Product Datasheet

GFAP Antibody

Catalog No: #32033

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

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

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

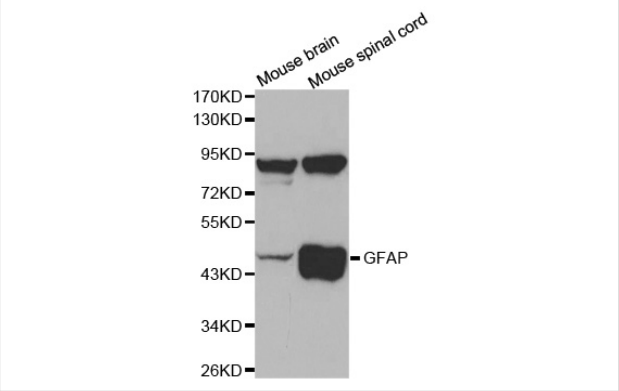
Application Details

Western blotting: 1:500 - 1:2000

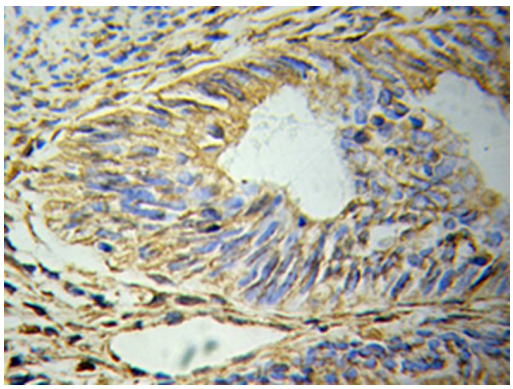
Immunohistochemistry: 1:50 - 1:200

Immunofluorescence: 1:50 - 1:100

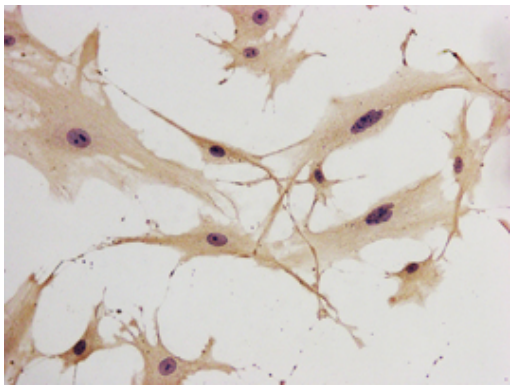
Images



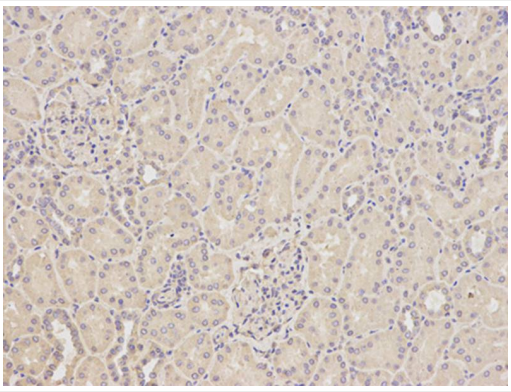
Western blot analysis of extracts of mouse brain and mouse spinal cord, using GFAP antibody.



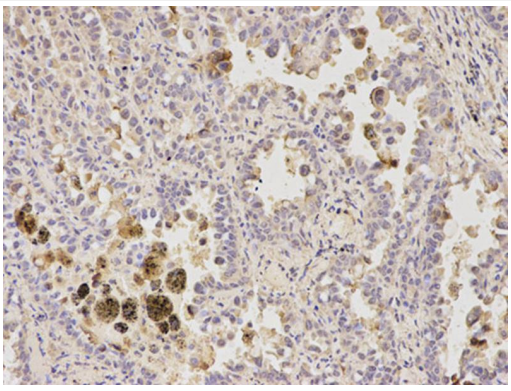
Immunohistochemical analysis of paraffin-embedded H-brain using GFAP antibody.



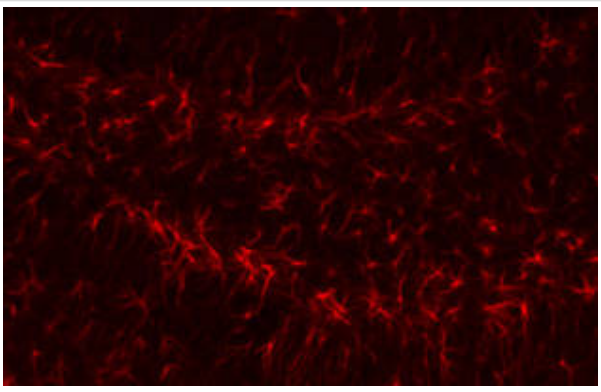
Immunohistochemical analysis of frozen neuroglial cells using GFAP antibody.



Immunohistochemical analysis of paraffin-embedded human kidney using GFAP antibody at dilution of 1:200 (200x lens). /Immunofluorescent analysis of hippocampal region of mouse using GFAP antibody.



Immunohistochemical analysis of paraffin-embedded human lung cancer using GFAP antibody at dilution of 1:200 (200x lens).



Immunofluorescence analysis of hippocampal region of mouse using GFAP antibody.

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 β1,2-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 α2 receptor in rat models of Parkinson's diseaseInCNS Neurosci TherOn2023 Sep 18.byQing Gao?1,?Yingying Zhang et al..PMID: 37721421, , (2023)

PMID:37721421

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

PMID:

el at., Regulation of nociception threshold by norepinephrine through adrenergic α2 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 el at., Artemisinin alleviates astrocyte overactivation and neuroinflammation by modulating the IRE1/NF-κB 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.