

## Datasheet: MCA837A700

<b>Description:</b>	MOUSE ANTI BOVINE CD8:Alexa Fluor® 700
<b>Specificity:</b>	CD8
<b>Format:</b>	ALEXA FLUOR® 700
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC63
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS/1ml

## 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	▪			Neat

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.

Target Species	Bovine								
Species Cross Reactivity	Reacts with: Sheep, Goat <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.								
Product Form	Purified IgG conjugated to Alexa Fluor® 700 - liquid								
Max Ex/Em	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>Alexa Fluor®700</td><td>702</td><td>723</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®700	702	723		
Fluorophore	Excitation Max (nm)	Emission Max (nm)							
Alexa Fluor®700	702	723							
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant								
Buffer Solution	Phosphate buffered saline								

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P31783</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">281060</a>    CD8A    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from an immunized mouse were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Bovine CD8 antibody, clone CC63</b> reacts with the bovine CD8 antigen expressed by a subset of T lymphocytes. The antibody precipitates molecules of ~34 kDa and ~38 kDa under reducing conditions. Clone CC63 has been reported as being suitable for use on formalin dichromate (FD5) fixed paraffin embedded tissue with amplification and antigen retrieval techniques ( <a href="#">Gutierrez et al. 1999</a> ).
<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>1. MacHugh, N.D. &amp; Sopp P (1991) Individual antigens of cattle. Bovine CD8 (BoCD8). <a href="#">Vet Immunol Immunopathol. 27 (1-3): 65-9.</a></li> <li>2. Gutierrez, M. et al. (1999) The detection of CD2+, CD4+, CD8+, and WC1+ T lymphocytes, B cells and macrophages in fixed and paraffin embedded bovine tissue using a range of antigen recovery and signal amplification techniques. <a href="#">Vet Immunol Immunopathol. 71 (3-4): 321-34.</a></li> <li>3. Winkler, M.T. et al. (1999) Bovine herpesvirus 1 can infect CD4(+) T lymphocytes and induce programmed cell death during acute infection of cattle. <a href="#">J Virol. 73 (10): 8657-68.</a></li> <li>4. Winkler, M.T. et al. (2000) Persistence and reactivation of bovine herpesvirus 1 in the tonsils of latently infected calves. <a href="#">J Virol. 74 (11): 5337-46.</a></li> <li>5. Twizere, J.C. et al. (2000) Discordance between bovine leukemia virus tax immortalization <i>in vitro</i> and oncogenicity <i>in vivo</i>. <a href="#">J Virol. 74 (21): 9895-902.</a></li> <li>6. Harris, J. et al. (2002) Expression of caveolin by bovine lymphocytes and antigen-presenting cells. <a href="#">Immunology. 105: 190-5.</a></li> <li>7. Toman, M. et al. (2003) Immunological characteristics of cattle with <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> infection <a href="#">Vet. Med. – Czech, 48, 2003: 147–54.</a></li> <li>8. Vordermeier, H.M. et al. (2004) Cellular immune responses induced in cattle by heterologous prime-boost vaccination using recombinant viruses and bacille Calmette-Guérin. <a href="#">Immunology. 112: 461-70.</a></li> <li>9. Vitale, F. et al. (2006) ESAT-6 peptide recognition by bovine CD8+ lymphocytes of naturally infected cows in herds from southern Italy. <a href="#">Clin Vaccine Immunol. 13: 530-3.</a></li> <li>10. Fulton, B.E. Jr. et al. (2006) Dissemination of bovine leukemia virus-infected cells from a newly infected sheep lymph node. <a href="#">J Virol. 80: 7873-84.</a></li> <li>11. Liebana, E. et al. (2007) Distribution and activation of T-lymphocyte subsets in</li> </ol>

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**Storage**

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA837A700">https://www.bio-rad-antibodies.com/SDS/MCA837A700</a> 10041
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA929A700\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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