OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850
UNITED STATES
Phone: +1-888-267-4436
Fax: +1-301-340-8606
techsupport@origene.com

OriGene Technologies GmbH
Schillerstr. 5
32052 Herford
GERMANY
Phone: +49-5221-34606-0
Fax: +49-5221-34606-11
info-de@origene.com

BA1011 Standard Bovine GFAP

Alternate names:	Glial Fibrillary Acidic Protein
Quantity:	0.25 mg
Concentration:	1.0 mg/ml
Background:	Glial fibrillary acidic protein (GFAP) is a member of the class III intermediate filament protein family. It is heavily, and specifically, expressed in astrocytes and certain other astroglia in the central nervous system, in satellite cells in peripheral ganglia, and in non myelinating Schwann cells in peripheral nerves. In addition, neural stem cells frequently strongly express GFAP. Antibodies to GFAP are therefore very useful as markers of astrocytic cells. In addition many types of brain tumor, presumably derived from astrocytic cells, heavily express GFAP. GFAP is also found in the lens epithelium, Kupffer cells of the liver, in some cells in salivary tumors and has been reported in erythrocytes.
Uniprot ID:	Q28115
NCBI:	NP_776490.2
GeneID:	281189
Species:	Bovine
Source:	Spinal Cord, Bovine spinal cord
Format:	**State:** Lyophilized **Purity:** >98% (determined by SDS gelelectrophoresis). **Buffer System:** Final Solution contains 10mM Sodium Phosphate buffer pH 7.5, 6M Urea, 2mM DTT, 1 mM EDTA, 10mM Methylammonium Chloride **Reconstitution:** Restore with distilled water. BA1011S: 80 µl (final volume 100 µl). BA1011 : 200 µl (final volume 250 µl).
Applications:	**Protein standard in 1D and 2D SDS gelelectrophoresis.** **Immunoassays.** **Immunization.** Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Description:	Bovine Glial Filament Protein (GFP) **Molecular weight:** 52 kDa
Add. Information:	**Isoelectric Point:** pI 5.4
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store the protein undiluted at -20°C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings:

1. Dahl D, Crosby CJ, Gardner EE, Bignami A. Purification of the glial fibrillary acidic protein by anion-exchange chromatography. Anal Biochem. 1982 Oct;126(1):165-9. PubMed PMID: 7181107.
2. Hatzfeld M and Franke WW (1985). J Cell Biol 101, 1826-1841
3. Hatzfeld M et al. (1987). J Mol Biol 197, 237-255

Protocols:

Reconstitution to Filaments is performed by dissolving in 6 M urea buffer (see above) at concentrations of approx. 0.5 mg/ml. Protofilaments and filament complexes are obtained by dialyzing the resulting polypeptide solution stepwise to a concentration of 4 M urea and then to low salt condition (50 mM NaCl, 2 mM dithiothreitol, 10 mM Tris-HCl, pH 7.4).
For immunization purposes, the solution can be further dialyzed against PBS (phosphate buffered saline, e.g. Dulbeccos PBS).

Pictures:

Lane 1: Myosin (a), beta-galactosidase (b), Phosphorylase (c), BSA (d), Ovalbumin (e). Lane 2: GFP