

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	2 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

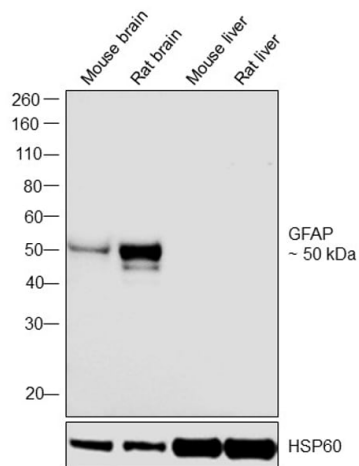
retrieval. This can be used at less than or equal to 5 µg/mL.

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

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

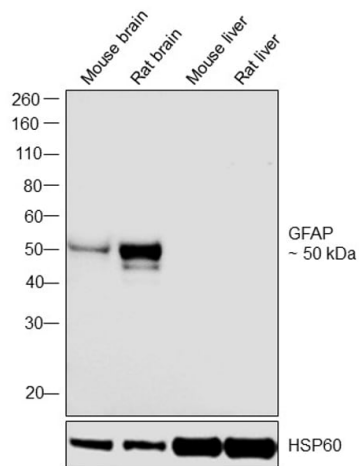
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



GFAP Antibody (14-9892-82)

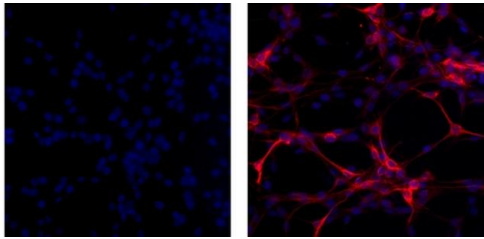
Antibody specificity was demonstrated by detection of differential basal expression of the target across tissue tested owing to their inherent genetic constitution. Relative expression of GFAP was observed in Mouse brain, Rat brain in comparison to Mouse liver and Rat liver using Anti-GFAP Monoclonal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



GFAP Antibody (14-9892-82)

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 # 14-9892-82) in Western Blot. Relative expression validation info.

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)

7 References

Immunofluorescence (2)

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

Infection and immunity

Cellular Microbiology of Mycoplasma canis.

"14-9892 was used in Functional assays to elucidate that M. canis has the capacity to influence meningoencephalitis through interactions within the multicellular and neurochemical in vivo milieu."

Authors: Michaels DL, Leibowitz JA, Azaiza MT, Shil PK, Shama SM, Kutish GF, Distelhorst SL, Balish MF, May MA, Brown DR

Species
Mouse

Dilution
Not Cited

Year
2016

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)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.