

Datasheet: MCA837A647

**BATCH NUMBER 1709**

<b>Description:</b>	MOUSE ANTI BOVINE CD8:Alexa Fluor® 647
<b>Specificity:</b>	CD8
<b>Format:</b>	ALEXA FLUOR® 647
<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 - 1/10

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.

### Target Species

Bovine

### Species Cross Reactivity

Reacts with: Sheep, Goat

**N.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® 647 - liquid

### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

### Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

### Buffer Solution

Phosphate buffered saline

<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin
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<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
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<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>
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<b>Fusion Partners</b>	Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line.
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<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 <i>et al.</i> 1999</a> ).
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"> <li>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>Gutierrez, M. <i>et al.</i> (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>Twizere, J.C. <i>et al.</i> (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>Winkler, M.T. <i>et al.</i> (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>Winkler, M.T. <i>et al.</i> (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>Sidders, B. <i>et al.</i> (2008) Screening of highly expressed mycobacterial genes identifies Rv3615c as a useful differential diagnostic antigen for the <i>Mycobacterium tuberculosis</i> complex. <a href="#">Infect Immun. 76: 3932-9.</a></li> <li>Sanchez, J. <i>et al.</i> (2011) Microscopical and immunological features of tuberculoid granulomata and cavitary pulmonary tuberculosis in naturally infected goats. <a href="#">J Comp Pathol. 145 (2-3): 107-17.</a></li> <li>La Manna, M.P. <i>et al.</i> (2011) Expansion of intracellular IFN-γ positive lymphocytes during <i>Mycoplasma agalactiae</i> infection in sheep. <a href="#">Res Vet Sci. 91 (3): e64-7.</a></li> <li>Fulton, B.E. Jr. <i>et al.</i> (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>Harris, J. <i>et al.</i> (2002) Expression of caveolin by bovine lymphocytes and antigen-presenting cells. <a href="#">Immunology. 105: 190-5.</a></li> </ol>

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22. Schmidt, N. *et al.* (2018) Decreased STEC shedding by cattle following passive and active vaccination based on recombinant *Escherichia coli* Shiga toxoids. [Vet Res. 49 \(1\): 28.](#)

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**Storage**

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

This product should be stored undiluted. This product is photosensitive and should be protected from light.

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**

18 months from date of despatch.

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**Acknowledgements**

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**Health And Safety Information**      Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA837A647>  
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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

<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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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)  
'M300459:170105'

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