

## Rabbit Anti-GFAP antibody

SL0199R

**Product Name** GFAP

**Chinese Name** 胶质纤维酸性蛋白抗体

**Alias** Astrocyte Marker; FLJ45472; GFAP; Glial Fibrillary Acidic Protein; Intermediate filament protein; GFAP\_HUMAN.

**Research Area** Tumour Cell biology immunology Neurobiology Signal transduction Stem cells Cell adhesion molecule Cell type markers Cytoskeleton

**Immunogen Species** Rabbit

**Clonality** Polyclonal

**React Species** Human, Mouse, Rat, (predicted: Dog, Pig, Cow, Rabbit, Sheep, )

**Applications** IHC-P=1:200-1000,IHC-F=1:200-1000,IF=1:200-1000,Flow-Cyt=1 $\mu$ g/Test (Paraffin sections need antigen repair)  
not yet tested in other applications.  
optimal dilutions/concentrations should be determined by the end user.

**Theoretical molecular weight** 48kDa

**Cellular localization** cytoplasmic

**Form** Liquid

**Concentration** 1mg/ml

**immunogen** KLH conjugated synthetic peptide derived from human GFAP: 51-150/432

**Lsotype** IgG

**Purification** affinity purified by Protein A

**Buffer Solution** 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

**Storage** Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

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

**PubMed** [PubMed](#)

**Product** This gene encodes one of the major intermediate filament proteins of mature astrocytes. It is

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**Detail**

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: 281189](#) Cow

[Entrez Gene: 2670](#) Human

[Entrez Gene: 14580](#) Mouse

[Entrez Gene: 24387](#) Rat

[Omim: 137780](#) Human

[SwissProt: Q28115](#) Cow

[SwissProt: P14136](#) Human

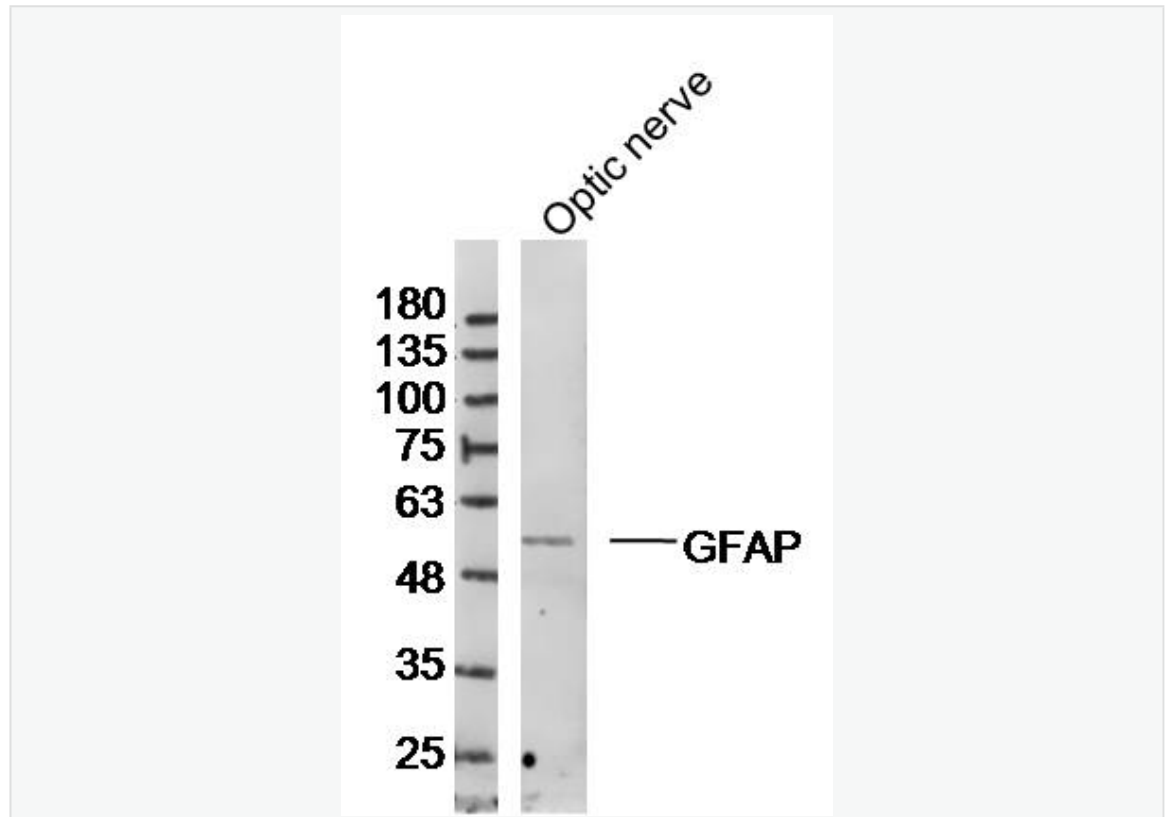
[SwissProt: P03995](#) Mouse

### 星形胶质细胞 Maker （Astrocyte Marker）

GFAP 是一个 56kDa 的中间丝蛋白（intermediate filament, IF），在中枢神经系统发育期是一个特异性的 Maker，以区别星形细胞和其它胶质细胞。GFAP 表达在皮层和海马,急、慢性皮质酮治疗时表达减少。

GFAP 可以和人、大鼠、小鼠的 GFAP 反应，在正常和 Tumour 性的星形胶质细胞阳性表达，而神经节细胞、神经元、成纤维细胞、少突胶质细胞和这些细胞来源的 Tumour 细胞阴性表达，主要用于星形胶质瘤等中枢神经系统 Tumour 的诊断和鉴别诊断,GFAP 的缺乏可导致 AD 病。

Product  
Picture



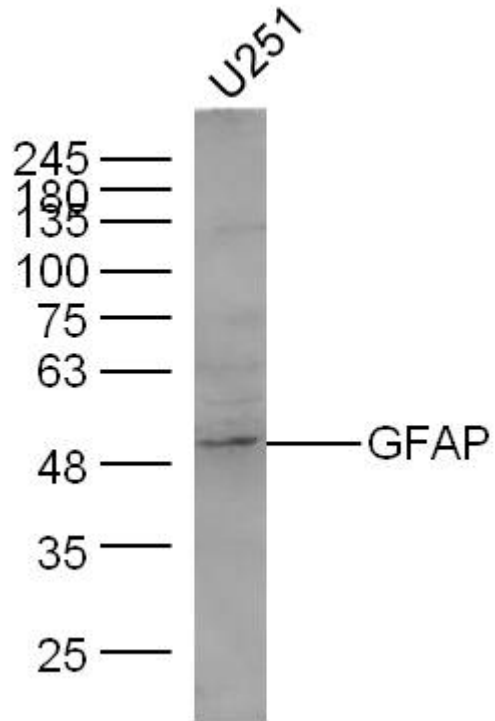
Sample:Optic nerve (Rat)cell Lysate at 40 ug

Primary: Anti-GFAP(SL0199R)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-RabbitIgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 53 kD



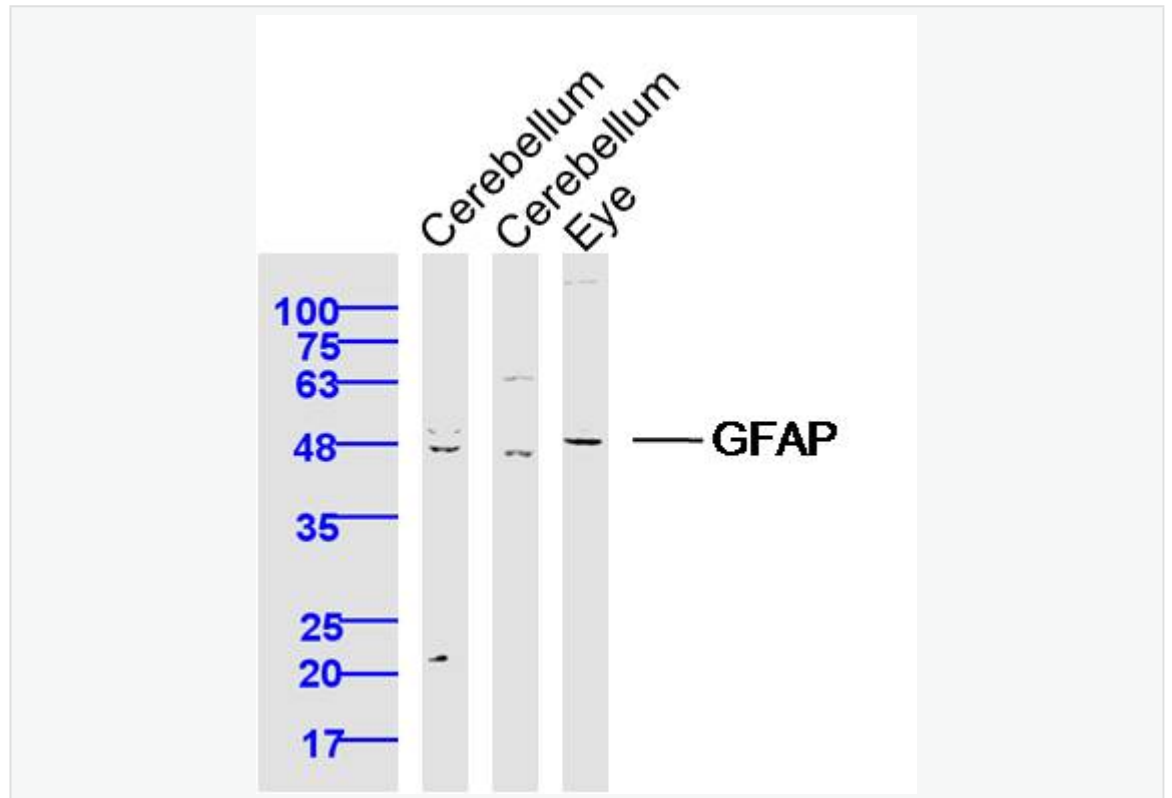
Sample: U251 Cell Lysate at 40 ug

Primary: Anti- GFAP (SL0199R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 48 kD

Observed band size: 50 kD



Sample:

Cerebellum (Rat) Lysate at 40 ug

Cerebellum (Mouse) Lysate at 40 ug

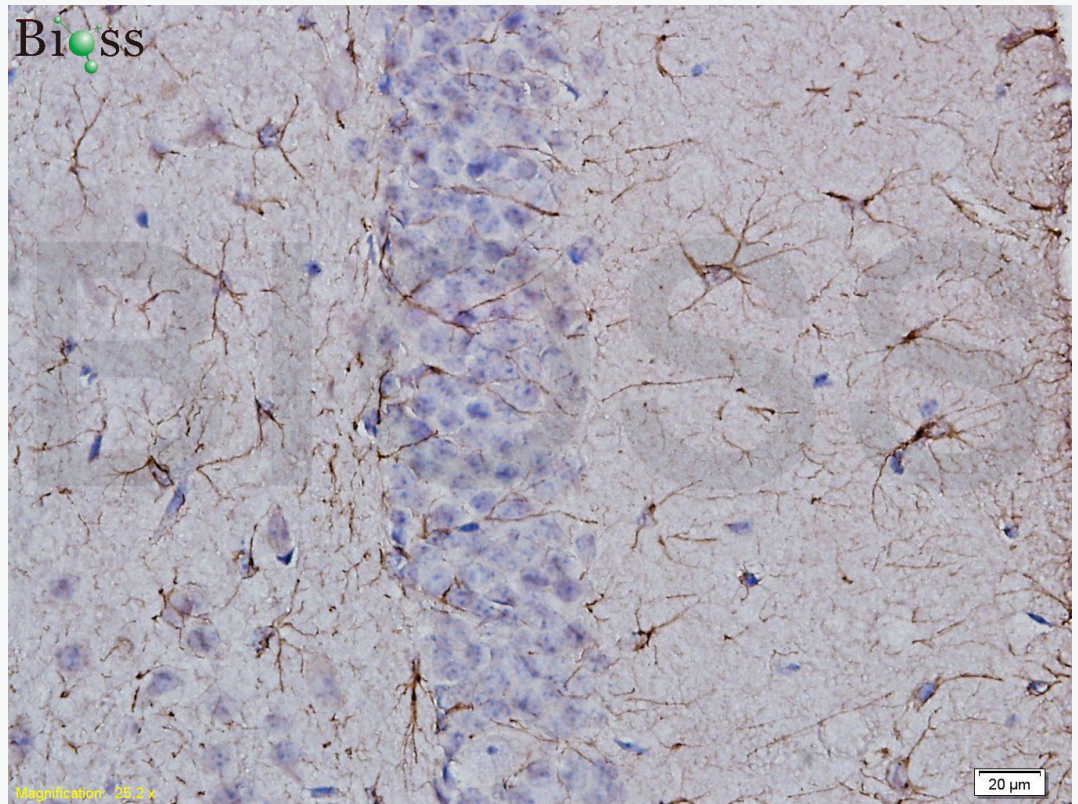
Eye (Mouse) Lysate at 40 ug

Primary: Anti-GFAP (SL0199R) at 1/300 dilution

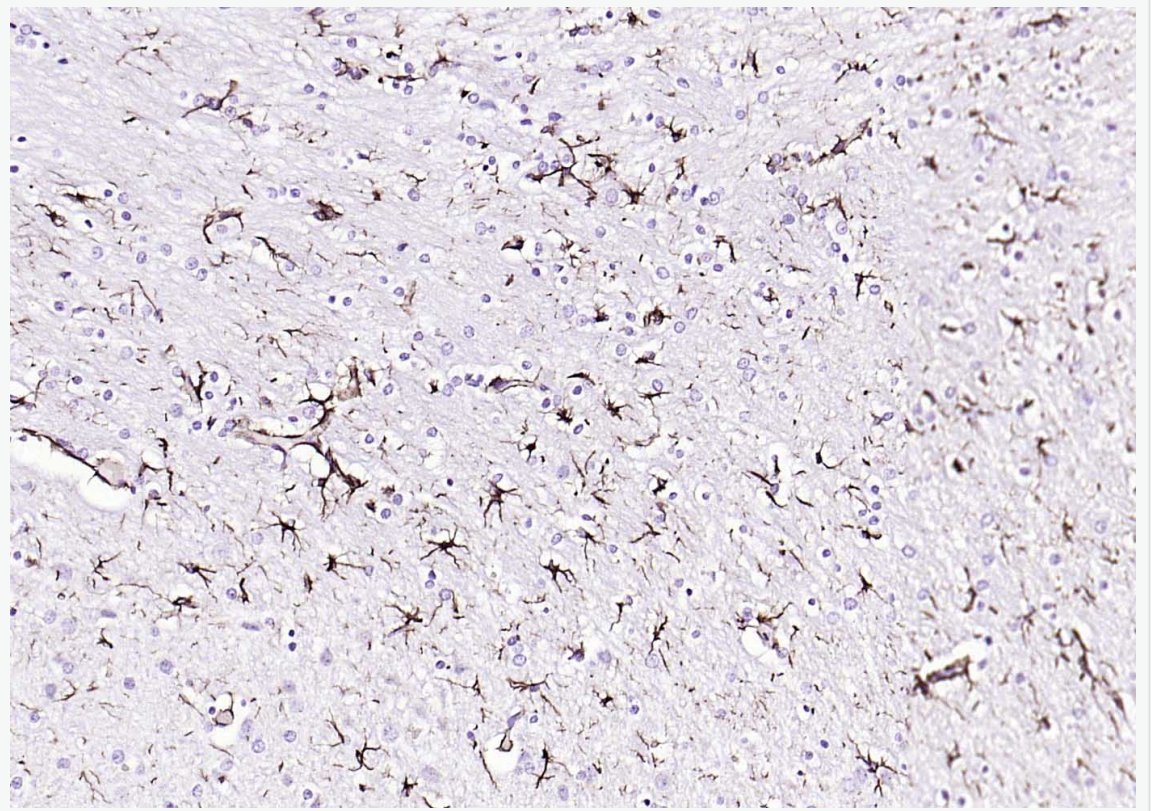
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

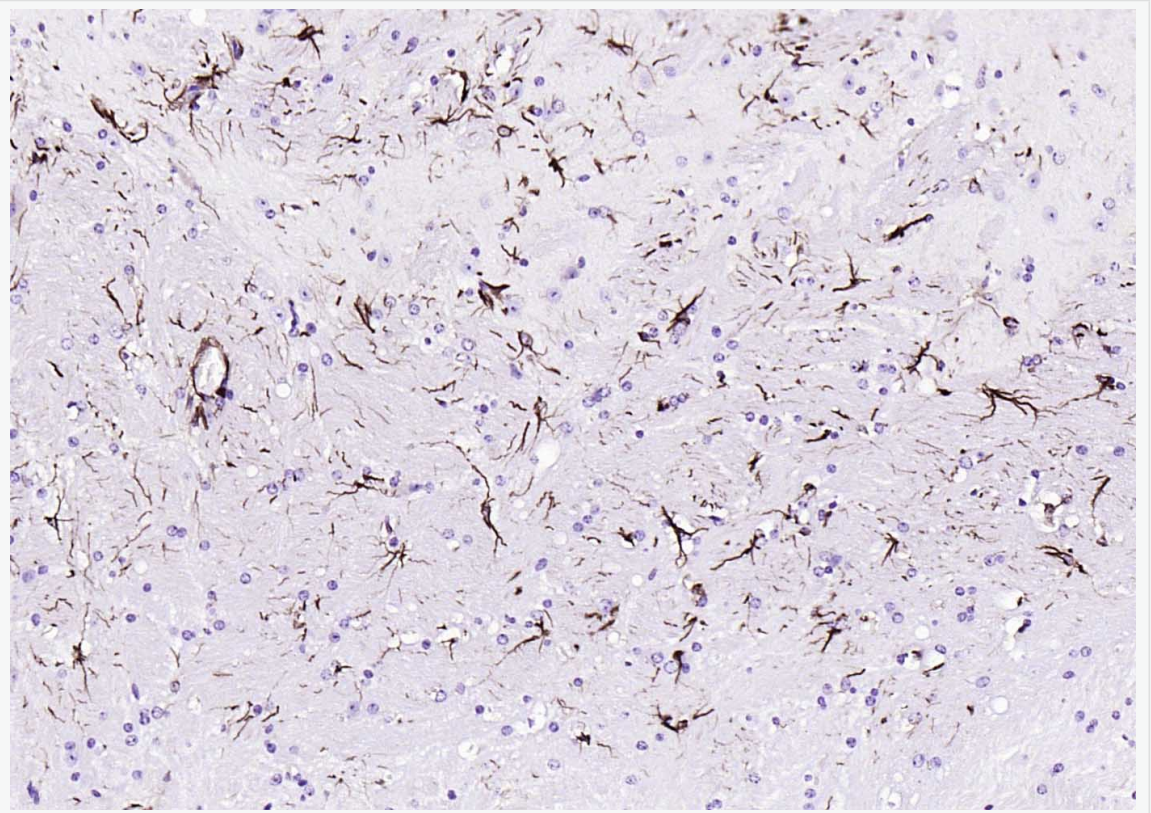
Observed band size: 48 kD



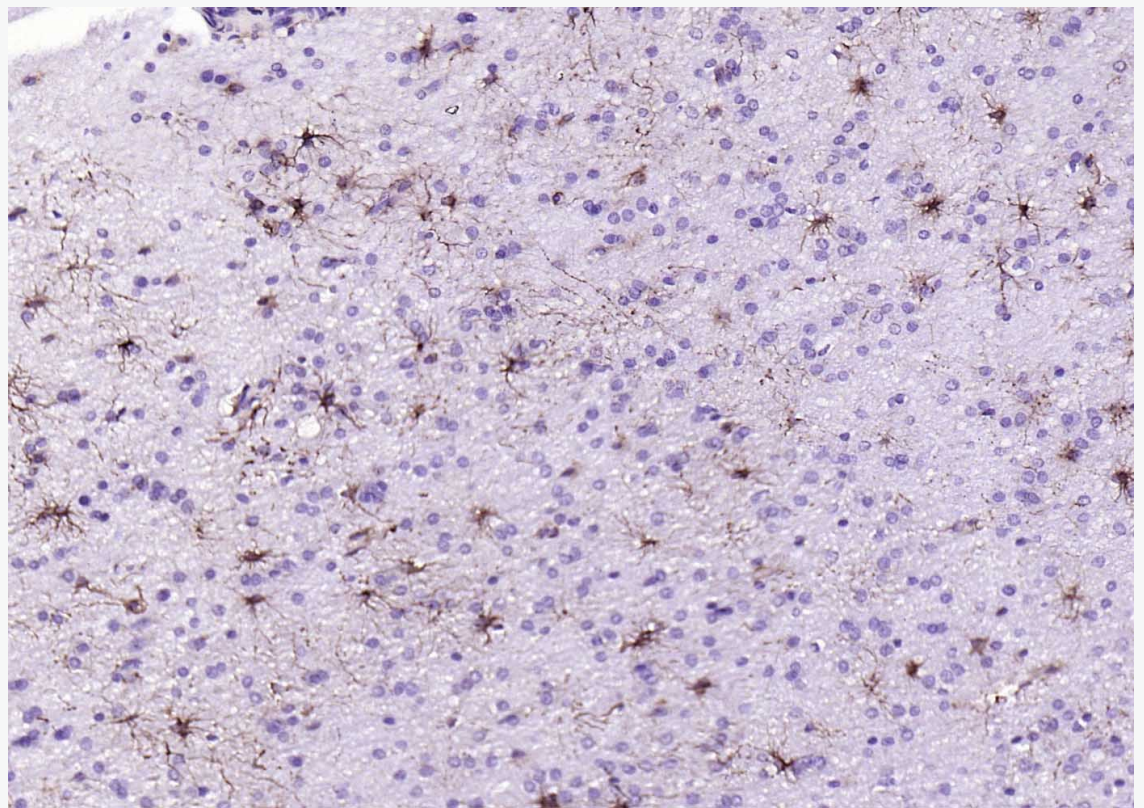
Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 1M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-GFAP Polyclonal Antibody, Unconjugated(SL0199R) 1:400, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



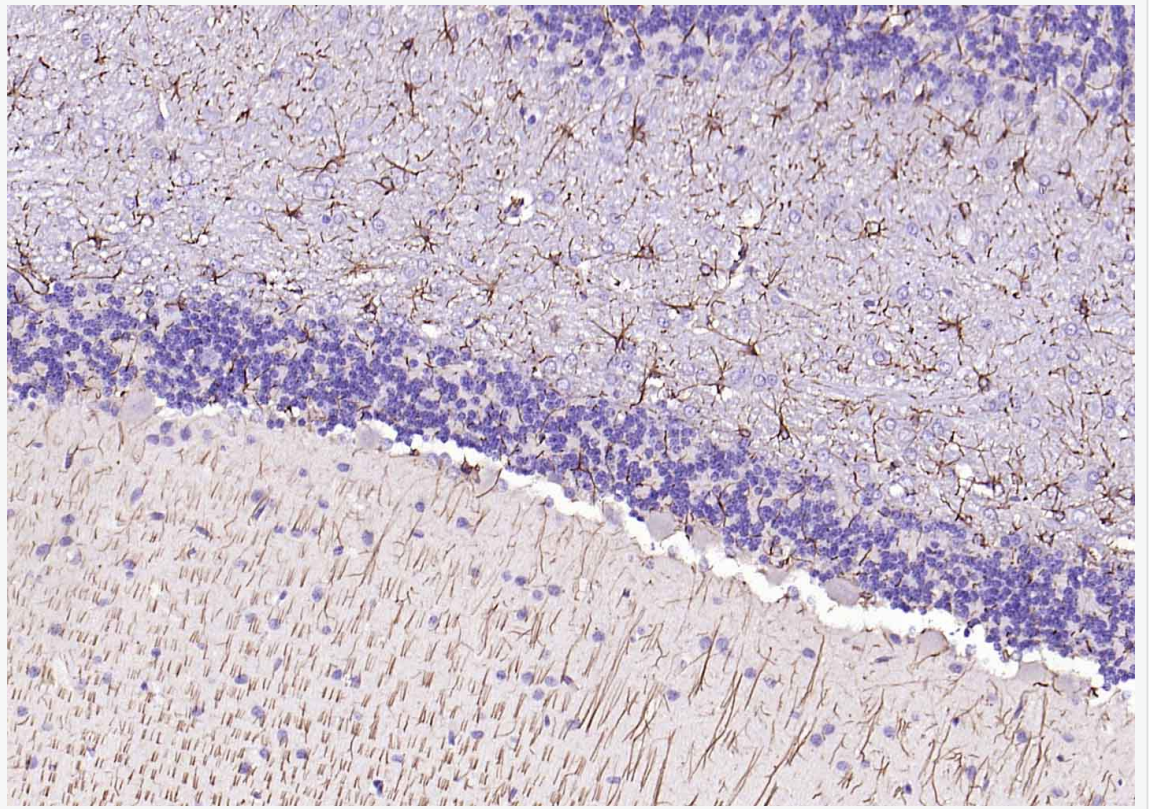
Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



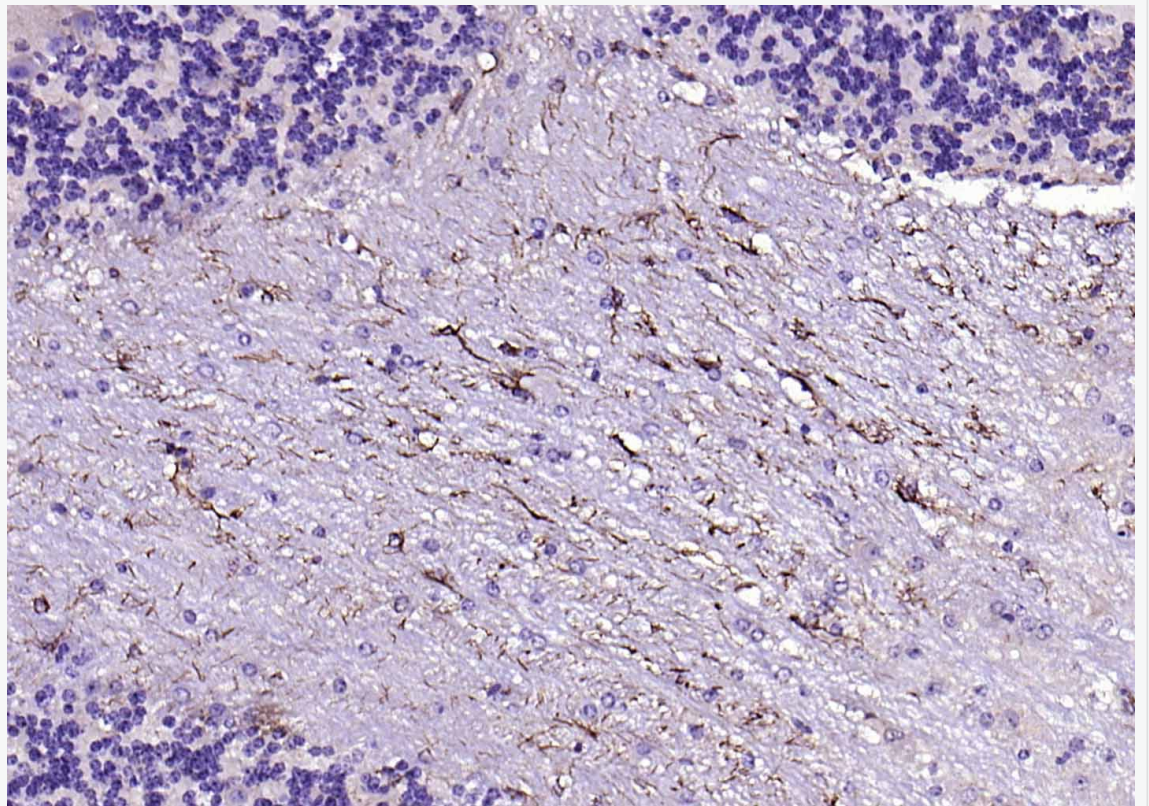
Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



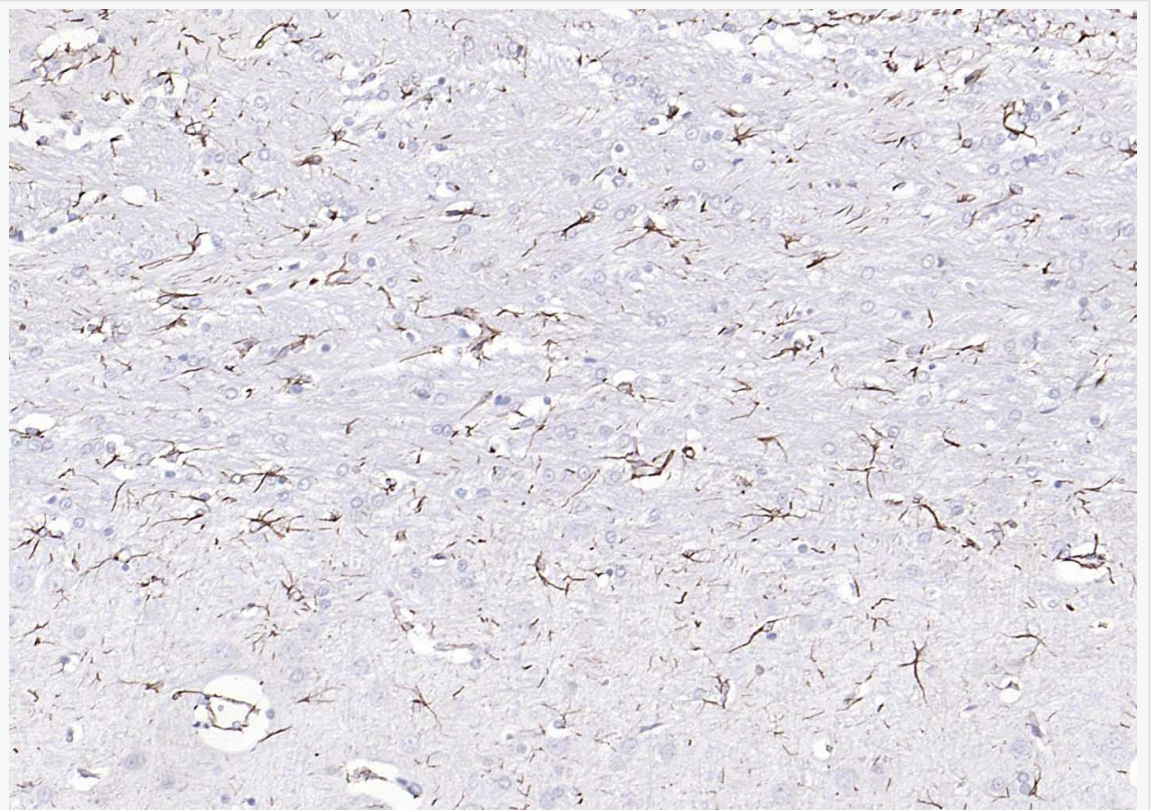
Paraformaldehyde-fixed, paraffin embedded (human glioma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



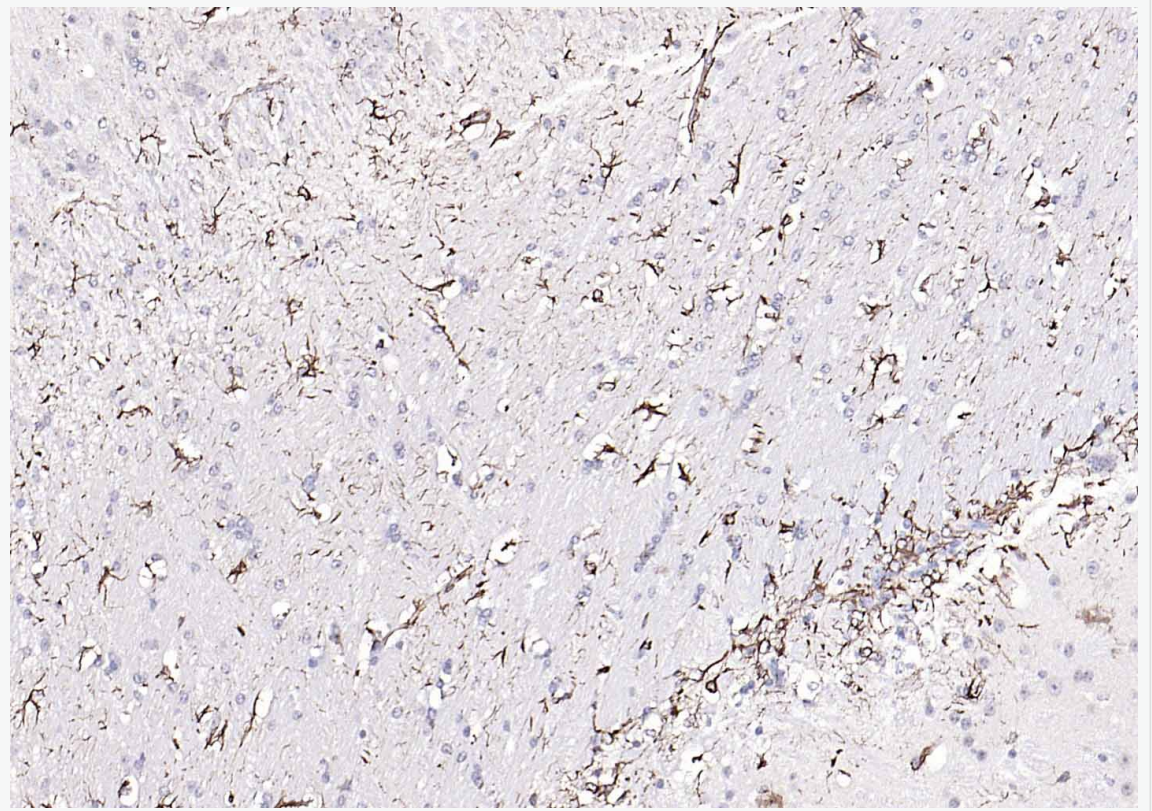
Paraformaldehyde-fixed, paraffin embedded (rat cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



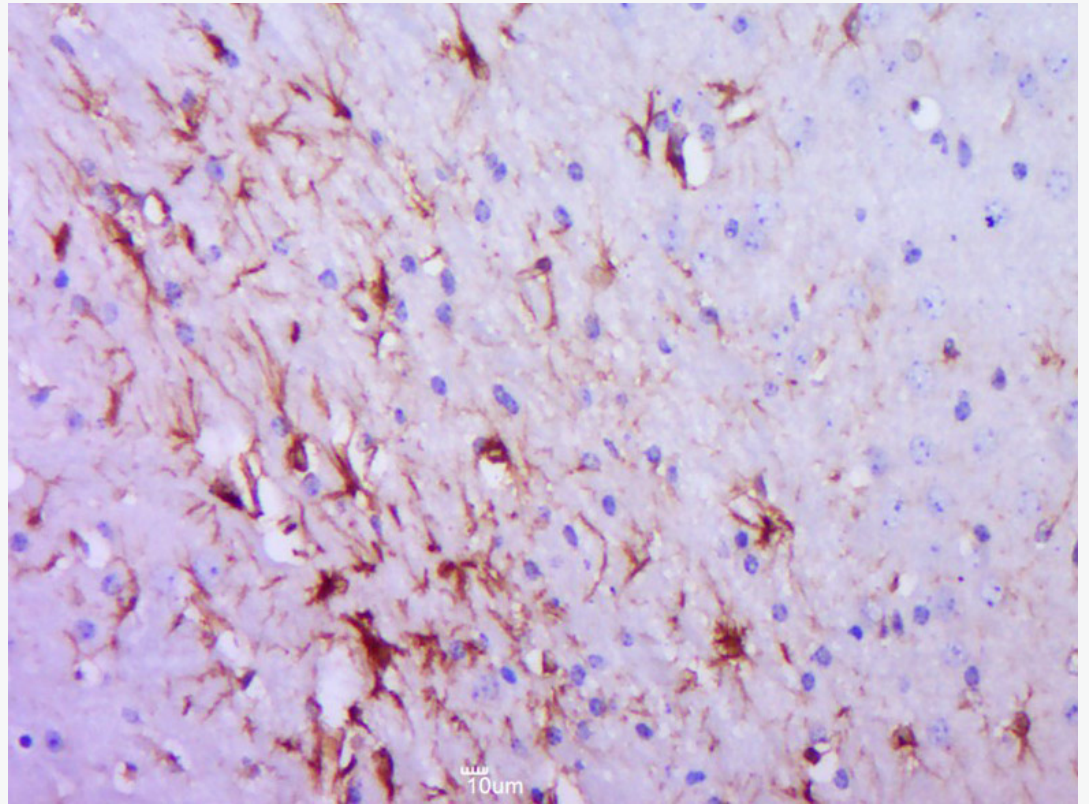
Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



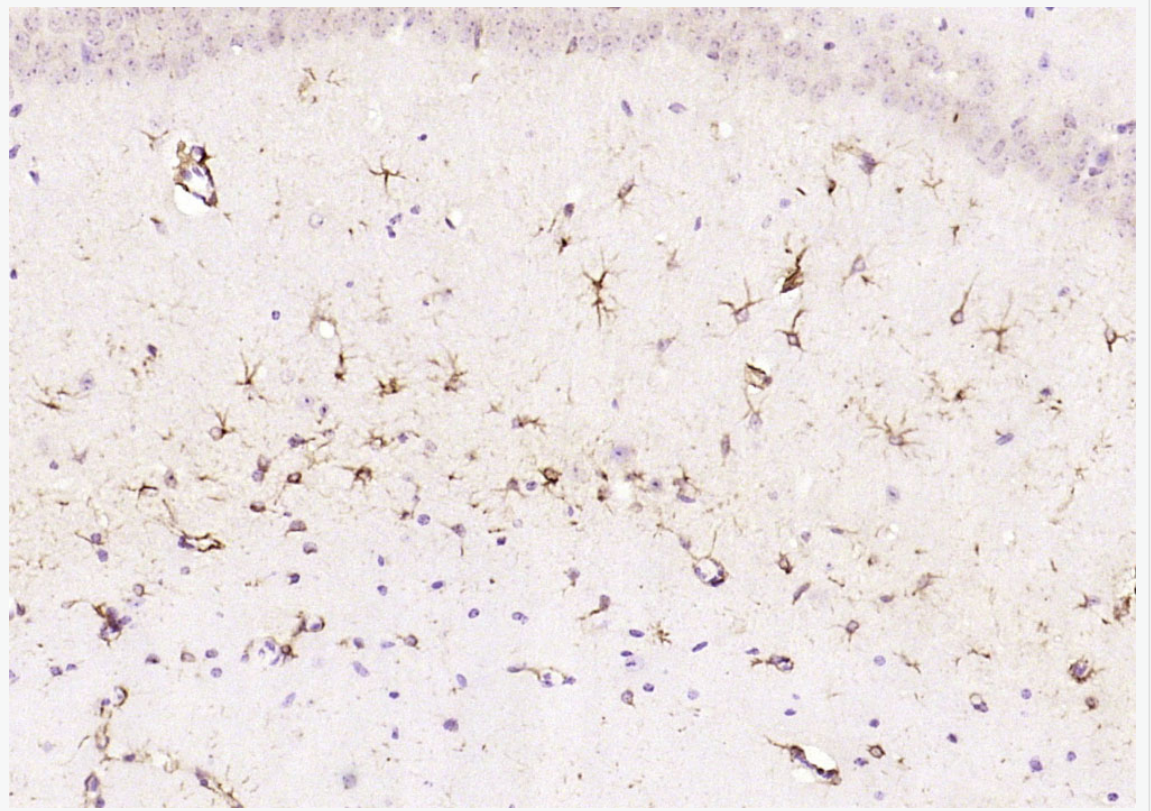
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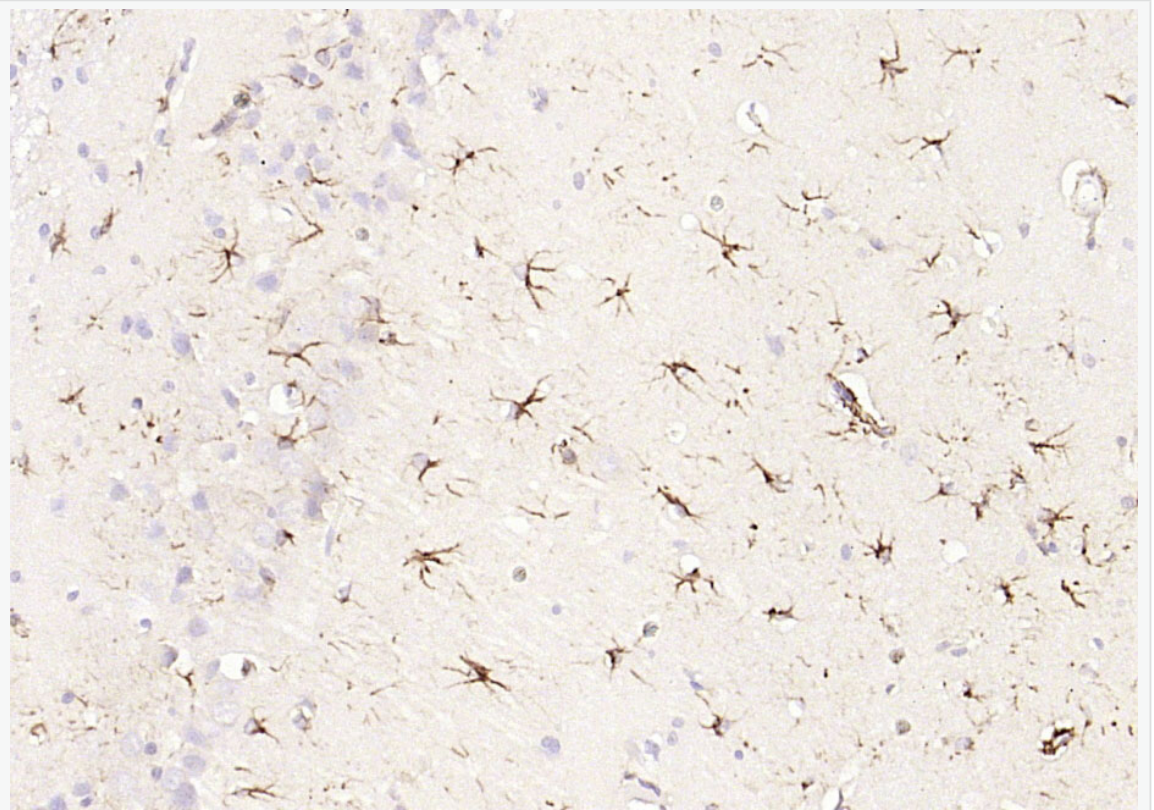
Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



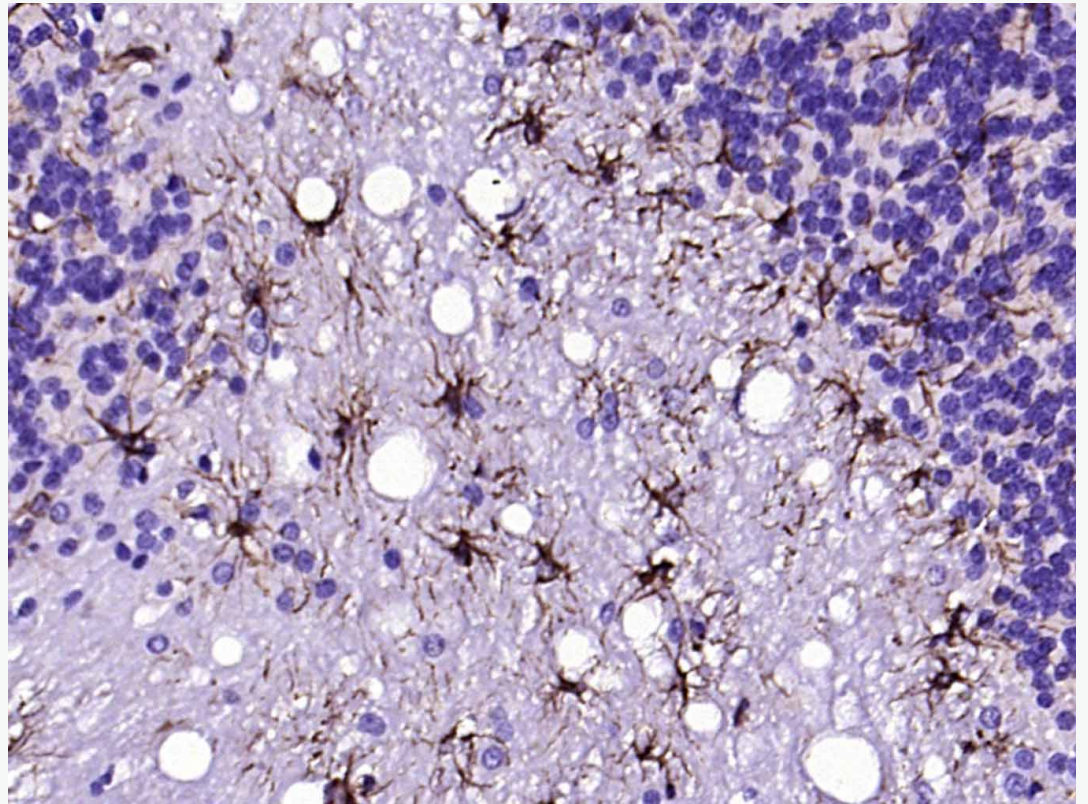
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GFAP) Polyclonal Antibody, Unconjugated (SL0199R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



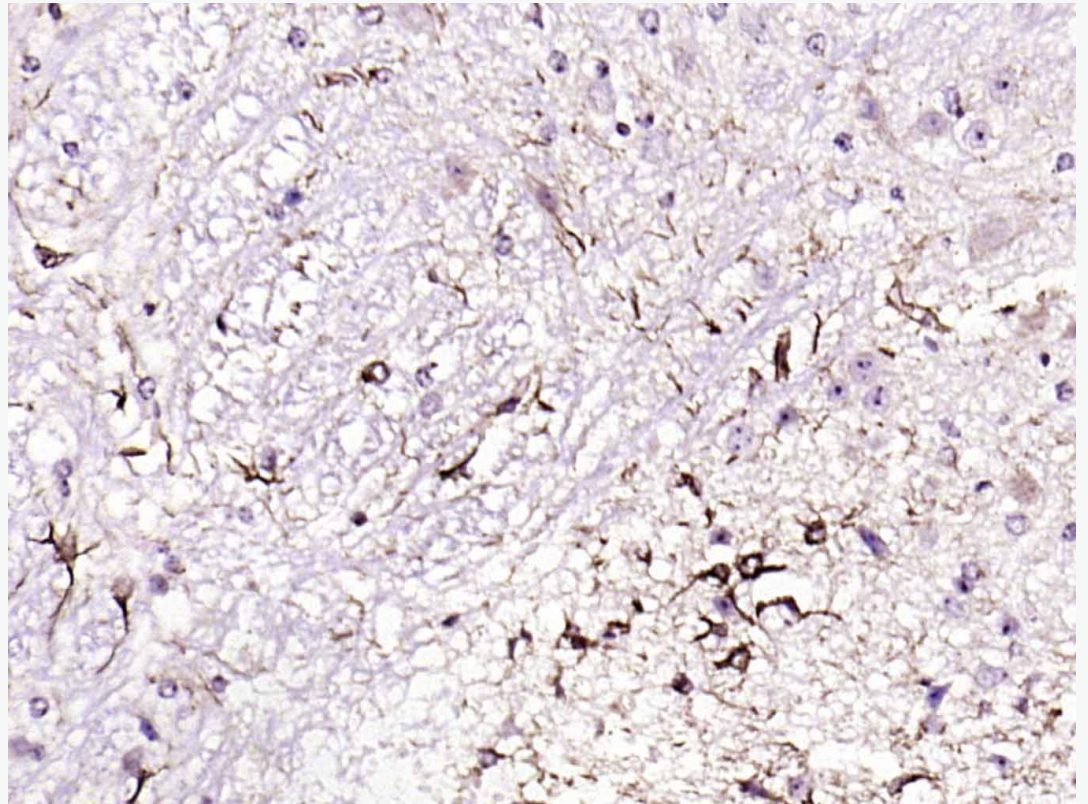
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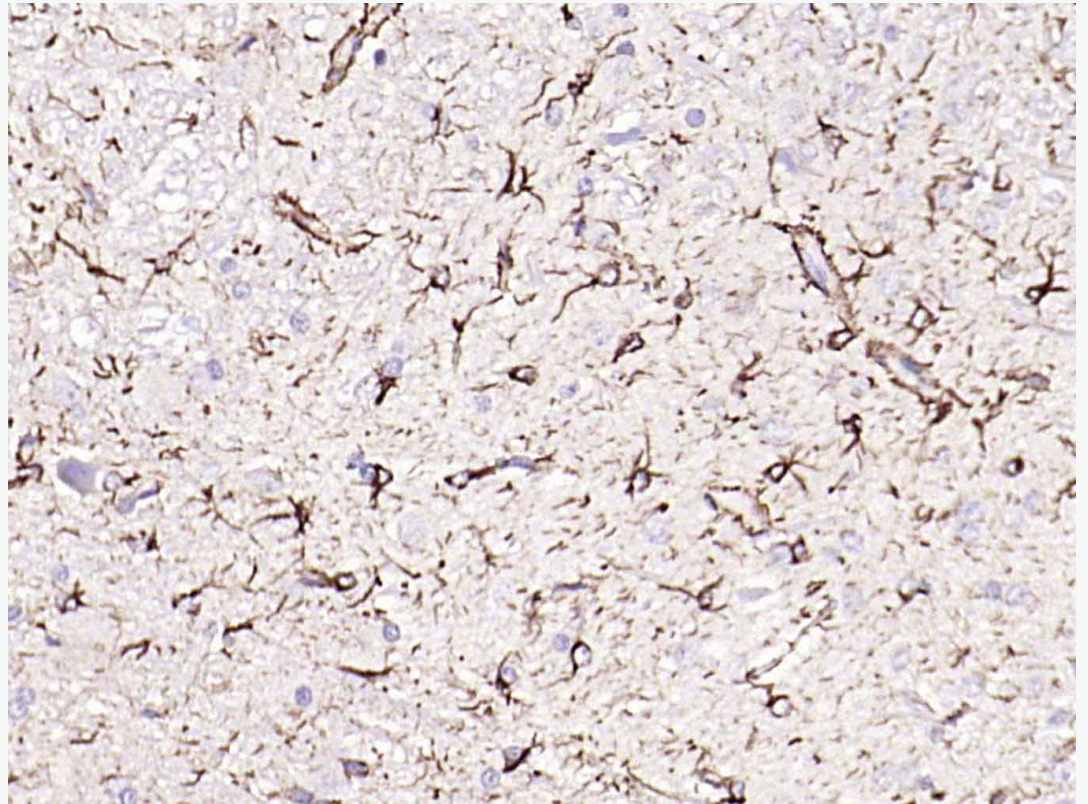
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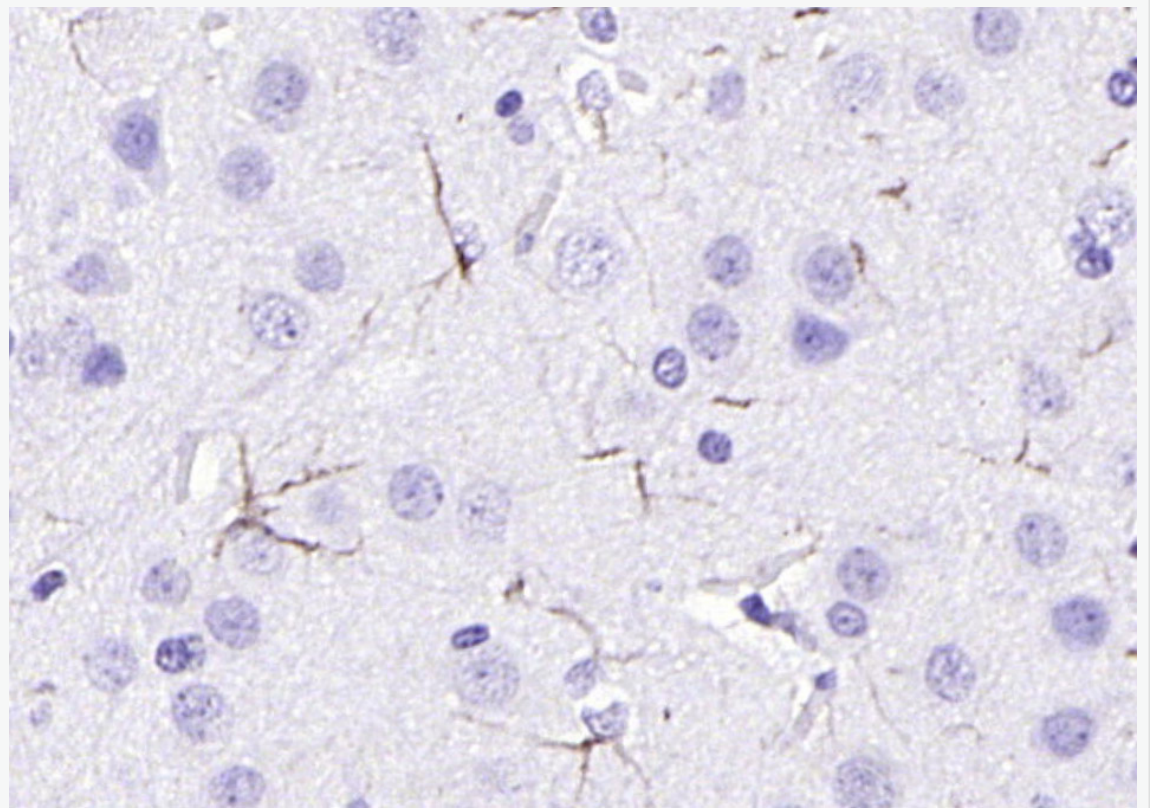
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