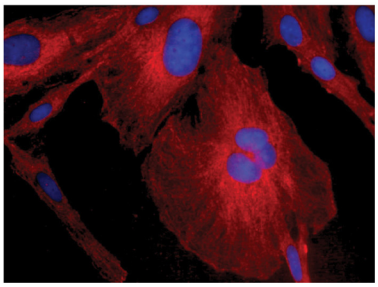
SouthernBiotech

Mouse Anti-Human GFAP

Cat. No.	Format	Size
12075-01	Purified (UNLB)	0.5 mg
12075-05	Horseradish Peroxidase (HRP)	1.0 mL
12075-08	Biotin (BIOT)	0.5 mg
12075-12	Cyanine 3 (CY3)	0.5 mg



Human astrocytoma cell line CCF-STTG1 was stained with Mouse Anti-Human GFAP-CY3 (SB Cat. No. 12075-12) and DAPI.

Overview

Clone SB61b
Isotype Mouse (BALB/c) $IgG_{2b}\kappa$
Immunogen Recombinant human GFAP
Specificity Human/Mouse GFAP
Alternate Name(s) Glial fibrillary acidic protein, intermediate filament protein

Description

Glial fibrillary acid protein (GFAP) is a member of the type III intermediate filament family of proteins. GFAP is heavily expressed in astrocytes and certain other astroglia in the central nervous system, in satellite cells in peripheral ganglia, and in non-myelinating Schwann cells in peripheral nerves. It is closely related to its non-epithelial family members, vimentin, desmin, and peripherin, which are all involved in the structure and functions of the cell's cytoskeleton. GFAP is thought to help to maintain astrocyte mechanical strength, as well as the shape of cell; however, its precise function remains poorly understood. In adults, GFAP levels increase in response to the proliferation of astrocytes associated with Alzheimer's disease, epilepsy, and multiple sclerosis. Antibodies specific for GFAP are useful as markers of astrocytic cells and neural stem cells as well as for distinguishing neoplasms of astrocytic origin from other neoplasms in the central nervous system.

Applications

ICC – Quality tested
IHC-FS – Reported in literature [1]
WB [2]
ELISA-Detection [2]

Note – May be paired with the purified clone SB61a (SB Cat. No. 12070-01) in a sandwich ELISA

Working Dilutions

Immunocytochemistry	Purified (UNLB) antibody	≤ 5 μg/mL
	BIOT conjugate	≤ 5 μg/mL
	HRP conjugate	1:100 – 1:400
	CY3 conjugate	≤ 1 μg/mL
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

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Handling and Storage

- The purified antibody (UNLB) is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added*. Store at 2-8°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL in a stock solution of 50% glycerol/50% PBS, pH 7.4. No preservative added. Store at 2-8°C or long-term at -20°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The Cyanine 3 (CY3) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Pons-Espinal M, de Lagran MM, Dierssen M. Environmental enrichment rescues DYRK1A activity and hippocampal adult neurogenesis in TgDyrk1A. Neurobiol Dis. 2013;60:18-31. (IHC-FS, Mouse Reactivity)
2. SouthernBiotech unpublished data (WB, ELISA)

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