

Datasheet: MCA4733

Description:	MOUSE ANTI BOVINE GFAP
Specificity:	GFAP
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1B4
Isotype:	IgG2b
Quantity:	0.25 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	1/200 - 1/1000
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence			▪	
Radioimmunoassays	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

(1) This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.

Target Species

Bovine

Species Cross Reactivity

Reacts with: Human, Mouse, Rat, Sheep, Dog, Pig, Rabbit, Guinea Pig, Chicken
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Bovine spinal cord homogenate.
External Database Links	<p>UniProt:</p> <p>P14136 Related reagents</p> <p>P47819 Related reagents</p> <p>P03995 Related reagents</p> <p>Q28115 Related reagents</p> <p>Entrez Gene:</p> <p>2670 GFAP Related reagents</p> <p>24387 Gfap Related reagents</p> <p>281189 GFAP Related reagents</p> <p>14580 Gfap Related reagents</p>
RRID	AB_2021034
Specificity	<p>Mouse anti Bovine GFAP antibody, clone 1B4 recognizes glial fibrillary acidic protein, or GFAP, a class III intermediate filament. During development of the central nervous system, GFAP distinguishes astrocytes from other glial cells. It is involved in various cellular functions, such as cell structure and movement, cell communication and the functioning of the blood-brain barrier. It also plays a role in mitosis by adjusting the filament network present in the cell.</p> <p>Defects in GFAP are a cause of Alexander disease, a rare disorder of the central nervous system affecting mostly males. It is a progressive leukoencephalopathy resulting in mental and physical retardation, dementia, seizures and early death.</p> <p>Mouse anti Bovine GFAP antibody, clone 1B4 may be used in conjunction with clones 4A11 and 2E1 for increased sensitivity when used in immunohistology.</p>
Histology Positive Control Tissue	Brain
References	1. Pegram, C.N. <i>et al.</i> (1985) Monoclonal antibodies reactive with epitopes restricted to

- glial fibrillary acidic proteins of several species. [Neurochem Pathol. 3 \(2\): 119-38.](#)
2. McLendon, R.E. *et al.* (1986) The immunohistochemical application of three anti-GFAP monoclonal antibodies to formalin-fixed, paraffin-embedded, normal and neoplastic brain tissues. [J Neuropathol Exp Neurol. 45 \(6\): 692-703.](#)
3. Schwabenlander, M. *et al.* (2016) Brain, Craniofacial, and Dental Lesions of a Free-ranging Gray Wolf (*Canis lupus*) Implicated in a Human Attack in Minnesota, USA. [J Wildl Dis. 52 \(1\): 131-7.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP
Goat Anti Mouse IgG (STAR70...)	FITC

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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