Mouse monoclonal antibody to Glial Fibrillary Acidic Protein (GFAP) [5C10]: IgG

Catalogue No.:	M-1375-100
Description:	GFAP is a 50 kDa intra-cytoplasmic filamentous protein of the cytoskeleton in astrocytes. During the development of the central nervous system, it is a cell-specific marker that distinguishes astrocytes from other glial cells. GFAP immunoreactivity has been shown in immature oligodendrocytes, epiglottic cartilage, pituicytes, papillary meningiomas, myoepithelial cells of the breast and in non-CNS: Schwann cells, salivary gland neoplasms, enteric glia cells, and metastasizing renal carcinomas.
Batch No.:	See product label
Unit size:	100 uL
Antigen:	Purified GFAP from porcine spinal cord
Antibody Type:	Monoclonal
Isotype:	IgG1
Clone:	5C10
Other Names:	Astrocyte; Glial fibrillary acidic protein; GFAP;
Accession:	P14136 GFAP_HUMAN; Q8WP16 Q8WP16_PIG;
Produced in:	Mouse
Applications:	Western Blotting (WB), Immunocytochemistry (ICC) and Immunohistochemistry (IHC). A dilution of 1:5,000 is recommended for WB. Human GFAP has a predicted length of 432 residues and a MW of 50 kDa. A dilution of 1:500-1:1,000 is recommended for ICC/IHC. This antibody works well on frozen sections, cells in tissue culture and on formalin fixed histological sections. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	The specificity of this antibody has been confirmed by WB.
Antibody Against:	Glial Fibrillary Acidic Protein
Cross-reactivity:	Human, Rat, Mouse, Bovine, Porcine. Predicted to react with other mammalian and avian species.
Form:	Lyophilised from PBS, pH 7.4, containing 3% trehalose and 0.05% sodium azide.
Reconstitution:	Reconstitute in 100 uL sterile distilled water to obtain an antibody stock concentration of 1 mg/mL. Centrifuge to remove any insoluble material.
Storage:	After reconstitution of lyophilised antibody, aliquot and store at -20C for a higher stability. Avoid freeze-thaw cycles.
Expiry Date:	12 months after purchase if unopened
Specific References:	Kawabe K et al. (2017) Transglutaminases Derived from Astrocytes Accelerate Amyloid ß Aggregation. Neurochem Res. [Epub ahead of print]. Application: ICC (cultured rat astrocytes). Nagai T et al. (2017) Development of an in situ evaluation system for neural cells using

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extracellular matrix-modeled gel culture. J Biosci Bioeng. 124(4):430-8. Application: IF (artificial gel matrix).

Kawabe T et al. (2017) Microglia Endocytose Amyloid ß Through the Binding of Transglutaminase 2 and Milk Fat Globule EGF Factor 8 Protein. Neurochem Res. [Epub ahead of print] Application: ICC (cultured astrocytes).

Takano K et al. (2017) Inhibition of Gap Junction Elevates Glutamate Uptake in Cultured Astrocytes. Neurochem Res. [Epub ahead of print] Application: ICC (cultured astrocytes).

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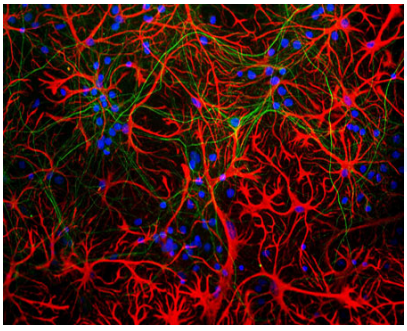

Mixed neuron-glial cultures stained with Mouse monoclonal antibody to Glial Fibrillary Acidic Protein [5C10] M-1375-100 (red) and chicken polylclonal antibody to neurofilament L C-1390-50 (green). The GFAP antibody stains the network of astrocytes in these cultures, while the NF-L antibody stains neurons and their processes. The blue channel shows the localization of DNA.

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