

# **Rabbit Anti-GFAP antibody**

# SL10950R

| Product Name:          | GFAP   |
|------------------------|--|
| Chinese Name:          | <b>胶</b> 质纤维 <b>酸性蛋白抗体</b>   |
| Alias:                 | Astrocyte; FLJ45472; GFAP; Glial Fibrillary Acidic Protein; Intermediate filament protein; GFAP HUMAN.   |
| Organism Species:      | Rabbit   |
| Clonality:             | Polyclonal   |
| React Species:         | Human, Mouse, Rat, Chicken, Pig, Cow, Rabbit, Sheep,   |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800Flow-Cyt=3µg/Test(Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.  |
| Molecular weight:      | 48kDa  |
| Cellular localization: | cytoplasmic  |
| Form:                  | Lyophilized or Liquid  |
| Concentration:         | 1mg/ml   |
| immunogen:             | KLH conjugated synthetic peptide derived from human GFAP:341-432/432   |
| Lsotype:               | IgG  |
| Purification:          | affinity purified by Protein A   |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.   |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.   |
| PubMed:                | <u>PubMed</u>  |
| Product Detail:        | 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. [provided by RefSeq, Oct 2008] |

#### **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.

#### **Subunit:**

Interacts with SYNM. Isoform 3 interacts with PSEN1 (via N-terminus).

#### **Subcellular Location:**

Cytoplasm. Note=Associated with intermediate filaments.

### Tissue Specificity:

Expressed in cells lacking fibronectin.

#### **Post-translational modifications:**

Phosphorylated by PKN1.

#### DISEASE:

Defects in GFAP are a cause of Alexander disease (ALEXD) [MIM:203450]. Alexander disease is a rare disorder of the central nervous system. It is a progressive leukoencephalopathy whose hallmark is the widespread accumulation of Rosenthal fibers which are cytoplasmic inclusions in astrocytes. The most common form affects infants and young children, and is characterized by progressive failure of central myelination, usually leading to death usually within the first decade. Infants with Alexander disease develop a leukoencephalopathy with macrocephaly, seizures, and psychomotor retardation. Patients with juvenile or adult forms typically experience ataxia, bulbar signs and spasticity, and a more slowly progressive course.

#### Similarity:

Belongs to the intermediate filament family.

#### SWISS:

P14136

#### Gene ID:

2670

#### Database links:

Entrez Gene: 281189Cow

Entrez Gene: 2670Human

Entrez Gene: 14580Mouse

Entrez Gene: 24387Rat

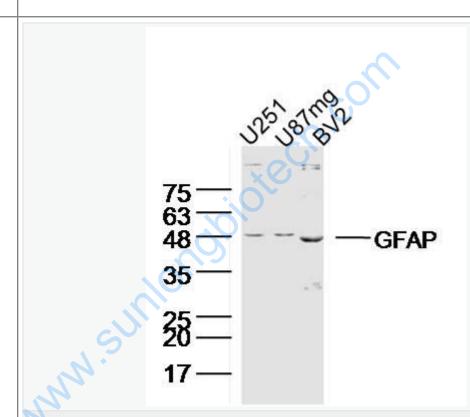
Omim: 137780Human

SwissProt: Q28115Cow SwissProt: P14136Human

SwissProt: P03995Mouse

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



#### Picture:

## Sample:

U251(human) Cell Lysate at 40 ug

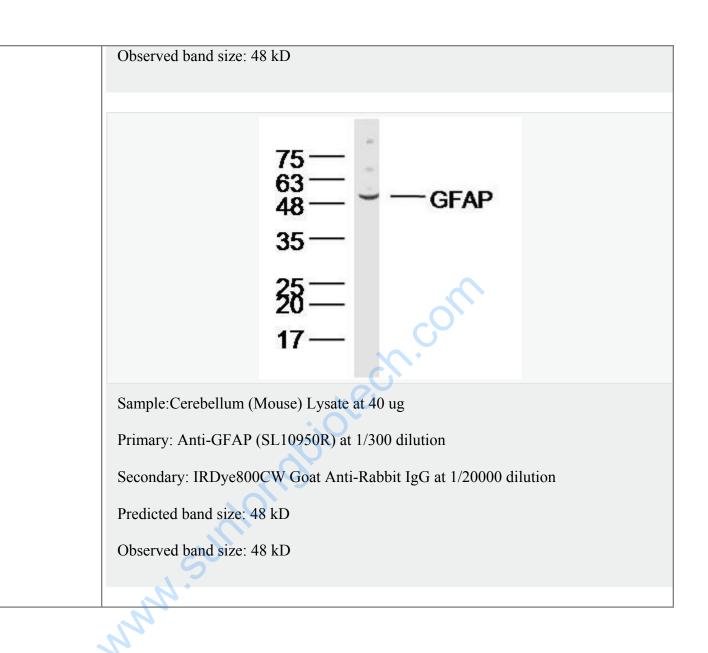
U87MG(human) Cell Lysate at 40 ug

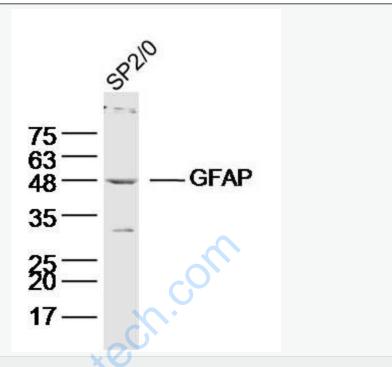
BV2(mouse) Cell Lysate at 40 ug

Primary: Anti-GFAP (SL10950R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD





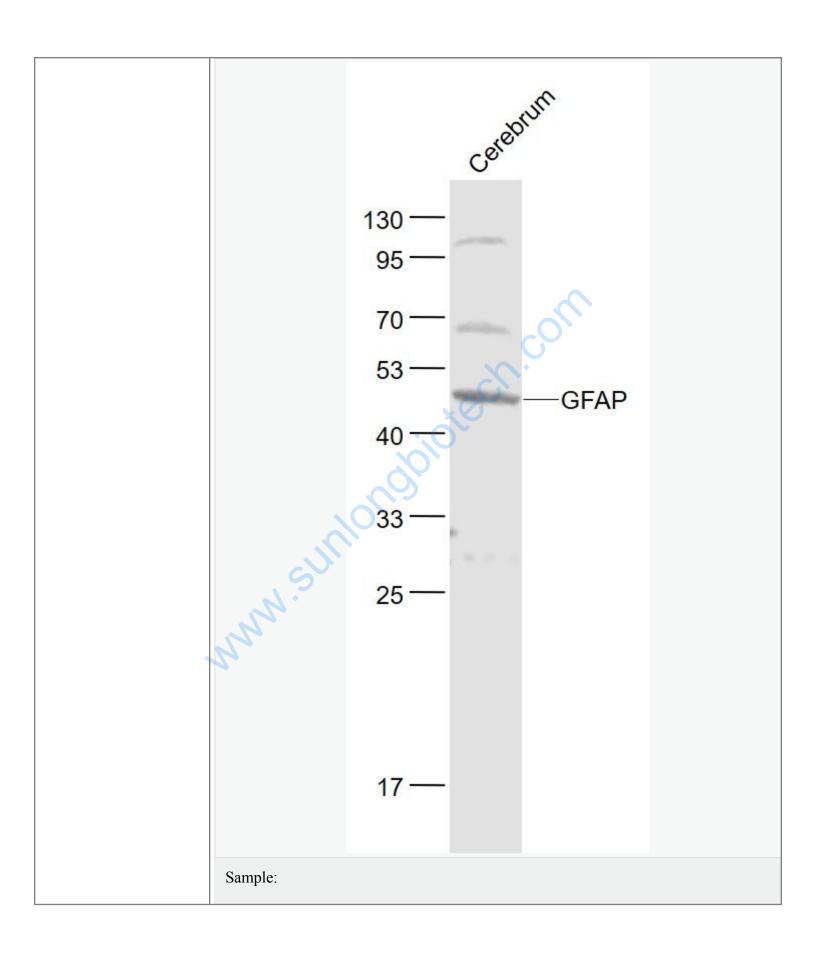
Sample:SP2/0(human) Cell Lysate at 40 ug

Primary: Anti-GFAP (SL10950R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 48 kD



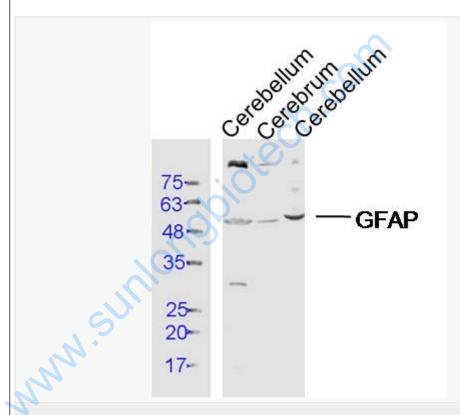
Cerebrum (Rat) Lysate at 40 ug

Primary: Anti- GFAP (SL10950R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 48 kD



Sample:

Cerebellum (Rat) Lysate at 40 ug

Cerebrum (Mouse) Lysate at 40 ug

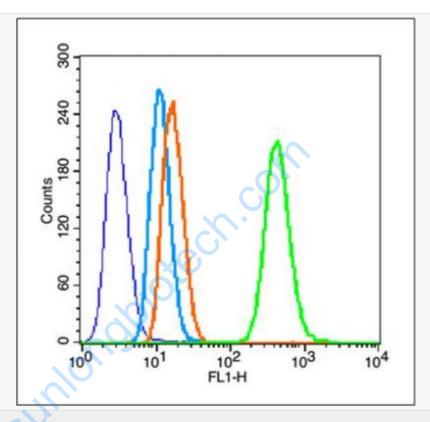
Cerebellum (Mouse) Lysate at 40 ug

Primary: Anti- GFAP (SL10950R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Blank control (blue line): Hela (fixed with 80% methanol (5 min at -20°C) and then permeabilized with 0.1% PBS-Tween for 20 min at room temperature).

Primary Antibody (green line): Rabbit Anti-GFAP antibody (SL10950R), dilution: 3μg /10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-PE, Dilution: 1µg /test.