

Datasheet: MCA2213GA

BATCH NUMBER 165851

Description:	MOUSE ANTI SHEEP CD4
Specificity:	CD4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	44.38
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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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: 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 - liquid

Preparation

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

supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Fetal thymocytes.
External Database Links	UniProt: P05542 Related reagents
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse P3-NS1/1-Ag-4-1 myeloma cell line.
Specificity	Mouse anti Sheep CD4 antibody, clone 44.38 recognizes the ovine CD4 cell surface glycoprotein, expressed by a subset of mature T lymphocytes. Mouse anti Sheep CD4 antibody, clone 44.38 immunoprecipitates a protein of ~56 kDa under reducing conditions.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none">1. Mackay, C.R. <i>et al.</i> (1986) Three distinct subpopulations of sheep T lymphocytes. Eur J Immunol. 16 (1): 19-25.2. Mackay, C.R. <i>et al.</i> (1986) Thymocyte subpopulations during early fetal development in sheep. J Immunol. 136 (5): 1592-9.3. 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): 46-55.4. Debes, G.F. <i>et al.</i> (2005) Chemokine receptor CCR7 required for T lymphocyte exit from peripheral tissues. Nat Immunol. 6: 889-94.5. Foulon, E. <i>et al.</i> (2008) Two populations of ovine bone marrow-derived dendritic cells can be generated with recombinant GM-CSF and separated on CD11b expression. J Immunol Methods. 339: 1-10.6. Umeshappa, C.S. <i>et al.</i> (2010) Cell-mediated immune response and cross-protective efficacy of binary ethylenimine-inactivated bluetongue virus serotype-1 vaccine in sheep. Vaccine. 28: 2522-31.7. Gillan, S. <i>et al.</i> (2010) Identification of immune parameters to differentiate disease states among sheep infected with Mycobacterium avium subsp. paratuberculosis. Clin Vaccine Immunol. 17: 108-17.8. Breugelmans, S. <i>et al.</i> (2010) Immunoassay of lymphocyte subsets in ovine palatine tonsils. Acta Histochem. 113: 416-22.9. Brown, M.N. <i>et al.</i> (2010) Chemoattractant receptors and lymphocyte egress from extralymphoid tissue: changing requirements during the course of inflammation. J Immunol. 185: 4873-82.

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Further Reading 1. Lybeck, K. R. *et al.* (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.](#)

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2213GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR76...) [RPE](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

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