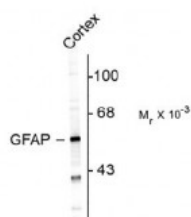




Glial Fibrillary Acidic Protein Antibody

CATALOG NUMBER: 50-268



Western blot of rat cortex lysate showing specific immunolabeling of the ~50k GFAP protein.

Below: Mixed cultures of neurons and glia stained with chicken anti-GFAP (red), and DNA (blue). Astrocytes stain strongly and specifically in a clearly filamentous fashion with this antibody.

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	IHC, WB
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
PREDICTED MOLECULAR WEIGHT:	50
SPECIFICITY:	Specific for the ~50kDa GFAP protein. A lower band at ~45kDa is a proteolytic fragment derived from the GFAP molecule.
IMMUNOGEN:	Recombinant and purified bovine GFAP.
HOST SPECIES:	Chicken

Properties

PURIFICATION:	Total IgY fraction
PHYSICAL STATE:	Liquid
STORAGE CONDITIONS:	Glial Fibrillary Acidic Protein antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
CLONALITY:	Polyclonal
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	GFAP
ACCESSION NO.:	Q28115
PROTEIN GI NO.:	143811396

OFFICIAL SYMBOL: GFAP

GENE ID: 281189

Background

BACKGROUND: Glial Fibrillary Acidic Protein (GFAP) was discovered by Amico Bignami and co-workers as a major fibrous protein of multiple sclerosis plaques. It was subsequently found to be a member of the 10 nm 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.

REFERENCES:

- 1) Bignami A, Eng LF, Dahl D, Uyeda CT. Localization of the glial fibrillary acidic protein in astrocytes by immunofluorescence. Brain Res. 43:429-35 (1972).
- 2) Brenner M, Johnson AB, Boespflug-Tanguy O, Rodriguez D, Goldman JE and Messing A. Mutations in GFAP, encoding glial fibrillary acidic protein, are associated with Alexander disease. Nat Genet 27:117-20 (2001)

FOR RESEARCH USE ONLY

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