Anti-GFAP Antibody

R1308-9

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 50 kDa

Description: GFAP, a class-III intermediate filament, is a cell-specific marker that, during the development of the central nervous system, distinguishes astrocytes from other glial cells. In particular, vimentin filaments are present at early developmental stages, while GFAP filaments are characteristic of differentiated and mature brain astrocytes. In addition, GFAP intermediate filaments are also present in nonmyelin-forming Schwann cells in the peripheral nervous system.

Immunogen: Synthetic peptide within N-terminal human GFAP.

Positive control: Human brain tissue lysates, mouse brain tissue lysates, A172, human brain tissue, rat hippocampus tissue.

Subcellular location: Cytoplasm, Intermediate filament.

Database links: SwissProt: P14136 Human

Recommended Dilutions:

WB	1:2,000
IF-Cell	1:50-1:200
IHC-P	1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

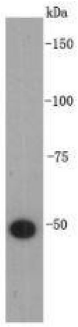

Fig1: Western blot analysis on human brain tissue lysates using anti-GFAP rabbit polyclonal antibodies.

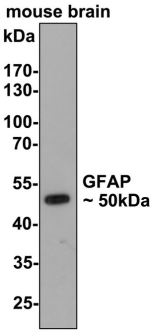

Fig2: Western blot analysis of GFAP on mouse brain tissue lysates with Rabbit anti-GFAP antibody (R1308-9) at 1/500 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 50 kDa
Observed band size: 50 kDa

Exposure time: 1 minute;

10% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (R1308-9) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

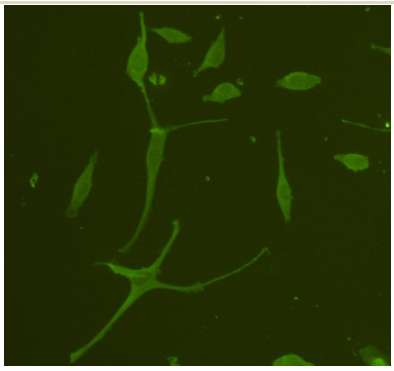

Fig3: Immunofluorescent staining of A172 cells using anti- GFAP rabbit polyclonal antibody.

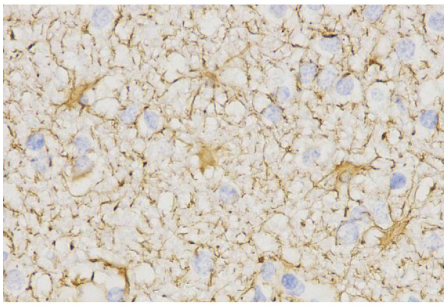

Fig4: Immunohistochemical analysis of paraffin-embedded human brain tissue using anti- GFAP rabbit polyclonal antibody.

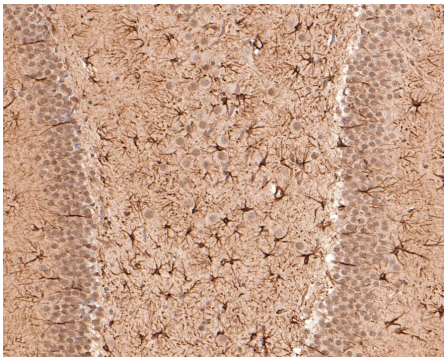

Fig5: Immunohistochemical analysis of paraffin-embedded rat hippocampus tissue with Rabbit anti-GFAP antibody (R1308-9) at 1/800 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (R1308-9) at 1/800 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. "A new splice variant of glial fibrillary acidic protein GFAPepsilon, interacts with the presenilin proteins." Nielsen A.L., Holm I.E., Johansen M., Bonven B., Jorgensen P., Jorgensen A.L. J. Biol. Chem. 277:29983-29991(2002)
2. "Mutations in GFAP, encoding glial fibrillary acidic protein, are associated with Alexander disease." Brenner M., Johnson A.B., Boespflug-Tanguy O., Rodriguez D., Goldman J.E., Messing A. Nat. Genet. 27:117-120(2001)