

## Datasheet: MCA1424GA

**BATCH NUMBER 1608**

<b>Description:</b>	MOUSE ANTI BOVINE CD21
<b>Specificity:</b>	CD21
<b>Other names:</b>	CR2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC21
<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 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Bovine
<b>Species Cross Reactivity</b>	<p>Reacts with: Goat, Sheep, Red deer, Mule deer</p> <p><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.</p>
<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 mg/ml
<b>RRID</b>	AB_11152606
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NSI myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine CD21 monoclonal antibody, clone CC21</b> recognizes the bovine CD21 cell surface antigen, a ~145 kDa single pass type I membrane glycoprotein containing multiple <a href="#">sushi</a> domains. CD21 is also known as complement receptor type 2. In cattle CD21 expression is restricted to B lymphocytes (<a href="#">Naessens et al. 1990</a>). CD21 may be expressed on B cells as either a long or a short form (<a href="#">Pringle et al. 2012</a>)</p> <p>Mouse anti bovine CD21, clone CC21 has been used to demonstrate the co-expression of CD21 with PrP<sup>c</sup> on B cells of scrapie infected sheep (<a href="#">Halliday et al. 2005</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Howard, C.J. <i>et al.</i> (1991) Summary of workshop findings for leukocyte antigens of cattle. <a href="#">Vet Immunol Immunopathol. 27 (1-3): 21-7.</a></li> <li>Naessens, J. <i>et al.</i> (1990) Characterization of a bovine leucocyte differentiation antigen of 145,000 Mw restricted to B lymphocytes. <a href="#">Immunology 69: 525-30.</a></li> <li>Sopp, P. &amp; Howard, C.J. (2001) IFN gamma and IL-4 production by CD4, CD8 and WC1 gamma delta TCR(+) T cells from cattle lymph nodes and blood. <a href="#">Vet Immunol Immunopathol. 81 (1-2): 85-96.</a></li> <li>Lwin, S. <i>et al.</i> (2009) Immune cell types involved in early uptake and transport of recombinant mouse prion protein in Peyer's patches of calves. <a href="#">Cell Tissue Res. 338: 343-54.</a></li> <li>Breugelmans, S. <i>et al.</i> (2011) Immunoassay of lymphocyte subsets in ovine palatine tonsils. <a href="#">Acta Histochem. 113: 416-22.</a></li> <li>Halliday, S. <i>et al.</i> (2005) Expression of PrPC on cellular components of sheep blood. <a href="#">J Gen Virol. 86 (Pt 5): 1571-9.</a></li> <li>Brackenbury, L.S. <i>et al.</i> (2005) Identification of a cell population that produces alpha/beta interferon <i>in vitro</i> and <i>in vivo</i> in response to noncytopathic bovine viral diarrhoea virus. <a href="#">J Virol. 79: 7738-44.</a></li> <li>Breugelmans, S. <i>et al.</i> (2011) Differences between the ovine tonsils based on an immunohistochemical quantification of the lymphocyte subpopulations. <a href="#">Comp Immunol</a></li> </ol>

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**Storage**

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1424GA>  
10040

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**Regulatory**

For research purposes only

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## 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>
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>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

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

**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751  
Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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Fax: +44 (0)1865 852 739  
Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

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'M365289:200529'

**Printed on 21 Feb 2024**

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