

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody

Our Anti-Glial Fibrillary Acidic Protein (GFAP) primary antibody from PhosphoSolutions is chicken po Catalog # AN1414

Specification

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC <u>P14136</u> Bovine, Chicken Chicken Polyclonal IgY 49880

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody - Additional Information

Gene ID

2670

Other Names

wu:fb34h11 antibody, ALXDRD antibody, cb345 antibody, etID36982.3 antibody, FLJ42474 antibody, FLJ45472 antibody, GFAP antibody, GFAP_HUMAN antibody, gfapl antibody, Glial fibrillary acidic protein antibody, Intermediate filament protein antibody, wu:fk42c12 antibody, xx:af506734 antibody, zgc:110485 antibody

Target/Specificity

Glial Fibrillary Acidic Protein (GFAP) was discovered by Amico Bignami and co-workers as a major fibrous protein of multiple sclerosis plaques (1). It was subsequently found to be a member of the 10nm or intermediate filament (IF) family, specifically the IF family Class III, which also includes peripherin, desmin and vimentin. GFAP is strongly and specifically expressed in astrocytes and certain other astroglia in the CNS, in satellite cells, peripheral ganglia, and in non-myelinating Schwann cells in peripheral nerves. In many damage and disease states GFAP expression is heavily upregulated in astrocytes. In addition, neural stem cells frequently strongly express GFAP. Point mutations in the protein coding region of the GFAP gene lead to Alexander disease which is characterized by the presence of abnormal astrocytes containing GFAP protein aggregates known as Rosenthal fibers (2).

Dilution WB~~1:1000 IHC~~1:100~500

Format Total IgY fraction

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Shipping Blue Ice

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody - Images



Immunofluorescence of a section of mouse hippocampus colabeled with Anti-GFAP(cat. 621-GFAP, green, 1:5000) and Anti-FOX3 (red). The Anti-FOX3 labels the nuclei and proximal perikarya of neurons while the Anti-GFAP labels a network of astroglial cells. The blue is DAPI staining of nuclear DNA.



Western blot of rat cortical lysate showing specific immunolabeling of the \sim 50 kDa GFAP protein.



Immunofluorescence of a section of mouse prefrontal cortex labeled with Anti-GFAP(cat. 621-GFAP, red, 1:1000). Image courtesy Andrea Cardenas, Rosalind Franklin Unversity, Medicine and Science.



Immunolabeling of mixed neuron and glia cultures where astrocytes are strongly and specifically labeled with Anti-GFAP(cat. 621-GFAP, 1:1000, red), and nuclear staining with DAPI (blue).





Immunofluorescence of a section of rat cerebellum showing specific labeling of MeCP2 (cat. 1205-MeCP2, 1:1000, red) in nuclei of neurons and specific labeling of GFAP (cat. 621-GFAP, 1:5000, green) in the network of astroglial cells and projections of Bergmann glia, and Hoechst staining of nuclear DNA.



Immunofluorescence of a section of rat frontal cortex showing labeling of Neurofilament-L (cat. 1452-NFL, 1:500, red) and labeling of GFAP(cat. 621-GFAP, 1:5000, green). The anti-NFL antibody labels cell bodies and processes of pyramidal neurons, as well as dendrites and axons of other neuronal cells. While the anti-GFAP antibody labels the network of glial cells.

Anti-Glial Fibrillary Acidic Protein (GFAP) Antibody - Background

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