Ordering Information
Web *www.encorbio.com*
Email *admin@encorbio.com*
Phone *352-372-7022*
Fax *352-372-7066*

HGNC Name: *GFAP*
RRID: *NA*
Format: *1mg/mL in 6M Urea, 10mM phosphate pH=7.5*
Storage: *Stable at 4°C for several months. For longer term store at -20°C or lower*
UniProt: *P14136*

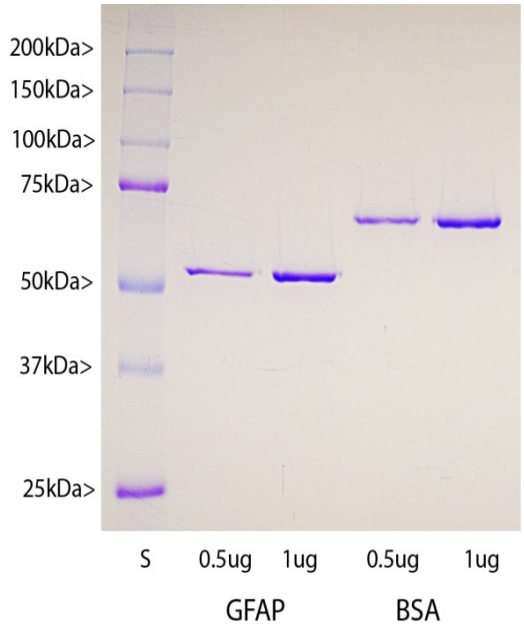
References:

1. Bignami A, Eng LF, Dahl D, Uyeda CT. Localization of the glial fibrillary acidic protein in astrocytes by immunofluorescence. Brain Res. 43:429-35 (1972).
2. Brenner M, et al. Mutations in GFAP, encoding glial fibrillary acidic protein, are associated with Alexander disease. Nat Genet 27:117-20 (2001).
3. Silver J. Miller JH. Regeneration beyond the glial scar. Nat. Rev. Neurosci. 5:146-56 (2004).
4. Schiff L1, Hadker N, Weiser S, Rausch C. A literature review of the feasibility of glial fibrillary acidic protein as a biomarker for stroke and traumatic brain injury. Mol. Diagn. Ther. 16:79-92 (2012).

GFAP Full Length Recombinant Protein

PROT-r-GFAP

Applications	Host	Molecular Wt.	HGNC	UniPort
Protein standard for ELISA, MSD, Luminex and Simoa assays, immunogen for antibody production	E. coli	50kDa by SDS-PAGE plus about 5kDa tag sequence	GFAP	P14136



0.5 and 1 µg of recombinant GFAP based on the human isotype I sequence was expressed in and purified from E. coli using standard methods and run out for SDS-PAGE in lanes on the left as indicated. The two rightmost lanes show 0.5 and 1 µg of BSA protein standard. Lane S shows protein standards of the indicated molecular weights, gel was stained with Coomassie brilliant blue protein stain.

Background:

Glial Fibrillary Acidic Protein (GFAP) is a major protein of the nervous system and is localized in astrocytes, stem cells, Bergmann glia and non-myelinating Schwann cells. It may also be found in retinal Mueller cells in pathological states, and the levels of the protein generally increase in damage and disease states (1-3). GFAP assembles to form 10nm or intermediate filaments in the cytoplasm, and these filaments appear to have an important structural role in the cell. Recent work suggests that measurement of the levels of GFAP in blood and CSF gives information about CNS damage and disease states (4).

This product is identical to the human GFAP isotype I sequence in GenBank entry NP_002046.1. It is widely used as a standard in ELISA and other antibody based assays. The human GFAP protein is a little different in amino acid sequence from that of the rat protein, so a recombinant form of the rat protein is also available from EnCor, Prot-r-GFAP-rat.

Abbreviation Key:

mAb—Monoclonal Antibody pAb—Polyclonal Antibody WB—Western Blot IF—Immunofluorescence ICC—Immunocytochemistry IHC—Immunohistochemistry E—ELISA Hu—Human Mo—Monkey Do—Dog Rt—Rat Ms—Mouse Co—Cow Pi—Pig Ho—Horse Ch—Chicken Dr—D. rerio Dm—D. melanogaster Sm—S. mutans Ce—C. elegans Sc—S. cerevisiae Sa—S. aureus Ec—E. coli.