

## Datasheet: MCA626GA

**BATCH NUMBER 158107**

<b>Description:</b>	MOUSE ANTI BOVINE IgG2
<b>Specificity:</b>	IgG2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	K192 4F10
<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	▪			
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>	Bovine
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<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 Bovine IgG
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the P3.X63.Ag8.653 myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Bovine IgG2, clone K192 4F10</b>, is a monoclonal antibody specific for bovine IgG2 (A1/A1 &amp; A1/A2) and does not recognize other bovine immunoglobulin classes.</p> <p>Clone K192 4F10 has been shown recognise IgG2 in some, but not all, breeds of sheep.</p> <p>While normal serum levels of IgG1 are relatively constant in cattle at around 50%, IgG2 levels are highly variable between different strains and races.</p>
<b>ELISA</b>	This product is suitable for use in direct ELISA applications
<b>References</b>	<ol style="list-style-type: none"> <li>1. Estes, D. M. <i>et al.</i> (1998) Effects of type I/type II interferons and transforming growth factor-beta on B-cell differentiation and proliferation. Definition of costimulation and cytokine requirements for immunoglobulin synthesis and expression. <a href="#">Immunology 95: 604-611.</a></li> <li>2. Wyatt, C.R. <i>et al.</i> (2001) Evidence for the emergence of a type-1-like immune response in intestinal mucosa of calves recovering from cryptosporidiosis. <a href="#">J Parasitol. 87: 90-5.</a></li> <li>3. Hassan, M. <i>et al.</i> (2011) The dynamic influence of the DRB1*1101 allele on the resistance of sheep to experimental <i>Teladorsagia circumcincta</i> infection. <a href="#">Vet Res. 42: 46.</a></li> <li>4. Abbott, J.R. <i>et al.</i> (2005) Rapid and long-term disappearance of CD4+ T lymphocyte responses specific for <i>Anaplasma marginale</i> major surface protein-2 (MSP2) in MSP2 vaccinates following challenge with live <i>A. marginale</i>. <a href="#">J Immunol. 174: 6702-15.</a></li> <li>5. Arulkanthan, A. <i>et al.</i> (1999) Biased immunoglobulin G1 isotype responses induced in cattle with DNA expressing msp1a of <i>Anaplasma marginale</i>. <a href="#">Infect Immun. 67: 3481-7.</a></li> <li>6. Barrio, M.B. <i>et al.</i> (2003) Assessment of the opsonic activity of purified bovine sIgA following intramammary immunization of cows with <i>Staphylococcus aureus</i>. <a href="#">J Dairy Sci. 86: 2884-94.</a></li> <li>7. French, D.M. <i>et al.</i> (1999) Emergence of <i>Anaplasma marginale</i> antigenic variants during persistent rickettsemia. <a href="#">Infect Immun. 67: 5834-40.</a></li> <li>8. Han, S. <i>et al.</i> (2010) <i>Anaplasma marginale</i> infection with persistent high-load bacteremia induces a dysfunctional memory CD4+ T lymphocyte response but sustained high IgG titers. <a href="#">Clin Vaccine Immunol. 17: 1881-90.</a></li> <li>9. Kooyman, F.N. <i>et al.</i> (2007) Antibodies elicited by the bovine lungworm, <i>Dictyocaulus viviparus</i>, cross-react with platelet-activating factor. <a href="#">Infect Immun. 75: 4456-62.</a></li> <li>10. Morton, H.C. <i>et al.</i> (2001) Identification of residues within the extracellular domain 1 of bovine Fc gamma 2R essential for binding bovine IgG2. <a href="#">J Biol Chem. 276: 47794-800.</a></li> </ol>
<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted.</p>

**Guarantee** 12 months from date of despatch

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

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

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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)  
'M368730:200529'

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