

Mouse Anti-GFAP (ready to use)antibody (BH0010)

BH0010

Product Name	GFAP(ready to use)
Chinese Name	GFAP 单克隆抗体 (工作液)
Alias	Astrocyte; FLJ45472; GFAP; Glial Fibrillary Acidic Protein; Intermediate filament protein; GFAP_HUMAN. 胶质纤维酸性蛋白单克隆抗体
Research Area	Tumour Cell biology Neurobiology
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	7D8
React Species	Human
Applications	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	49kDa
Cellular localization	cytoplasmic
Form	Liquid
immunogen	Recombinant mouse GFAP full length,
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M PBS(pH7.4) with 1% BSA and 0.1% Proclin300
Storage	Store at 2-8 °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](#)

Glial fibrillary acidic protein (GFAP) is an intermediate filament (IF) protein that is expressed by numerous cell types of the central nervous system (CNS) including astrocytes and ependymal cells during development. GFAP has also been found to be expressed in glomeruli and peritubular fibroblasts taken from rat kidneys Leydig cells of the testis in both hamsters and humans, human keratinocytes, human osteocytes and chondrocytes and stellate cells of the pancreas and liver in rats. It is closely related to its non-epithelial family members, vimentin, desmin, and peripherin, which are all involved in the structure and function of the cell's cytoskeleton. GFAP is thought to help to maintain astrocyte mechanical strength, as well as the shape of cells but its exact function remains poorly understood, despite the number of studies using it as a cell marker.

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.

Product Detail

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: 2670](#) Human

[Omim: 137780](#) Human

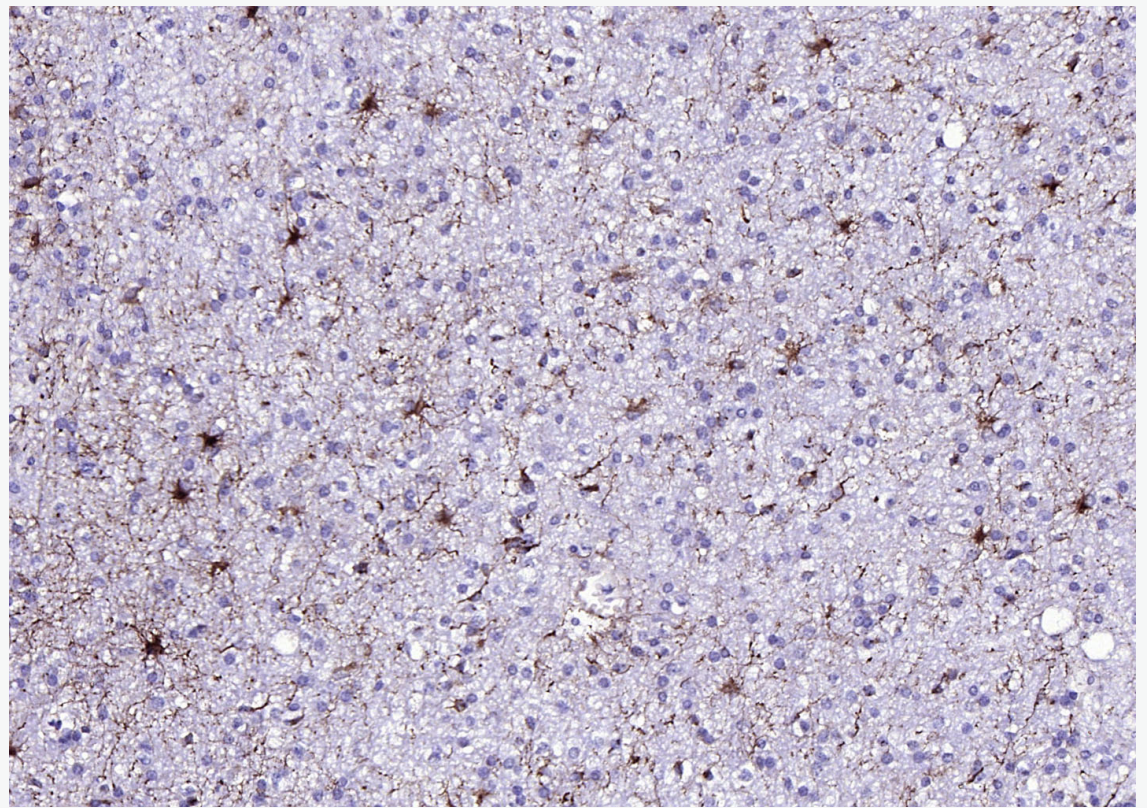
[SwissProt: P14136](#) Human

星形胶质细胞 Marker (Astrocyte Marker)

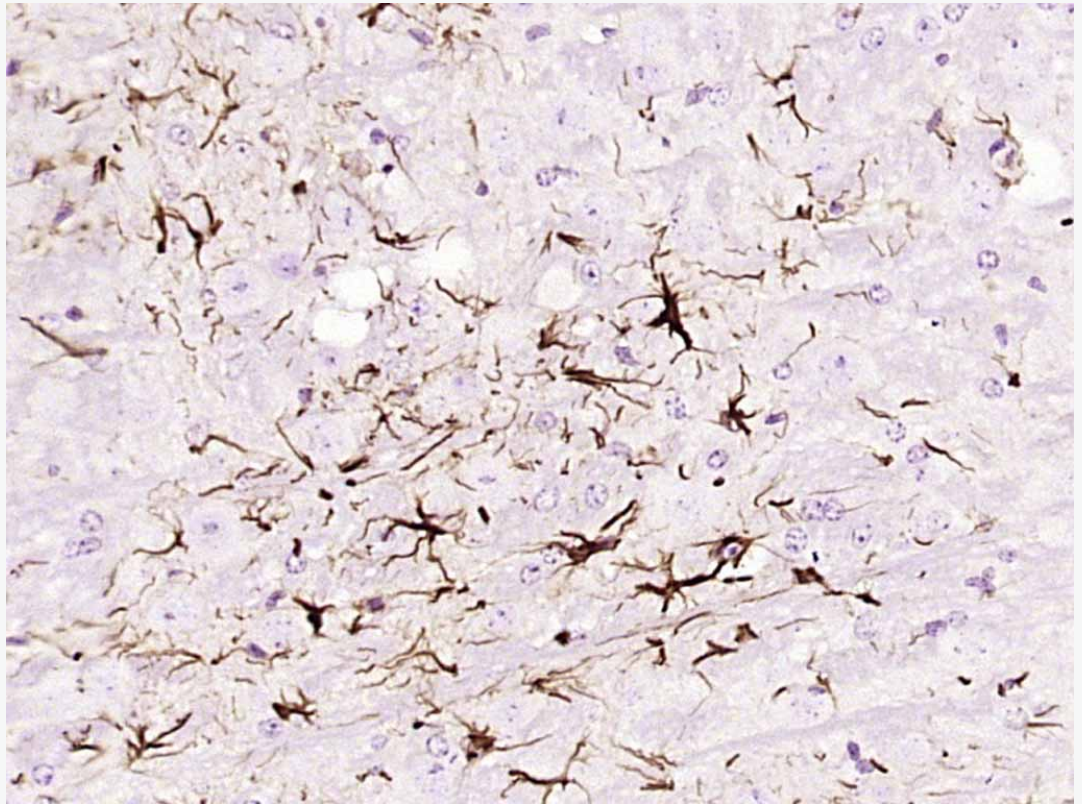
GFAP 是一个 56kDa 的中间丝蛋白 (intermediate filament, IF)，在中枢神经系统发育期是一个特异性的 Marker，以区别星形细胞和其它胶质细胞。GFAP 表达在皮层和海马,急、慢性皮质酮治疗时表达减少。

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。

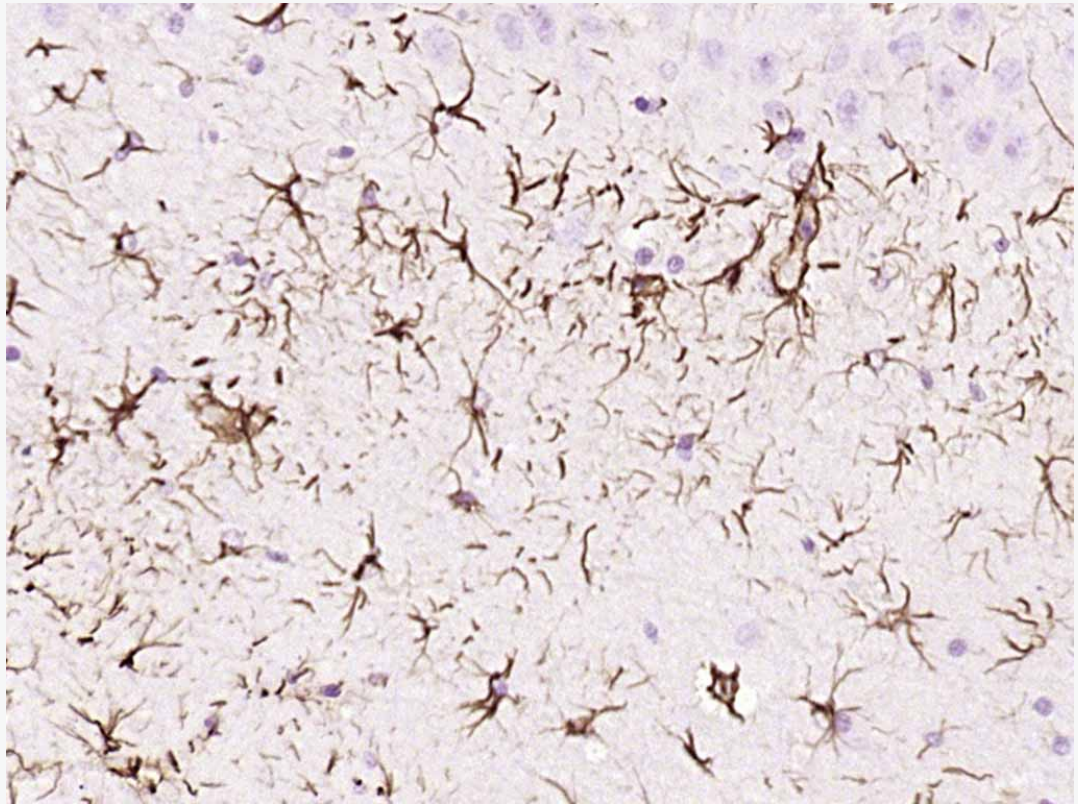
**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (human brain 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) Monoclonal Antibody, Unconjugated (BH0010) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) 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) Monoclonal Antibody, Unconjugated (BH0010) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB 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) Monoclonal Antibody, Unconjugated (BH0010) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.