

GFAP Antibody

Catalog No: #32033

Package Size: #32033-1 50ul #32033-2 100ul

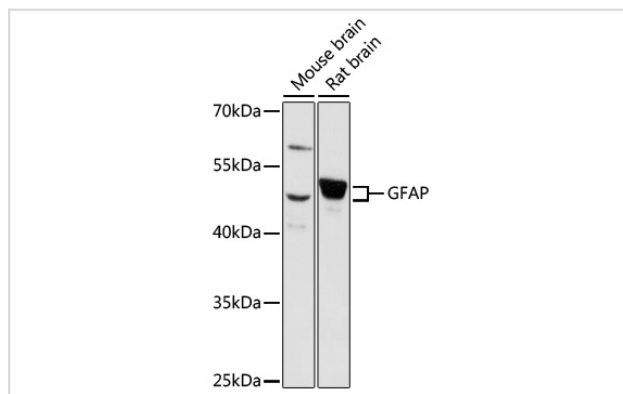
Description

Product Name	GFAP Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were purified by affinity purification using immunogen.
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total GFAP protein.
Immunogen Type	Recombinant Protein
Immunogen Description	Recombinant protein of human GFAP .
Conjugates	Unconjugated
Target Name	GFAP
Other Names	GFAP; FLJ45472;
Accession No.	Swiss-Prot:P14136NCBI Gene ID:2670
SDS-PAGE MW	50KD
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

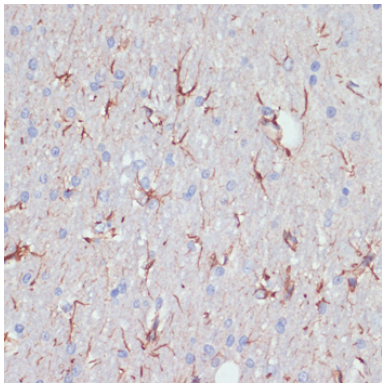
Application Details

WB□1:500 - 1:2000IHC□1:50 - 1:200IF□1:50 - 1:200

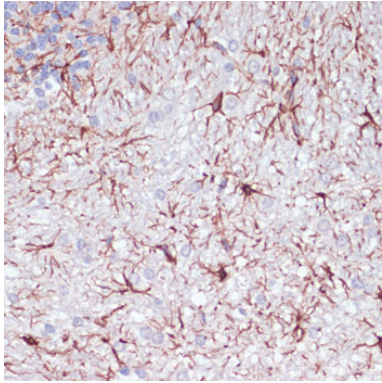
Images



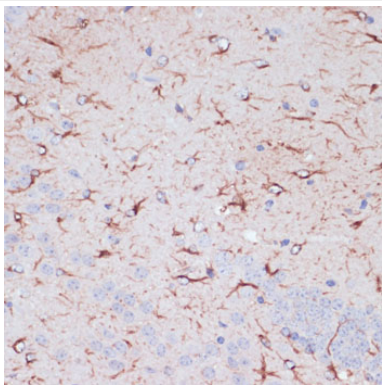
Western blot analysis of extracts of various cell lines, using GFAP at 1:1000 dilution.



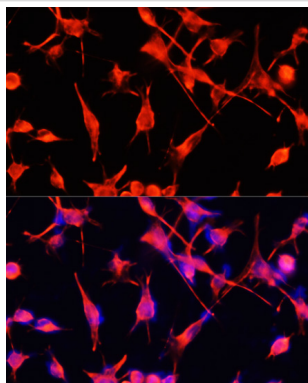
Immunohistochemistry of paraffin-embedded rat brain using GFAP at dilution of 1:200 (40x lens).



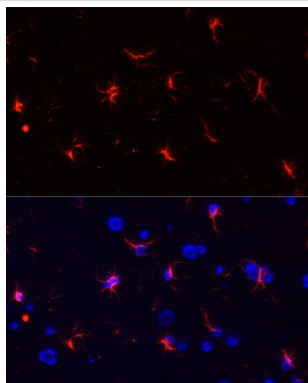
Immunohistochemistry of paraffin-embedded rat cerebellum using GFAP at dilution of 1:100 (40x lens).



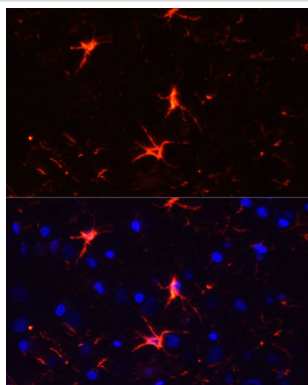
Immunohistochemistry of paraffin-embedded mouse brain using GFAP at dilution of 1:100 (40x lens).



Immunofluorescence analysis of U-251MG cells using GFAP at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of rat brain using GFAP at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of mouse brain using GFAP at dilution of 1:100. Blue: DAPI for nuclear staining.

Background

The cytoskeleton consists of three types of cytosolic fibers: microfilaments (actin filaments), intermediate filaments, and microtubules. Major types of intermediate filaments are specifically expressed in particular cell types: cytokeratins in epithelial cells, glial fibrillary acidic protein (GFAP) in glial cells, desmin in skeletal, visceral, and certain vascular smooth muscle cells, vimentin in cells of mesenchymal origin, and neurofilaments in neurons. GFAP and vimentin form intermediate filaments in astroglial cells and modulate their motility and shape (1). In particular, vimentin filaments are present at early developmental stages, while GFAP filaments are characteristic of differentiated and mature brain astrocytes. Thus, GFAP is commonly used as a marker for intracranial and intraspinal tumors arising from astrocytes (2). In addition, GFAP intermediate filaments are also present in non-myelin-forming Schwann cells in the peripheral nervous system (3).

Published Papers

el at., Fidgetin regulates cultured astrocyte migration by severing tyrosinated microtubules at the leading edge. In *Mol Biol Cell* on 2017 Feb 15 by Zunlu Hu, Jie Feng, et al.. PMID: 27974640, , (2017)

[PMID:27974640](#)

el at., Depletion of kinesin-12, a myosin-IIB-interacting protein, promotes migration of cortical astrocytes. In *J Cell Sci* on 2016 Jun 15 by Jie Feng, Zunlu Hu et al.. PMID: 27170353, , (2016)

[PMID:27170353](#)

el at., Analysis of the expression and distribution of protein O-linked mannose β 1,2-N-acetylglucosaminyltransferase 1 in the normal adult mouse brain.. In *Front Neuroanat* on 2023 Jan 6 by Hanxiao Jiang, Yuxue Feng, et al.. PMID: 36686576, , (2022)

[PMID:36686576](#)

el at., Regulation of nociception threshold by norepinephrine through adrenergic α 2 receptor in rat models of Parkinson's disease. In *CNS Neurosci Ther* on 2023 Sep 18 by Qing Gao, Yingying Zhang et al.. PMID: 37721421, , (2023)

[PMID:37721421](#)

el at., Near-Infrared Light Induces Neurogenesis and Modulates Anxiety-like Behavior., , (2024)

[PMID:](#)

el at., Regulation of nociception threshold by norepinephrine through adrenergic α 2 receptor in rat models of Parkinson's disease. In *CNS Neurosci Ther* on 2024 Mar by Qing Gao, Yingying Zhang, et al.. PMID: 37721421, , (2024)

[PMID:37721421](#)

Lei Chen; Xia Zhao; Rui Sheng; Philip Lazarovici; Wenhua Zheng et al., Artemisinin alleviates astrocyte overactivation and neuroinflammation by modulating the IRE1/NF- κ B signaling pathway in in vitro and in vivo Alzheimer's disease models., , (2025)

[PMID:39826816](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.