

Cat. No: AB-10682

Conjugate: Unconjugated

Size: 100 ul

Clone: POLY

Concentration: 1mg/ml

Host: Rabbit

Isotype: IgG

Immunogen: Purified bovine full length protein

Reactivity: Hu, Ms, Rt, Ct, Mamm.

Applications: Western Blot: 1: 2,500 is recommended Immunocytochemistry: on cell in tissue cultures at 1:1,000 using fluorescent secondary antibody Immunofluorescence: 1:1,000 Immunohistochemistry: in tissue sections (frozen and paraffin-embedded tissues) at 1:500-1:1,000 or 1:2,500 using other enzyme linked method Immunohistochemistry (frozen): 1:500

Molecular Weight: 55kDa

Purification: Serum

Background:

Glial Fibrillary Acidic Protein (GFAP) was discovered by Amico Bignami and coworkers as a major fibrous protein of multiple sclerosis plaques (1). It was subsequently found to be a member of the 10nm or intermediate filament protein family, specifically the intermediate filament protein family Class III, which also includes peripherin, desmin and vimentin. The GFAP protein runs on gels at ~55kDa protein, usually associated with lower molecule weight bands which are thought to be proteolytic fragments and alternate transcripts from the single gene. GFAP is strongly and specifically 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. In many damage and disease states GFAP expression is heavily upregulated in astrocytes. In addition neural stem cells frequently strongly express GFAP. Antibodies to GFAP are therefore very useful as markers of astrocytic cells and neural stem cells. In addition many types of brain tumor, presumably derived from astrocytic cells, heavily express GFAP. Finally, Alexander's disease was recently shown to be caused by point mutations in protein coding region of the GFAP gene (2). All forms of Alexander disease are characterized by the presence of Rosenthal fibers, which are GFAP containing cytoplasmic inclusions found in astrocytes. Human, horse, cow, pig, chicken, rat, mouse and other mammals.

Form: Liquid

Buffer: Antibody is supplied as an aliquot of serum plus 5mM Na₃

Storage: At 4°-8° C for short term. At -20°C For longer term. Avoid repeated freezing and thawing cycles.

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