

# Datasheet: MCA4733GA

**BATCH NUMBER 1703**

<b>Description:</b>	MOUSE ANTI BOVINE GFAP
<b>Specificity:</b>	GFAP
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1B4
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	0.1 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			1/200 - 1/1000
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.**

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	Reacts with: Human, Mouse, Rat, Sheep, Dog, Pig, Rabbit, Guinea Pig, Chicken <b>N.B.</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.

<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Bovine spinal cord homogenate.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P14136</a>      <a href="#">Related reagents</a></p> <p><a href="#">P47819</a>      <a href="#">Related reagents</a></p> <p><a href="#">P03995</a>      <a href="#">Related reagents</a></p> <p><a href="#">Q28115</a>      <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">2670</a>      GFAP      <a href="#">Related reagents</a></p> <p><a href="#">24387</a>      Gfap      <a href="#">Related reagents</a></p> <p><a href="#">281189</a>      GFAP      <a href="#">Related reagents</a></p> <p><a href="#">14580</a>      Gfap      <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2021036
<b>Specificity</b>	<p><b>Mouse anti Bovine GFAP antibody, clone 1B4</b> 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 <a href="#">4A11</a> and <a href="#">2E1</a> for increased sensitivity when used in immunohistology.</p>
<b>Histology Positive Control Tissue</b>	Brain

## References

1. Pegram, C.N. *et al.* (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

Store at +4°C or at -20°C if preferred.  
Storage in frost-free freezers is not recommended.  
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

## Guarantee

12 months from date of despatch

## Health And Safety Information

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA4733GA>  
10040

## Regulatory

For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

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'M367966:200529'

Printed on 19 Jan 2024