

GFAP Monoclonal Antibody (ASTRO6)

| Product Details | |
|--------------------|---------------------------------|
| Size | 500 µL |
| Species Reactivity | Chicken, Human, Pig, Rat |
| Published Species | Rat, Pig, Human, Mouse |
| Host/Isotype | Mouse / IgG1 |
| Class | Monoclonal |
| Type | Antibody |
| Clone | ASTRO6 |
| Conjugate | Unconjugated |
| Immunogen | Glial Fibrillary Acidic Protein |
| Form | Liquid |
| Concentration | 0.2 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 | 1 Publication |
| Immunohistochemistry (IHC) | - | 26 Publications |
| Immunohistochemistry (Paraffin) (IHC (P)) | 1-2 µg/mL | 4 Publications |
| Immunohistochemistry (Frozen) (IHC (F)) | Assay Dependent | 3 Publications |
| Flow Cytometry (Flow) | - | 1 Publication |
| Immunocytochemistry (ICC/IF) | 1:20-1:200 | 9 Publications |

Product Specific Information

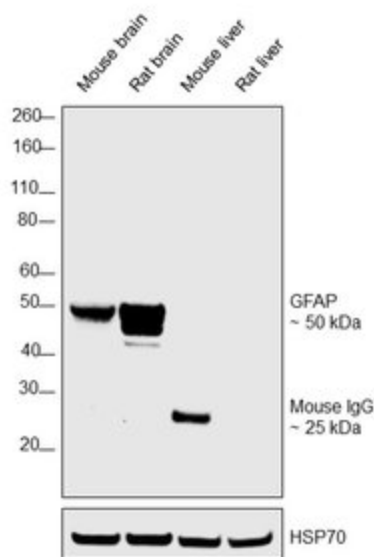
MA5-12023 targets Glial Fibrillary Acidic Protein in IF, IHC (P), and WB applications and shows reactivity with Chicken, Human, Porcine, and Rat samples.

The MA5-12023 immunogen is glial Fibrillary Acidic Protein.

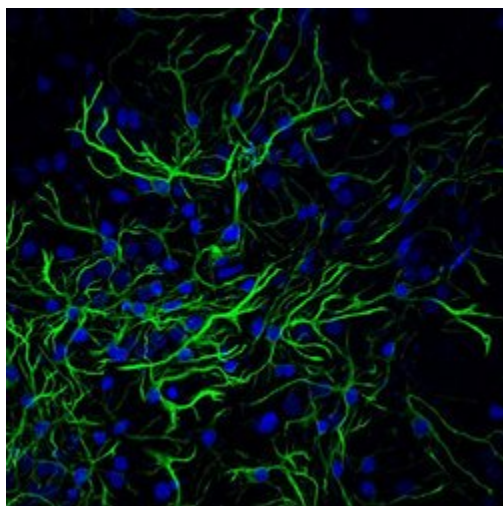
MA5-12023 was successfully used to detect astrocytes in E18 Sparague Dawley primary cortical cells.

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). Relative expression validation info.

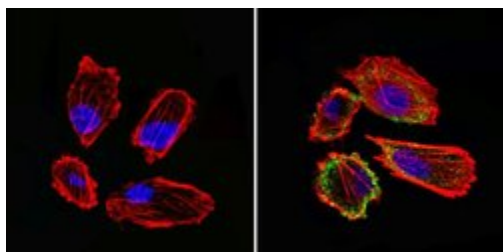


Product Images For GFAP Monoclonal Antibody (ASTRO6)



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.



GFAP Antibody (MA5-12023) in ICC/IF

Immunofluorescent analysis of GFAP (green) showing staining in the cytoplasm of SK-N-MC cells (right) compared to a negative control without primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with a GFAP monoclonal antibody (Product # MA5-12023) in 3% BSA-PBS at a dilution of 1:100 and incubated overnight at 4°C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with Hoechst or DAPI. Images were taken at a magnification of 60x.

44 References

Western Blot (1)

| | |
|---|---------------------------|
| PloS one | Species Mouse |
| The multifaceted effects of agmatine on functional recovery after spinal cord injury through Modulations of BMP-2/4/7 expressions in neurons and glial cells. | Dilution 1:1000 |
| "MA5-12023 was used in immunohistochemistry and western blot to study the roles of neuronal and glial BMP-2, -4 and -7 in the beneficial effects of agmatine on recovery from spinal cord injury in a murine model" | Year 2013 |
| Authors: Park YM, Lee WT, Bokara KK, Seo SK, Park SH, Kim JH, Yenari MA, Park KA, Lee JE | |

Immunohistochemistry (26)

| | |
|---|--------------------------|
| Brain research | Species Rat |
| NDGA reduces secondary damage after spinal cord injury in rats via anti-inflammatory effects. | Dilution 1:100 |
| "MA5-12023 was used in immunohistochemistry to study the role of anti-inflammatory mechanisms in ability of nordihydroguaiaretic acid to protect against secondary damage in a rat model of spinal cord injury" | Year 2013 |
| Authors: Xue H, Zhang XY, Liu JM, Song Y, Liu TT, Chen D | |

| | |
|---|---------------------------|
| Neuroscience | Species Rat |
| Involvement of the spinal NALP1 inflammasome in neuropathic pain and aspirin-triggered-15-epi-lipoxin A4 induced analgesia. | Dilution 1:1000 |
| "MA5-12023 was used in immunohistochemistry to study the role of reduced NALP1 inflammasome activation in the analgesic effects of 15-epilipoxin A4 in a rat model of neuropathic pain" | Year 2013 |
| Authors: Li Q, Tian Y, Wang ZF, Liu SB, Mi WL, Ma HJ, Wu GC, Wang J, Yu J, Wang YQ | |

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Immunohistochemistry (Paraffin) (4)

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|---|------------------------------|
| PloS one | Species Mouse |
| Lipocalin-2 as an Infection-Related Biomarker to Predict Clinical Outcome in Ischemic Stroke. | Dilution Not Cited |
| "MA5-12023 was used in immunohistochemistry - paraffin section measure LCN2 in ischemic samples" | Year 2017 |
| Authors: Hochmeister S, Engel O, Adzemovic MZ, Pekar T, Kendlbacher P, Zeitelhofer M, Haindl M, Meisel A, Fazekas F, Seifert-Held T | |

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