

## Datasheet: MCA2216F

**BATCH NUMBER 147847**

<b>Description:</b>	MOUSE ANTI SHEEP CD8:FITC
<b>Specificity:</b>	CD8
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	38.65
<b>Isotype:</b>	IgG2a
<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	▪			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** Sheep

**Species Cross Reactivity** Reacts with: Bovine, 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525

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

**Buffer Solution** Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Ovine efferent lymphocytes.
<b>RRID</b>	AB_321147
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Sheep CD8 antibody, clone 38.65</b> recognizes the ovine CD8 cell surface antigen, which is expressed by the cytotoxic/suppressor subset of T lymphocytes.  Under reducing conditions, the antigens immunoprecipitated by Mouse anti Sheep CD8 antibody, clone 38.65 migrate at ~33 kDa and ~36 kDa.
<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>Maddox, J.F. <i>et al.</i> (1985) Surface antigens, SBU-T4 and SBU-T8, of sheep T lymphocyte subsets defined by monoclonal antibodies. <a href="#">Immunology. 55 (4): 739-48.</a></li> <li>Mackay, C.R. <i>et al.</i> (1986) Three distinct subpopulations of sheep T lymphocytes. <a href="#">Eur J Immunol. 16 (1): 19-25.</a></li> <li>Mackay, C.R. <i>et al.</i> (1987) A monoclonal antibody to the p220 component of sheep LCA identifies B cells and a unique lymphocyte subset. <a href="#">Cell Immunol. 110 (1): 46-55.</a></li> <li>Mackay, C.R. <i>et al.</i> (1989) Gamma/delta T cells express a unique surface molecule appearing late during thymic development. <a href="#">Eur J Immunol. 19 (8): 1477-83.</a></li> <li>Mackay, C.R. <i>et al.</i> (1986) Thymocyte subpopulations during early fetal development in sheep. <a href="#">J Immunol. 136 (5): 1592-9.</a></li> <li>Breugelmans, S. <i>et al.</i> (2010) Immunoassay of lymphocyte subsets in ovine palatine tonsils. <a href="#">Acta Histochem. 113(4):416-22</a></li> <li>Lybeck, K.R. <i>et al.</i> (2009) Neutralization of interleukin-10 from CD14(+) monocytes enhances gamma interferon production in peripheral blood mononuclear cells from Mycobacterium avium subsp. paratuberculosis-infected goats. <a href="#">Clin Vaccine Immunol. 16 (7): 1003-11.</a></li> <li>Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. <a href="#">Immunology. 107: 366-72.</a></li> <li>Elhmouzi-Younes, J. <i>et al.</i> (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. <a href="#">Vet Res. 41: 4.</a></li> <li>Lybeck, K.R. <i>et al.</i> (2009) Neutralization of interleukin-10 from CD14(+) monocytes enhances gamma interferon production in peripheral blood mononuclear cells from Mycobacterium avium subsp. paratuberculosis-infected goats. <a href="#">Clin Vaccine Immunol. 16: 1003-11.</a></li> <li>Kallapur, S.G. <i>et al.</i> (2011) Pulmonary and Systemic Inflammatory Responses to Intraamniotic IL-1 alpha in fetal sheep. <a href="#">Am J Physiol Lung Cell Mol Physiol. 301(3):L285-95</a></li> </ol>

12. Bruce, C.J. *et al.* (1999) Depletion of bovine CD8+ T cells with chCC63, a chimaeric mouse-bovine antibody. [Vet Immunol Immunopathol. 71 \(3-4\): 215-31.](#)
13. Nfon, C.K.*et al* (2012) Innate Immune Response to Rift Valley Fever Virus in Goats. [PLoS Negl Trop Dis.6 \(4\): e1623.](#)
14. Lybeck, K.R. *et al.* (2012) Intestinal Strictures, Fibrous Adhesions and High Local Interleukin-10 Levels in Goats Infected Naturally with *Mycobacterium avium* subsp. *paratuberculosis*. [J Comp Pathol. 148: 157-72.](#)
15. Olsen, L. *et al.* (2015) The early intestinal immune response in experimental neonatal ovine cryptosporidiosis is characterized by an increased frequency of perforin expressing NCR1(+) NK cells and by NCR1(-) CD8(+) cell recruitment. [Vet Res. 46: 28.](#)
16. Goh, S. *et al.* (2016) Identification of *Theileria lestoquardi* Antigens Recognized by CD8+ T Cells. [PLoS One. 11 \(9\): e0162571.](#)
17. Arranz-Solís, D. *et al.* (2016) Systemic and local immune responses in sheep after *Neospora caninum* experimental infection at early, mid and late gestation. [Vet Res. 47: 2.](#)
18. Baliu-piqué, M. *et al.* (2019) Age-related distribution and dynamics of T-cells in blood and lymphoid tissues of goats. [Dev Comp Immunol. 93: 1-10.](#)
19. Schwarz, E.R. *et al.* (2020) Experimental Infection of Mid-Gestation Pregnant Female and Intact Male Sheep with Zika Virus. [Viruses. 12 \(3\)Mar 07 \[Epub ahead of print\].](#)
20. Zhang, H. *et al.* (2020) Thiamine ameliorates inflammation of the ruminal epithelium of Saanen goats suffering from subacute ruminal acidosis. [J Dairy Sci. 103 \(2\): 1931-43.](#)

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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. 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**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2216F>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA929F\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

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