

# GFAP Polyclonal Antibody

Product Details	
Size	500 µL
Species Reactivity	Bovine, Chicken, Guinea pig, Hamster, Human, Mouse, Non-human primate, Sheep, Rat
Published Species	Rat, Bacteria, Zebrafish, Mouse, Human
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	GFAP isolated from cow spinal cord
Form	Liquid
Purification	purified
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10980769

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	3 Publications
Immunohistochemistry (IHC)	-	26 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:200	3 Publications
Immunocytochemistry (ICC/IF)	1:100-1:250	10 Publications

## Product Specific Information

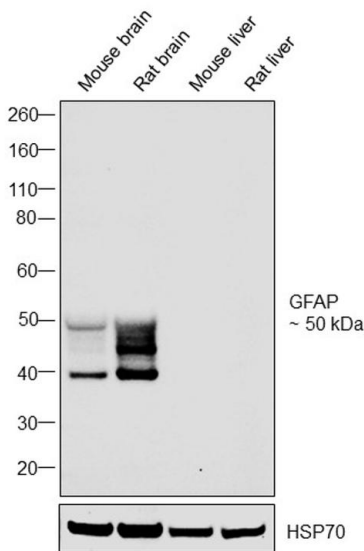
PA5-16291 targets Glial Fibrillary Acidic Protein in IHC (P) applications and shows reactivity with Bovine, Chicken, Guinea Pig, Hamster, Human, mouse, Non-human primate, Ovine, and Rat samples.

The PA5-16291 immunogen is gFAP isolated from cow spinal cord.

## Product Images For GFAP Polyclonal Antibody

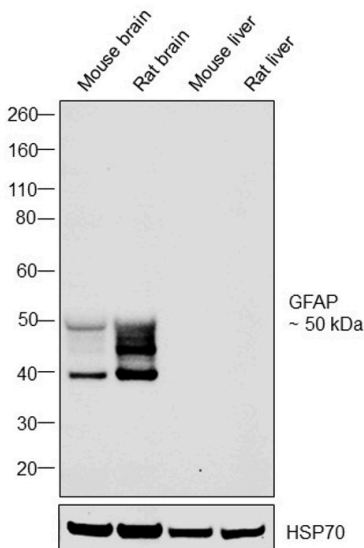
### GFAP Antibody (PA5-16291) in WB

Western blot was performed using Anti-GFAP Rabbit Polyclonal Antibody (Product # PA5-16291) and a 50 kDa band corresponding to GFAP was observed across tissues tested. Whole cell extracts (30 µg lysate) of Mouse brain (Lane 1), Rat brain (Lane 2), Mouse liver (Lane 3), and Rat liver (Lane 4) were electrophoresed using Novex® NuPAGE® 4-12 % Bis-Tris gel (Product # NP0321BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blots were probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain), Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



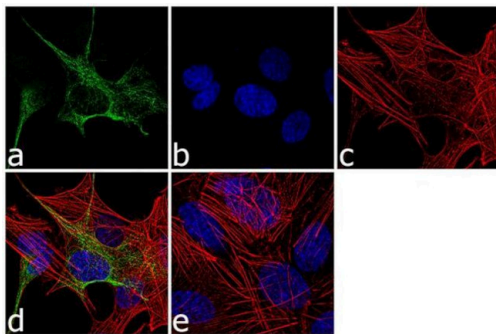
### GFAP Antibody (PA5-16291)

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 polyclonal antibody (Product # PA5-16291) in Western Blot. (doi: 10.1016/j.tins.2015.04.003). {RE}



### GFAP Antibody (PA5-16291) in ICC/IF

Immunofluorescence analysis of GFAP was performed using 70% confluent log phase SH-SY5Y cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with GFAP Rabbit Polyclonal Antibody (Product # PA5-16291) at 1:250 dilution in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A27034) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



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

42 References

Western Blot (3)

<div>Theranostics</div> <div>Mesenchymal stem cell-derived extracellular vesicles ameliorate Alzheimer's disease-like phenotypes in a preclinical mouse model.</div> <div>"PA5-16291 was used in Immunohistochemistry (PFA fixed), Western Blot to test the potential therapeutic effects of mesenchymal stem cell extracellular vesicles."</div> <div>Authors: Cone AS,Yuan X,Sun L,Duke LC,Vreones MP,Carrier AN,Kenyon SM,Carver SR,Bentham SD,Stimmell AC,Moseley SC,Hike D,Grant SC,Wilber AA,Olcese JM,Meckes DG</div>	<div>Year 2022</div> <div>Species Human</div>
<div>Aging cell</div> <div>VPS35 D620N knockin mice recapitulate cardinal features of Parkinson's disease.</div> <div>"PA5-16291 was used in Immunohistochemistry-immunofluorescence to characterize the biochemical, pathological, and behavioral changes of a VPS35 D620N knockin (KI) mouse model with chronic aging."</div> <div>Authors: Niu M,Zhao F,Bondelid K,Siedlak SL,Torres S,Fujioka H,Wang W,Liu J,Zhu X</div>	<div>Year 2021</div> <div>Species Mouse</div>

View more WB references on [thermofisher.cn](https://thermofisher.cn)

Immunohistochemistry (26)

<div>Biology open</div> <div>Loss of flrt2 gene leads to microphthalmia in zebrafish.</div> <div>"PA5-16291 was used in Immunohistochemistry to detect the high expression of flrt2 in zebrafish retina."</div> <div>Authors: Yang S,Huang L,Liang H,Guo J,Liu L,Chen S,Cao M</div>	<div>Year 2023</div> <div>Species Zebrafish</div> <div>Dilution 1:500</div>
<div>Neurobiology of disease</div> <div>Wide-field calcium imaging reveals widespread changes in cortical functional connectivity following mild traumatic brain injury in the mouse.</div> <div>"PA5-16291 was used in Immunohistochemistry to show that mTBI induces a transient neuroinflammation, without alterations in cognitive or motor behavior, and a reorganized cortical network evidenced by the widespread, chronic alterations in cortical FC."</div> <div>Authors: Cramer SW,Haley SP,Popa LS,Carter RE,Scott E,Flaherty EB,Dominguez J,Aronson JD,Sabal L,Surinach D,Chen CC,Kodandaramaiah SB,Ebner TJ</div>	<div>Year 2023</div> <div>Species Mouse</div> <div>Dilution 1:1,000</div>

View more IHC references on [thermofisher.cn](https://thermofisher.cn)

More applications with references on [thermofisher.cn](https://thermofisher.cn)

- IHC (P) (3)
- ICC/IF (10)

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.