

## Datasheet: MCA2216PE

**BATCH NUMBER 166541**

<b>Description:</b>	MOUSE ANTI SHEEP CD8:RPE
<b>Specificity:</b>	CD8
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	38.65
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS

### 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 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

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 R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute with 1 ml distilled water

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

#### Preparation

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

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin 5% sucrose
<b>Immunogen</b>	Ovine efferent lymphocytes.
<b>RRID</b>	AB_566897
<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 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<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> (1986) Thymocyte subpopulations during early fetal development in sheep. <a href="#">J Immunol. 136 (5): 1592-9.</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>Bruce, C.J. <i>et al.</i> (1999) Depletion of bovine CD8+ T cells with chCC63, a chimaeric mouse-bovine antibody. <a href="#">Vet Immunol Immunopathol. 71 (3-4): 215-31.</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>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>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>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>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>Kallapur, S.G. <i>et al.</i> (2011) Pulmonary and Systemic Inflammatory Responses to</li> </ol>

Intraamniotic IL-1 alpha in fetal sheep. [Am J Physiol Lung Cell Mol Physiol. 301\(3\):L285-95](#)

13. 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.](#)
14. Nfon, C.K. *et al.* (2012) Innate Immune Response to Rift Valley Fever Virus in Goats. [PLoS Negl Trop Dis. 6 \(4\): e1623.](#)
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. Ramos, A. *et al.* (2018) Melatonin enhances responsiveness to Dichelobacter nodosus vaccine in sheep and increases peripheral blood CD4 T lymphocytes and IgG-expressing B lymphocytes. [Vet Immunol Immunopathol. 206: 1-8.](#)
19. Curina, G. *et al.* (2018) Evaluation of immune responses in mice and sheep inoculated with a live attenuated *Brucella melitensis*. REV1 vaccine produced in bioreactor. [Vet Immunol Immunopathol. 198: 44-53.](#)
20. 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.](#)
21. Wooldridge, A.L. *et al.* (2019) Maternal allergic asthma during pregnancy alters fetal lung and immune development in sheep: potential mechanisms for programming asthma and allergy. [J Physiol. 597 \(16\): 4251-62.](#)
22. 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 \[Epub ahead of print\].](#)
23. 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.](#)
24. Ducournau, C. *et al.* (2020) Effective Nanoparticle-Based Nasal Vaccine Against Latent and Congenital Toxoplasmosis in Sheep. [Front Immunol. 11: 2183.](#)
25. Yang, J. *et al.* (2022) Baseline T-lymphocyte and cytokine indices in sheep peripheral blood. [BMC Vet Res. 18 \(1\): 165.](#)
26. Yang, J. *et al.* (2023) Recombinant antigen P29 of *Echinococcus granulosus* induces Th1, Tc1, and Th17 cell immune responses in sheep. [Front Immunol. 14: 1243204.](#)

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**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.  
DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2216PE>  
20487

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

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

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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)  
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**Printed on 12 Apr 2024**

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