

# Datasheet: MCA835GA

**BATCH NUMBER 157705**

<b>Description:</b>	MOUSE ANTI BOVINE CD5
<b>Specificity:</b>	CD5
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC17
<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 - 1/100
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>Species Cross Reactivity</b>	<p>Reacts with: Goat, Sheep</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 G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> )
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Bovine thymocytes
External Database Links	<p><b>UniProt:</b>  <a href="#">P19238</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">280745</a>    CD5    <a href="#">Related reagents</a></p>
Fusion Partners	Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line
Specificity	<p><b>Mouse anti Bovine CD5 antibody, clone CC15</b> recognizes bovine CD5, a ~67 kDa type 1 single pass transmembrane molecule containing three scavenger receptor cysteine rich (<a href="#">SRCR</a>) domains. Clone CC17 reacts with BoCD5.1, which is a polymorphic antigen expressed on cells of all <i>Bos taurus</i> animals and a small proportion of <i>Bos indicus</i> animals.</p> <p>Bo5.1, recognized by Mouse anti Bovine CD5, clone CC17 is the only isoform expressed by <i>Bos taurus</i> while <i>Bos indicus</i> may express Bo5.2 or both allelic forms of bovine CD5. (<a href="#">Howard et al.1989</a>) .</p> <p>Bovine CD5 is expressed by all mature T-lymphocytes and a subpopulation of B-lymphocytes. It is also expressed by mature medullary thymocytes and at a lower level by immature cortical thymocytes (<a href="#">Howard et al. 1988</a>).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
References	<ol style="list-style-type: none"> <li>Howard, C.J. &amp; Leibold, W. (1991) Individual antigens of cattle. Bovine CD5 (BoCD5). <a href="#">Vet Immunol Immunopathol. 27(1-3): 55-60.</a></li> <li>Howard, C.J. et al. (1988) Two monoclonal antibodies (CC17, CC29) recognizing an antigen (Bo5) on bovine T lymphocytes, analogous to human CD5. <a href="#">Vet Immunol Immunopathol. 19(2): 127-39.</a></li> <li>Howard, C.J. et al. (1991) Competitive binding with putative Bo5 (CD5) cluster of monoclonal antibodies. <a href="#">Vet Immunol Immunopathol. 27(1-3): 147-51.</a></li> <li>Hein, W.R. et al. (1991) Comparison of reactivity of monoclonal antibodies on bovine, ovine and caprine tissues and on cells from other animal species. <a href="#">Vet Immunol Immunopathol. 27(1-3): 32-4.</a></li> <li>Elhmouzi-Younes, J. et al. (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. <a href="#">Vet Res. 41(1): 4.</a></li> </ol>

6. Haas, K.M. & Estes, D.M. (2000) Activation of bovine B cells via surface immunoglobulin M cross-linking or CD40 ligation results in different B-cell phenotypes. [Immunology 99: 272-8.](#)
7. Nfon, C.K. *et al.* (2012) Innate immune response to Rift Valley fever virus in goats. [PLoS Negl Trop Dis. 6: e1623.](#)
8. Andreotti, C.S. *et al.* (2017) Characterization of immune response in *Staphylococcus aureus* chronically infected bovine mammary glands during active involution. [Comp Immunol Microbiol Infect Dis. 54: 51-60.](#)

#### 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.

#### 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/MCA835GA10040>

#### 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 Negative Controls

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

#### North & South America

Tel: +1 800 265 7376  
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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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