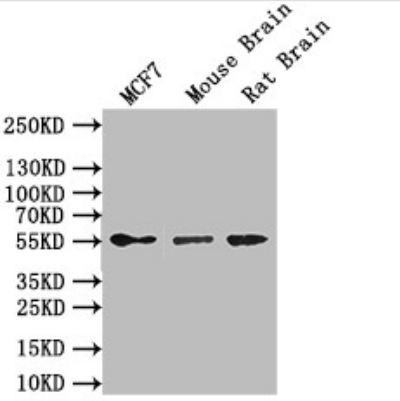
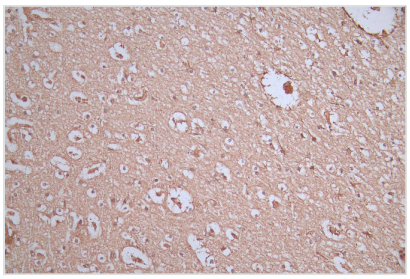
GFAP Recombinant Monoclonal Antibody

Product Code	CSB-RA009369MA1HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14136
Immunogen	Recombinant Human GFAP protein
Species Reactivity	Human, Mouse, Rat
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB:1:1000-1:5000, IHC:1:20-1:200, IF:1:20-1:200, FC:1:20-1:200
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	Affinity-chromatography
Isotype	Mouse IgG2a
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience;Tags & Cell Markers;Signal transduction?Stem cells
Gene Names	GFAP
Clone No.	6B12

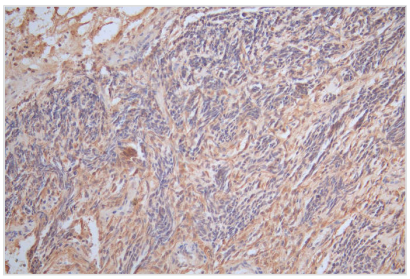
Image



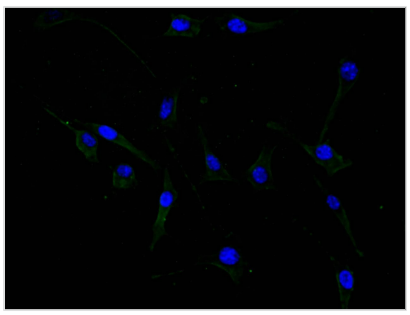
Western Blot
Positive WB detected in: MCF7 whole cell lysate,Mouse Brain tissue lysate,Rat Brain tissue lysate
All lanes: GFAP antibody at 1:1000
Secondary
Goat polyclonal to mouse IgG at 1/50000 dilution
Predicted band size: 50 kDa
Observed band size: 55 kDa



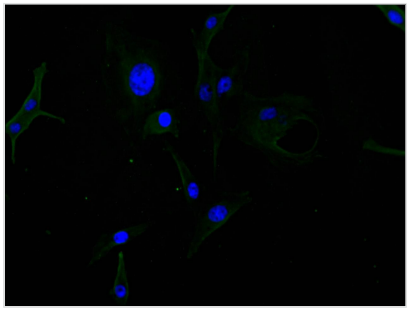
IHC image of CSB-RA009369MA1HU diluted at 1:300 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



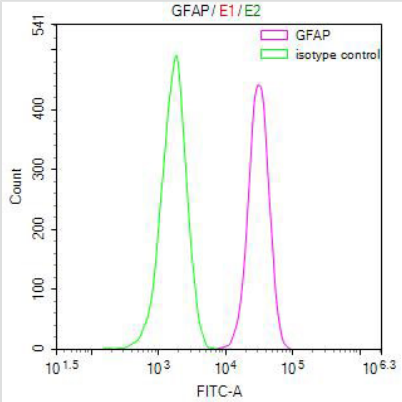
IHC image of CSB-RA009369MA1HU diluted at 1:300 and staining in paraffin-embedded human glioma cancer performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-Mouse IgG labeled by HRP and visualized using 0.05% DAB.



Immunofluorescence staining of SH-SY5Y cell with CSB-RA009369MA1HU at 1:200, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4C. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescence staining of U87 cell with CSB-RA009369MA1HU at 1:200, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4C. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Overlay Peak curve showing Jurkat cells stained with CSB-RA009369MA1HU (red line) at 1:50. Then 10% normal goat serum was Incubated to block non-specific protein-protein interactions followed by the antibody (1µg /1*10^{6}cells) for 45 min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/200 dilution for 35 min at 4 °C. Isotype control antibody (green line) was mouse IgG1 (1µg/1*10^{6}cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The production of the recombinant monoclonal antibody targeting GFAP involves the initial step of constructing GFAP antibody genes within plasmid vectors. These engineered plasmid vectors are subsequently introduced into appropriate host cells for expression using exogenous protein expression techniques. Following this, this GFAP recombinant monoclonal antibody goes through purification using affinity chromatography. It has been rigorously validated for various applications, including ELISA, WB, IHC, IF, and FC. This antibody exhibits reactivity with GFAP proteins derived from human, mouse, and rat species.

GFAP is a critical protein in astrocytes that provides structural support, participates in astrocyte activation and reactive gliosis, contributes to the blood-brain barrier's integrity, and has both neuroprotective and diagnostic roles in various neurological conditions.