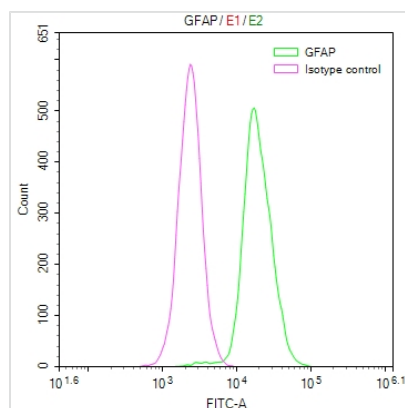




GFAP Recombinant Monoclonal Antibody

| | |
|----------------------------|---|
| Product Code | CSB-RA241995A0HU |
| Storage | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze. |
| Uniprot No. | P14136 |
| Immunogen | A synthesized peptide derived from Human GFAP |
| Species Reactivity | Human |
| Tested Applications | ELISA, FC; Recommended dilution: FC:1:50-1:200 |
| Form | Liquid |
| Conjugate | Non-conjugated |
| Storage Buffer | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Purification Method | Affinity-chromatography |
| Isotype | Rabbit IgG |
| 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. | 14C8 |

Image



Overlay Peak curve showing HeLa cells stained with CSB-RA241995A0HU (red line) at 1:50. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1µg/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.

Description

The GFAP recombinant monoclonal antibody is produced through a comprehensive process that includes in vitro cloning, where genes for both the heavy and light chains of the GFAP antibody are inserted into expression vectors. These recombinant vectors are subsequently transfected into host cells to enable the recombinant expression of the antibody in a cell culture setting. After expression, the GFAP recombinant monoclonal antibody is purified from the supernatant of transfected host cell lines using affinity chromatography. This



purified antibody demonstrates specific reactivity with the human GFAP protein and exhibits versatility by being suitable for ELISA and FC applications.

GFAP is primarily associated with astrocyte function and is essential for the structural support, morphology, and various roles of astrocytes in the central nervous system. It contributes to the maintenance of the blood-brain barrier, ion and water homeostasis, neurotransmitter uptake, and neuroprotection. Additionally, GFAP expression increases during reactive gliosis in response to CNS injuries or diseases, where it plays a role in glial scar formation and the brain's response to damage.