,Ye ZN,Zhou CH,Wang CX,Xie GB,Zhang XS,Gao YY,Zhang ZH,Zhou ML,Zhuang Z,Liu JP,Hang CH, Shi JX

Species
Not Applicable

Dilution
Not Cited

Year
2018

[View more IF references on thermofisher.com](#)

Immunohistochemistry (1)

PloS one

Vitamin D receptor expression is essential during retinal vascular development and attenuation of neovascularization by 1, 25(OH)2D3.

"14-9892 was used in Immunohistochemistry to identify that vitamin D receptor expression plays a significant role during retinal vascular development, especially during maturation of retinal vasculature."

Authors: Jamali N,Wang S,Darjatmoko SR,Sorenson CM,Sheibani N

Species
Mouse

Dilution
1:500

Year
2018

Flow Cytometry (2)

Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism

Depletion of microglia exacerbates postischemic inflammation and brain injury.

"Published figure using GFAP monoclonal antibody (Product # 14-9892-82) in Flow Cytometry"

Authors: Jin WN,Shi SX,Li Z,Li M,Wood K,Gonzales RJ,Liu Q

Species
Not Applicable

Dilution
Not Cited

Year
2017

More applications with references on thermofisher.com

[ICC \(1\)](#) [IHC \(P\) \(1\)](#)

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