



GFAP Monoclonal Antibody (ASTRO6)

Product Details	
Size	500 μL
Species Reactivity	Chicken, Human, Pig, Rat
Published Species	Rat, Pig, Mouse, Human
Host/Isotype	Mouse / IgG
Class	Monoclonal
Туре	Antibody
Clone	ASTRO6
Conjugate	Unconjugated
Immunogen	Glial Fibrillary Acidic Protein
Form	Liquid
Concentration	200 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10984338

Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 μg/mL	8 Publications
Immunohistochemistry (IHC)	-	38 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1-2 μg/mL	4 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-dependent	3 Publications
Immunocytochemistry (ICC/IF)	1:20-1:200	15 Publications
Flow Cytometry (Flow)	-	1 Publication

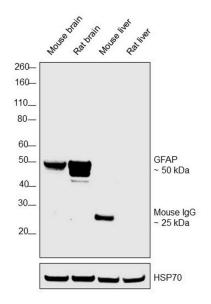
Product Specific Information

MA5-12023 targets Glial Fibrillary Acidic Protein in IF, IHC (P), and WB applications and shows reactivity with Chicken, Human, Porcine, and Rat samples.

The MA5-12023 immunogen is glial Fibrillary Acidic Protein.

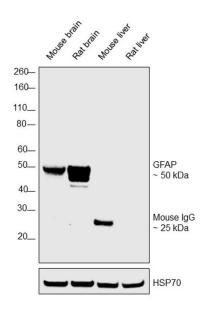
MA5-12023 was successfully used to detect astrocytes in E18 Sparague Dawley primary cortical cells.

Product Images For GFAP Monoclonal Antibody (ASTRO6)



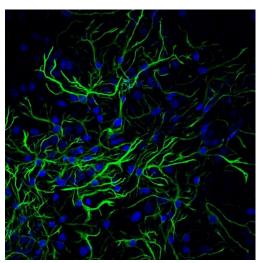
GFAP Antibody (MA5-12023)

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 kidney and Rat kidney using Anti-GFAP monoclonal antibody (ASTRO6) (Product # MA5-12023) in Western Blot. (doi: 10.1016/j.tins.2015.04.003). {RE}



GFAP Antibody (MA5-12023) in WB

Western blot was performed using Anti-GFAP Monoclonal Antibody (ASTRO6), (Product # MA5-12023) and a 50 kDa band corresponding to GFAP was observed in the tissues tested along with Mouse IgG at ~25 kDa. 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 blot was probed with the primary antibody (0.2 ug/ml) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L), SuperclonalTM Recombinant Secondary Antibody, HRP conjugate (Product # A28177, 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 (MA5-12023) in ICC/IF

Immunofluorescent analysis of glial fibrillary acidic protein (GFAP) in E18 Sparague Dawley primary cortical neuronal cells containing astrocytes. The cells were fixed with 4% formaldehyde for 15 mins, permeabilized with 0.25% Triton X-100 in PBS for 10 mins, and blocked with 3% BSA in PBS for 30 mins at RT. Cells were stained with a GFAP mouse monoclonal antibody (Product # MA5-12023) at a dilution of 1:200 in 3% BSA in PBS for 1 hr at RT, and then incubated with Invitrogen™ AlexaFluor™ 488 Plus goat anti-mouse IgG secondary antibody (Product # A32723) at a dilution of 1:1000 for 1 hr at RT. Nuclei were stained with Hoechst 33342 (Product # H3570). The image contains overlay of GFAP (green) and nuclei (blue). Images were taken on a Zeiss LSM 710 confocal microscope at 40X magnification.

View more figures on thermofisher.com

□ 69 References

Western Blot (8)

Glia

Astrocyte-specific loss of lactoferrin influences neuronal structure and function by interfering with cholesterol synthesis.

"Published figure using GFAP monoclonal antibody (Product # MA5-12023) in Immunohistochemistry" Authors: Xu SF,Pang ZQ,Fan YG,Zhang YH,Meng YH,Bai CY,Jia MY,Chen YH,Wang ZY,Guo C

Year 2022

2022

Species Mouse

Dilution 1:8000

Frontiers in molecular neuroscience

Detection and Functional Evaluation of the P2X7 Receptor in hiPSC Derived Neurons and Microglia-Like Cells.

"Published figure using GFAP monoclonal antibody (Product # MA5-12023) in Western Blot" Authors: Francistiová L, Vörös K, Lovász Z, Dinnyés A, Kobolák J **Year** 2022

Species Human

Dilution 1:500

View more WB references on thermofisher.com

Immunohistochemistry (38)

Frontiers in pharmacology

Parabrachial nucleus astrocytes regulate wakefulness and isoflurane anesthesia in mice.

"MA5-12023 was used in Immunohistochemistry-immunofluorescence to show that PBN astrocytes are a key neural substrate regulating wakefulness and emergence from isoflurane anesthesia."

Authors: Liu PC,Yao W,Chen XY,Su WK,Zheng ZH,Yan XB,Deng YL,Shi KG,Liu X,Gao YW,Lin TT,Zhu YX,Lin YX,Zhu ZH,Cai P,Zhang LC,Chen L

Year 2023

Species Mouse

Dilution 1:1000

Cancer discovery

BAF Complex Maintains Glioma Stem Cells in Pediatric H3K27M Glioma.

"Published figure using GFAP monoclonal antibody (Product # MA5-12023) in Immunohistochemistry"

Authors: Panditharatna E,Marques JG,Wang T,Trissal MC,Liu I,Jiang L,Beck A,Groves A,Dharia NV,Li D,Hoffman SE, Kugener G,Shaw ML,Mire HM,Hack OA,Dempster JM,Lareau C,Dai L,Sigua LH,Quezada MA,Stanton AJ,Wyatt M, Kalani Z,Goodale A,Vazquez F,Piccioni F,Doench JG,Root DE,Anastas JN,Jones KL,Conway AS,Stopka S,Regan MS, Liang Y,Seo HS,Song K,Bashyal P,Jerome WP,Mathewson ND,Dhe-Paganon S,Suvà ML,Carcaboso AM,Lavarino C, Mora J,Nguyen QD,Ligon KL,Shi Y,Agnihotri S,Agar NYR,Stegmaier K,Stiles CD,Monje M,Golub TR,Qi J,Filbin MG

Year 2022

View more IHC references on thermofisher.com

More applications with references on thermofisher.com

IHC (P) (4) IHC (F) (3) ICC/IF (15) Flow (1)

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