

Product datasheet for TA336708

OriGene Technologies, Inc.

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GFAP Chicken Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: IF, WB

Recommended Dilution: WB: 1:50000, FC: 1:100, IF: 1:1000-1:5000, IHC: 1:1000-1:5000, IHC-F: 1:1000-1:5000, IHC-P:

1:1000-1:5000

Reactivity: Human, Mouse, Rat, Bovine, Chicken, Feline

Host: Chicken

Isotype: IgY

Clonality: Polyclonal

Immunogen: GFAP purified from bovine spinal cord [UniProt# Q28115].

Formulation: PBS, 0.03% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid

freeze-thaw cycles.

Concentration: lot specific

Purification: Ammonium sulfate precipitation

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 55 kDa

Gene Name: glial fibrillary acidic protein

Database Link: NP 002046

Entrez Gene 14580 MouseEntrez Gene 24387 RatEntrez Gene 2670 Human

P14136





Background:

GFAP (Glial Fibrillary Acidic Protein) was discovered by Amico Bignami and coworkers as a major fibrous protein of multiple sclerosis plaques. 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. All forms of Alexander disease are characterized by the presence of Rosenthal fibers, which are GFAP containing cytoplasmic inclusions found in astrocytes.

Synonyms: ALXDRD

Note: This GFAP Antibody is useful for Immunocytochemistry/Immunofluorescence, Western blot,

Immunohistochemistry on both paraffin-embedded section and frozen sections, and Flow Cytometry. Use this antibody at about 1:1,000 using fluorescent secondary antibodies or 1:5,000 using peroxidase or other enzyme linked methods. In Western Blot expect to see a band at 55kDa and another at about 48kDa, a breakdown product of the 55kDa band.

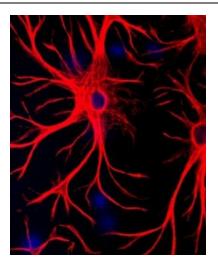
Protein Families: ES Cell Differentiation/IPS

Product images:



Western Blot: GFAP Antibody TA336708 - Western blot of whole rat cerebellum homogenate stained with TA336708. A prominent band running with an apparent SDS-PAGE molecular weight of ~50kDa corresponds to rodent GFAP. A lower band at ~45kDa is derived fr





Immunocytochemistry/Immunofluorescence: GFAP Antibody TA336708 - Mixed cultures of neurons and glia stained with TA336708 (red), and DNA (blue). Astrocytes stain strongly and specifically in a clearly filamentous fashion with this antibody.