

Datasheet: MCA2216PE

BATCH NUMBER 1711

Description:	MOUSE ANTI SHEEP CD8:RPE
Specificity:	CD8
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	38.65
Isotype:	IgG2a
Quantity:	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.

	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 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 G from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
Immunogen	Ovine efferent lymphocytes.
RRID	AB_566897
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS-1 myeloma cell line.
Specificity	Mouse anti Sheep CD8 antibody, clone 38.65 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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Maddox, J.F. <i>et al.</i> (1985) Surface antigens, SBU-T4 and SBU-T8, of sheep T lymphocyte subsets defined by monoclonal antibodies. Immunology. 55 (4): 739-48. Mackay, C.R. <i>et al.</i> (1986) Three distinct subpopulations of sheep T lymphocytes. Eur J Immunol. 16 (1): 19-25. 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. Cell Immunol. 110 (1): 46-55. Mackay, C.R. <i>et al.</i> (1989) Gamma/delta T cells express a unique surface molecule appearing late during thymic development. Eur J Immunol. 19 (8): 1477-83. Mackay, C.R. <i>et al.</i> (1986) Thymocyte subpopulations during early fetal development in sheep. J Immunol. 136 (5): 1592-9. Breugelmans, S. <i>et al.</i> (2010) Immunoassay of lymphocyte subsets in ovine palatine tonsils. Acta Histochem. 113(4):416-22 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. Clin Vaccine Immunol. 16 (7): 1003-11. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107: 366-72. Elhmouzi-Younes, J. <i>et al.</i> (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. Vet Res. 41: 4. 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. Clin Vaccine Immunol. 16: 1003-11. Kallapur, S.G. <i>et al.</i> (2011) Pulmonary and Systemic Inflammatory Responses to Intraamniotic IL-1 alpha in fetal sheep. Am J Physiol Lung Cell Mol Physiol.

[301\(3\):L285-95](#)

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.](#)
21. 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.](#)
22. 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.](#)
23. Ducournau, C. *et al.* (2020) Effective Nanoparticle-Based Nasal Vaccine Against Latent and Congenital Toxoplasmosis in Sheep. [Front Immunol. 11: 2183.](#)
24. 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.](#)
25. Yang, J. *et al.* (2022) Baseline T-lymphocyte and cytokine indices in sheep peripheral blood. [BMC Vet Res. 18 \(1\): 165.](#)

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2216PE>
20487

Related Products

Recommended Negative Controls

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

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M375433:210104'

Printed on 12 Apr 2024