

#### Goat Anti-GFAP Antibody

Peptide-affinity purified goat antibody Catalog # AF1477a

#### Specification

# **Goat Anti-GFAP Antibody - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, Pep-ELISA P14136 NP\_002046, 2670, 14580 (mouse), 24387 (rat) Human, Mouse Rat, Dog Goat Polyclonal 100ug/200ul IgG 49880

## **Goat Anti-GFAP Antibody - Additional Information**

Gene ID 2670

**Other Names** Glial fibrillary acidic protein, GFAP, GFAP

Dilution WB~~1:1000 Pep-ELISA~~N/A

Format

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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

Goat Anti-GFAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **Goat Anti-GFAP Antibody - Protein Information**

Name GFAP

**Function** 

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.



**Cellular Location** 

Cytoplasm. Note=Associated with intermediate filaments

**Tissue Location** 

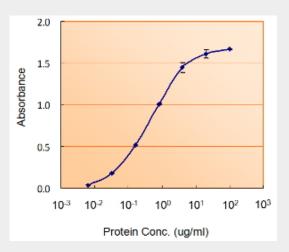
Expressed in cells lacking fibronectin.

## **Goat Anti-GFAP Antibody - Protocols**

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

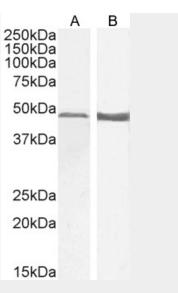
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **Goat Anti-GFAP Antibody - Images**

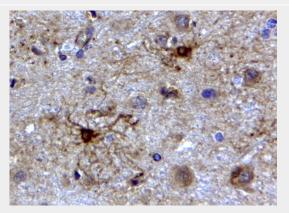


AF1477a (5ug/ml) as the reporter with EB002015 as the capture rabbit antibody (5ug/ml). This data is from a previous batch, not on sale.

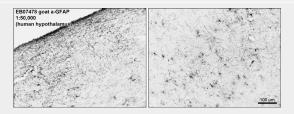




EB07478 (0.001µg/ml) staining of Human Cerebellum (A) and Cerebral Cortex (B) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

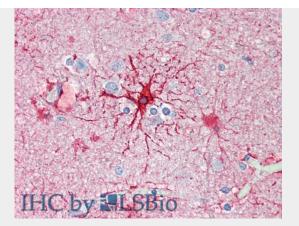


EB07478 (2µg/ml) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining. **This data is from a previous batch, not on sale.** 

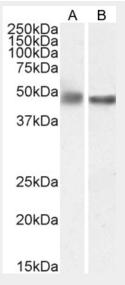


EB07478 (0.01µg/ml) staining of PFA-perfused cryosection of Human Hypothalamus. Antigen retrieval with citrate buffer pH 6 at 80C for 30min, HRP-staining with Ni-DAB after Biotin-SP-antigoat amplification. Data obtained by Prof. Erik Hrabovszky, Inst, Ex

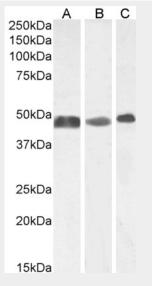




EB07478 (5µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. This data is from a previous batch, not on sale.

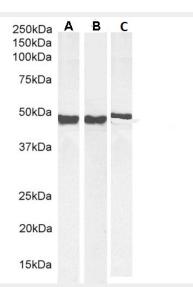


EB07478 (0.003µg/ml) staining of Mouse (A) and (0.01ug/ml) Rat (B) Brain lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

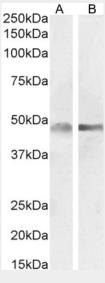


EB07478 (0.001µg/ml) staining of Human Brain (Cerebellum) (A), (0.3ug/ml) Mouse (B) and (0.01ug/ml) Rat (C) Brain lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





EB07478 (0.01µg/ml) staining of Human Cerebellum (A),Mouse Brain (B) and (0.003ug/ml) Rat Brain (C) lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07478 (0.005µg/ml) staining of Human Cerebellum (A) and (0.01ug/ml) Cerebral Cortex (B) (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB07478 (0.1ug/ml) staining of Rat Brain lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.

#### Goat Anti-GFAP Antibody - Background

This gene encodes one of the major intermediate filament proteins of mature astrocytes. It is used as a marker to distinguish astrocytes from other glial cells during development. Mutations in this gene cause Alexander disease, a rare disorder of astrocytes in the central nervous system. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

### Goat Anti-GFAP Antibody - References

Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.

Withaferin A targets intermediate filaments glial fibrillary acidic protein and vimentin in a model of retinal gliosis. Bargagna-Mohan P, et al. J Biol Chem, 2010 Mar 5. PMID 20048155.

Specific human astrocyte subtype revealed by affinity purified GFAP antibody; unpurified serum cross-reacts with neurofilament-L in Alzheimer. Middeldorp J, et al. PLoS One, 2009 Nov 4. PMID 19888461.

Redox proteomic analysis of carbonylated brain proteins in mild cognitive impairment and early Alzheimer's disease. Sultana R, et al. Antioxid Redox Signal, 2010 Mar. PMID 19686046.

Glial fibrillary acidic protein in tumor types with cartilaginous differentiation. Santos GC, et al. Mod Pathol, 2009 Oct. PMID 19668151.