

Basic Information

Product Name	Anti-GFAP Antibody	
Gene Name	GFAP	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat, pig	
Tested Application	WB, IHC, IF	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human GFAP recombinant protein (Position: Q93-M432). Human GFAP shares 94% amino acid (aa) sequence identity with both mouse and rat GFAP.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	50 kDa	
Dilution Ratios	Western blot (WB): 1:2000-10000 Immunohistochemistry (IHC): 1:1000-5000 Immunofluorescence (IF): 1:50-500 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

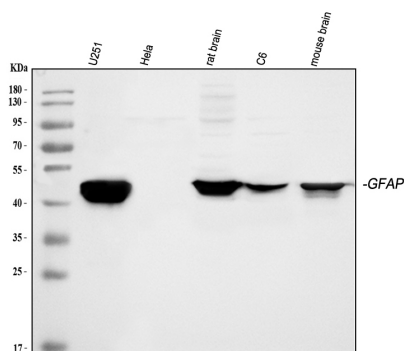
Background Information

Glial fibrillary acidic protein (GFAP) is a protein that is encoded by the GFAP gene in humans. It is an intermediate filament(IF) protein that is expressed by numerous cell types of the central nervous system (CNS) including astrocytes, and ependymal cells. It is mapped to 17q21.31. GFAP is closely related to its non-epithelial family members, vimentin, desmin, and peripherin, which are all involved in the structure and function of the cell's cytoskeleton. GFAP is thought to help to maintain astrocyte mechanical strength, as well as the shape of cells. This gene has been shown to play a role in mitosis by adjusting the filament network present in the cell. GFAP is necessary for many critical roles in the CNS. What's more, GFAP also plays a role in astrocyte-neuron interactions as well as cell-cell communication.

Reference

Anti-GFAP Antibody被引用在79文献中。

Selected Validation Data



Western blot analysis of GFAP using anti-GFAP antibody (PB9082).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human U251 whole cell lysates,

Lane 2: human Hela whole cell lysates,

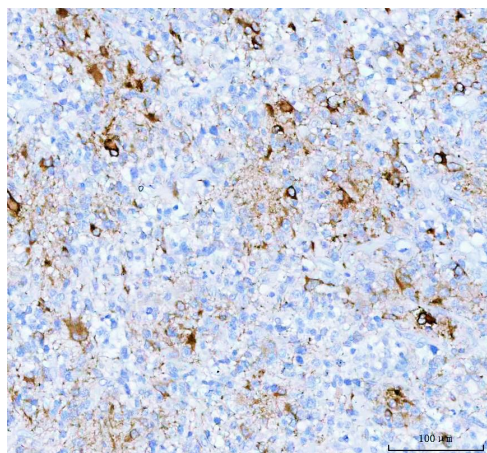
Lane 3: rat brain tissue lysates,

Lane 4: human C6 whole cell lysates,

Lane 5: mouse brain tissue lysates.

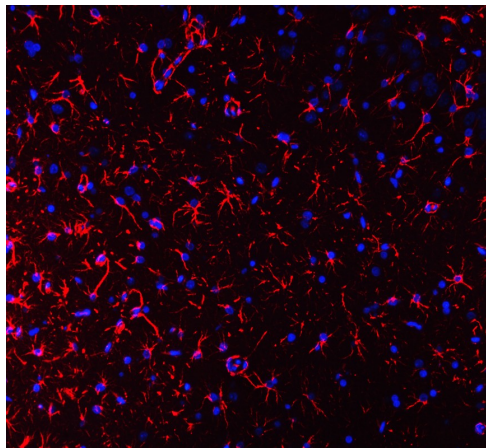
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-GFAP antigen affinity purified polyclonal antibody (PB9082) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for GFAP at approximately 50 kDa. The expected band size for GFAP is at 50 kDa.



IHC analysis of GFAP using anti-GFAP antibody (PB9082) .

GFAP was detected in a paraffin-embedded section of human glioma tissue. The tissue section was incubated with rabbit anti-GFAP Antibody (PB9082) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of GFAP using anti-GFAP antibody (PB9082).

GFAP was detected in a paraffin-embedded section of rat brain tissue. The tissue section was incubated with rabbit anti-GFAP Antibody (PB9082) at a dilution of 1:100. Cy3-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1032) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).