

## Datasheet: MCA2443GA

<b>Description:</b>	MOUSE ANTI BOVINE IgM
<b>Specificity:</b>	IgM
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	IL-A30
<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	▪			1/25 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/5000
Immunoprecipitation	▪			
Western Blotting			▪	
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.

<b>Target Species</b>	Bovine
<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>	Bovine peripheral blood mononuclear cells depleted of T lymphocytes.
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Bovine IgM, clone IL-A30</b> recognizes bovine IgM, expressed by bovine B-cells. Clone IL-A30 reacts with both serum IgM and cell surface IgM expressed by B lymphocytes. Mouse anti Bovine IgM, clone IL-A30 recognizes a monomorphic epitope within bovine IgM (<a href="#">Naessens et al.1988</a>).</p> <p>Studies using clone IL-A30 have demonstrated that the percentage of IgM<sup>+</sup>ve lymphocytes may vary widely ,ranging between 4 - 30%, within populations of healthy cattle, however the percentage of positive cells remains relatively constant within individual animals (<a href="#">Naessens et al.1988</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>1. Naessens, J. <i>et al.</i> (1988) Identification of isotypes and allotypes of bovine immunoglobulin M with monoclonal antibodies. <a href="#">Immunology. 63 (4): 569-74.</a></li> <li>2. Williams, D.J. <i>et al.</i> (1990) Quantitation of bovine immunoglobulin isotypes and allotypes using monoclonal antibodies. <a href="#">Vet Immunol Immunopathol. 24 (3): 267-83.</a></li> <li>3. Campbell, J.D. <i>et al.</i> (1998) A novel cell surface proliferation-associated marker expressed on T cells and up-regulated on germinal center B cells. <a href="#">J Leukoc Biol. 63 (5): 567-74.</a></li> <li>4. Menge, C. <i>et al.</i> (2004) Bovine ileal intraepithelial lymphocytes represent target cells for Shiga toxin 1 from <i>Escherichia coli</i>. <a href="#">Infect Immun. 72 (4): 1896-905.</a></li> <li>5. Naessens, J. (1997) Surface Ig on B lymphocytes from cattle and sheep. <a href="#">Int Immunol. 9 (3): 349-54.</a></li> <li>6. Morrison, W.I. <i>et al.</i> (1996) Pathogenicity of <i>Theileria parva</i> is influenced by the host cell type infected by the parasite. <a href="#">Infect Immun. 64 (2): 557-62.</a></li> <li>7. Nishimori, A. <i>et al.</i> (2016) Direct polymerase chain reaction from blood and tissue samples for rapid diagnosis of bovine leukemia virus infection. <a href="#">J Vet Med Sci. 78 (5): 791-6.</a></li> <li>8. Sei, J.J. <i>et al.</i> (2016) Effect of Foot-and-Mouth Disease Virus Infection on the Frequency, Phenotype and Function of Circulating Dendritic Cells in Cattle. <a href="#">PLoS One. 11 (3): e0152192.</a></li> <li>9. Goh, S. <i>et al.</i> (2016) Identification of <i>Theileria lestoquardi</i> Antigens Recognized by CD8+ T Cells. <a href="#">PLoS One. 11 (9): e0162571.</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: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<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>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

### Recommended Useful Reagents

[MOUSE ANTI BOVINE IgA \(MCA2438GA\)](#)  
[MOUSE ANTI BOVINE IgA:HRP \(MCA2438P\)](#)  
[MOUSE ANTI BOVINE IgG \(MCA2439GA\)](#)  
[MOUSE ANTI BOVINE IgG:HRP \(MCA2439P\)](#)  
[MOUSE ANTI BOVINE IgG1 \(MCA2440GA\)](#)  
[MOUSE ANTI BOVINE IgG1:HRP \(MCA2440P\)](#)  
[MOUSE ANTI BOVINE IgG2 \(MCA2441GA\)](#)  
[MOUSE ANTI BOVINE IgG2:HRP \(MCA2441P\)](#)

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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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