

Datasheet: MCA2216F

BATCH NUMBER 172197

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

	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 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 A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		

Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Ovine efferent lymphocytes.
RRID	AB_321147
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 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	- 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> (1986) Thymocyte subpopulations during early fetal development in sheep. J Immunol. 136 (5): 1592-9. - 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. - Bruce, C.J. <i>et al.</i> (1999) Depletion of bovine CD8+ T cells with chCC63, a chimaeric mouse-bovine antibody. Vet Immunol Immunopathol. 71 (3-4): 215-31. - Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107: 366-72. - 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. - 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. - Breugelmans, S. <i>et al.</i> (2010) Immunoassay of lymphocyte subsets in ovine palatine tonsils. Acta Histochem. 113(4):416-22 - Elh mouzi-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. - 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](#)

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.](#)
27. Royo, M. *et al.* (2025) Effect of paratuberculosis vaccination before and after oral experimental infection with *Mycobacterium avium* subspecies *paratuberculosis* in goats. [Vet Q. 45 \(1\): 2566363.](#)

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

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2216F
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M445840:250923'

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