Datasheet: MCA2213F

BATCH NUMBER 1804

Description:	MOUSE ANTI SHEEP CD4:FITC
Specificity:	CD4
Format:	FITC
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	▪			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 uising 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 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 Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Fetal thymocytes.
External Database Links	**UniProt:** P05542 Related reagents
RRID	AB_324690
Fusion Partners	Spleen cells from immunised 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 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Mackay, C.R. *et al.* (1986) Three distinct subpopulations of sheep T lymphocytes. Eur J Immunol. 16 (1): 19-25. 2. Mackay, C.R. *et al.* (1986) Thymocyte subpopulations during early fetal development in sheep. J Immunol. 136 (5): 1592-9. 3. Mackay, C.R. *et al.* (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. Brown, M.N. *et al.* (2010) Chemoattractant receptors and lymphocyte egress from extralymphoid tissue: changing requirements during the course of inflammation. J Immunol. 185: 4873-82. 5. Breugelmans, S. *et al.* (2010) Immunoassay of lymphocyte subsets in ovine palatine tonsils. Acta Histochem. 113: 416-22. 6. Connelley, T. *et al.* (2011) NKp46 defines ovine cells that have characteristics corresponding to NK cells. Vet Res. 42: 37. 7. Debes, G.F. *et al.* (2005) Chemokine receptor CCR7 required for T lymphocyte exit from peripheral tissues. Nat Immunol. 6: 889-94. 8. Foulon, E. *et al.* (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. 9. Umeshappa, C.S. *et al.* (2010) Cell-mediated immune response and cross-protective efficacy of binary ethylenimine-inactivated bluetongue virus serotype-1 vaccine in sheep. Vaccine. 28: 2522-31. 10. Silva, A.P. *et al.* (2015) Encapsulated *Brucella ovis* Lacking a Putative ATP-Binding Cassette Transporter (ΔabcBA) Protects against Wild Type *Brucella ovis* in Rams. PLoS One. 10 (8): e0136865. 11. Gillan, S. *et al.* (2010) Identification of immune parameters to differentiate disease

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Brucella melitensis
strain 16M and the reduced virulence strain Rev. 1. Vet Immunol Immunopathol. 202: 74-84.
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Further Reading

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Storage

Store at +4^{o}C or at -20^{o}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.
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/MCA2213F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F)

North & South America Tel: +1 800 265 7376 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

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