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

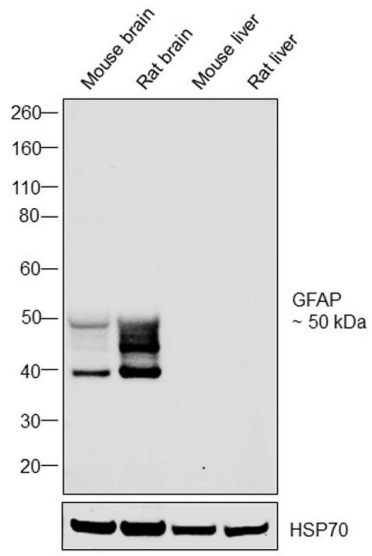
Applications	Tested Dilution	Publications
Western Blot (WB)	1:1,000	3 Publications
Immunohistochemistry (IHC)	-	26 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:200	3 Publications
Immunocytochemistry (ICC/IF)	1:100-1:250	10 Publications

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.

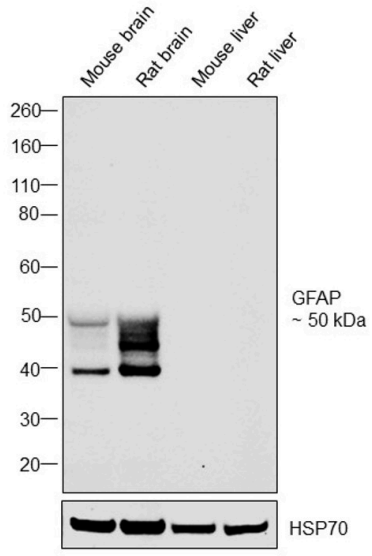
The PA5-16291 immunogen is gFAP isolated from cow spinal cord.

Product Images For GFAP Polyclonal Antibody



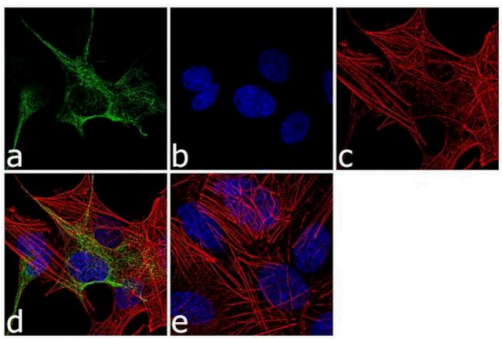
GFAP Antibody (PA5-16291) in WB

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

42 References

Western Blot (3)

Theranostics

Mesenchymal stem cell-derived extracellular vesicles ameliorate Alzheimer's disease-like phenotypes in a preclinical mouse model.

"PA5-16291 was used in Immunohistochemistry (PFA fixed), Western Blot to test the potential therapeutic effects of mesenchymal stem cell extracellular vesicles."

Authors: Cone AS,Yuan X,Sun L,Duke LC,Vreones MP,Carrier AN,Kenyon SM,Carver SR,Benthem SD,Stimmell AC, Moseley SC,Hike D,Grant SC,Wilber AA,Olcese JM,Meckes DG

Year 2022

Species Human

Aging cell

VPS35 D620N knockin mice recapitulate cardinal features of Parkinson's disease.

"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."

Authors: Niu M,Zhao F,Bondelid K,Siedlak SL,Torres S,Fujioka H,Wang W,Liu J,Zhu X

Year 2021

Species Mouse

View more WB references on thermofisher.cn

Immunohistochemistry (26)

Biology open

Loss of flrt2 gene leads to microphthalmia in zebrafish.

"PA5-16291 was used in Immunohistochemistry to detect the high expression of flrt2 in zebrafish retina."

Authors: Yang S,Huang L,Liang H,Guo J,Liu L,Chen S,Cao M

Year 2023

Species Zebrafish

Dilution 1:500

Neurobiology of disease

Wide-field calcium imaging reveals widespread changes in cortical functional connectivity following mild traumatic brain injury in the mouse.

"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."

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

Year 2023

Species Mouse

Dilution 1:1,000

View more IHC references on thermofisher.cn

More applications with references on thermofisher.cn

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