

## Datasheet: MCA1901GA

**BATCH NUMBER 163697**

<b>Description:</b>	MOUSE ANTI HORSE IgGb
<b>Specificity:</b>	IgGb
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CVS39
<b>Isotype:</b>	IgG1
<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			▪	
ELISA	▪			1/5000 - 1/50000
Immunoprecipitation			▪	
Western Blotting			▪	

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.

<b>Target Species</b>	Horse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A 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 1.0 mg/ml
<b>Immunogen</b>	Purified equine IgGb.
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Horse IgGb antibody, clone CVS39</b> recognizes equine IgGb, also known as equine IgG4/7 (<a href="#">Keggan et al. 2013</a>), and shows no significant binding to other IgG subclasses. Equine IgGb is an immunoglobulin with a molecular weight (MW) of approximately 160kDa, the MW of the light chain being 27kDa, common to all equine IgG subclasses, while the heavy chain has a MW of 53kDa, specific to IgGb (<a href="#">Sheoran et al. 1998</a>). Equine IgGb has been demonstrated to be involved in long lasting immunity following respiratory-related viral infections such as Equine Herpes virus Type 4 (EHV-4) (<a href="#">Mizukoshi et al. 2002</a>) and Equine Influenza (<a href="#">Soboll et al. 2003</a>).</p> <p>In addition to Mouse anti Horse IgGb, clone CVS39, Bio-Rad also offer a range of other monoclonal and polyclonal antibodies that are specific to equine immunoglobulin classes and subclasses.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sheoran, A.S. <i>et al.</i> (1998) Monoclonal antibodies to subclass-specific antigenic determinants on equine immunoglobulin gamma chains and their characterization. <a href="#">Vet Immunol Immunopathol. 62 (2): 153-65.</a></li> <li>2. Lewis, M.J. <i>et al.</i> (2008) The different effector function capabilities of the seven equine IgG subclasses have implications for vaccine strategies. <a href="#">Mol Immunol. 45 (3): 818-27.</a></li> <li>3. Keggan, A. <i>et al</i> (2013) Production of seven monoclonal equine immunoglobulins isotyped by multiplex analysis <a href="#">Vet Immunol Immunopathol. 153(3-4):187-93</a></li> <li>4. Palm, A.E. <i>et al.</i> (2016) Secretory immunoglobulin A and immunoglobulin G in horse saliva. <a href="#">Vet Immunol Immunopathol. 180: 59-65.</a></li> </ol>
<b>Further Reading</b>	<ol style="list-style-type: none"> <li>1. Mizukoski, F. <i>et al</i> (2002) IgG antibody subclass response against equine herpesvirus type 4 in horses. <a href="#">Vet Immunol Immunopathol. 88(1-2):97-101.</a></li> <li>2. Soboll, G. <i>et al</i> (2003) Regional antibody and cellular immune responses to equine influenza virus infection, and particle mediated DNA vaccination. <a href="#">Vet Immunol Immunopathol. 94(1-2):47-62.</a></li> </ol>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1901GA">https://www.bio-rad-antibodies.com/SDS/MCA1901GA</a>

**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>

**Recommended Useful Reagents**[PURIFIED HORSE IgG \(PEP001\)](#)

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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://bio-rad-antibodies.com/datasheets)  
'M409724:221020'

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