



Polyclonal Anti- Glial fibrillary acidic protein, GFAP (Sepharose Bead Conjugate)

Catalogue No. PA1239-S

Lot No. 09F01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat, mouse. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP)

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human GFAP, identical to the related rat and mouse sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN $_3a_3$ preservative.

Storage Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

Glial fibrillary acidic protein (GFAP) is an intermediate-filament (IF) protein that is highly specific for cells of astroglial lineage, although its tissue-specific role is speculative.1 GFAP has been located in rat kidney glomeruli and peritubular fibroblasts, leydig cells of testis, skin keratinocytes, osteocytes ofbones, chondrocytes of epiglottis, bronchus, and stellate-shaped cells of the pancreas and liver. Its expression is essential for normal white matter architecture and blood-brain barrier integrity, and its absence leads to late-onset CNS dysmyelination.2 GFAP has also been shown to play a role in mitosis by adjusting the filament network present in the cell. During mitosis, there is an increase in the amount of phosphorylated GFAP, and a movement of this modified protein to the cleavage furrow.3

REFERENCE

1. Reeves SA, Helman LJ, Allison A, Israel MA (1989). "Molecular cloning and primary structure of human glial fibrillary acidic protein". *Proc. Natl. Acad. Sci. U.S.A.* 86 (13): 5178–82.

2. Liedtke W, Edelmann W, Bieri PL, Chiu FC, Cowan NJ, Kucherlapati R, Raine CS (1996). "GFAP is necessary for the integrity of CNS white matter architecture and long-term maintenance of myelination". *Neuron* 17 (4): 607–15.

3. Tardy M, Fages C, Le Prince G, Rolland B, Nunez J (1990). "Regulation of the glial fibrillary acidic protein (GFAP) and of its encoding mRNA in the developing brain and in cultured astrocytes". *Adv. Exp. Med. Biol.* 265: 41–52.