Anti-Glial Fibrillary Acidic Protein (GFAP) Alexa Fluor® 488

Catalog Number: 53-9892
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Glial Fibrillary Acidic Protein (GFAP) Alexa Fluor® 488
REF **Catalog Number:** 53-9892
Clone: GA5 (GA-5, G-A-5)
Concentration: 0.5 mg/mL
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

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, α-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 (GA-5, G-A-5) antibody has been reported for use in intracellular staining followed by flow cytometric analysis, immunohistology staining of frozen tissue sections, and immunocytochemistry.

Applications Tested

This GA5 antibody has been tested by immunocytochemistry of fixed and permeabilized C6 cells. This can be used at less than or equal to 10 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Quinlan RA, Brenner M, Goldman JE, Messing A. GFAP and its role in Alexander disease. Exp Cell Res. 2007 Jun 10;313(10):2077-87.

McLendon RE, Bigner DD. Immunohistochemistry of the glial fibrillary acidic protein: basic and applied considerations. Brain Pathol. 1994 Jul;4(3):221-8.

Mokuno K, Kamholz J, Behrman T, Black C, Sessa M, Feinstein D, Lee V, Pleasure D. Neuronal modulation of Schwann cell glial fibrillary acidic protein (GFAP). J Neurosci Res. 1989 Aug;23(4):396-405. (**GA5**, WB)

Rasmussen S, Bock E, Warecka K, Althage G. Quantitation of glial fibrillary acidic protein in human brain tumours. Br J Cancer. 1980 Jan;41(1):113-6.

Related Products

11-9897 Anti-Vimentin FITC (V9)
53-4714 Mouse IgG1 K Isotype Control Alexa Fluor® 488 (P3.6.2.8.1)

Legal

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.ebioscience.com • info@ebioscience.com