

Datasheet: MCA2226F

Description:	MOUSE ANTI SHEEP MHC CLASS II DR MONOMORPHIC:FITC
Specificity:	MHC CLASS II DR MONOMORPHIC
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	37.68
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	▪			1/5 - 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: Goat, Human, Bovine

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	Splenocytes from ATL mice.
RRID	AB_323966
Specificity	<p>Mouse anti Sheep MHC class II antibody, clone 37.68 recognizes a monomorphic epitope on ovine MHC class II DR molecules, constitutively expressed on antigen presenting cells such as dendritic cells, B lymphocytes, monocytes, macrophages, activated T lymphocytes and may be induced on a range of other cell types by interferon gamma.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes some of which are important in the immune response to infections. In sheep, this complex is referred to as the ovine leukocyte antigen (OLA) region. There are 2 major types of MHC class IIa molecules encoded by the OLA which are DR and DQ each composed of an alpha and beta chain.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 1 x 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 1. Puri, N.K. <i>et al.</i> (1987) Monoclonal antibodies to sheep MHC class I and class II molecules: biochemical characterization of three class I gene products and four distinct subpopulations of class II molecules. Vet Immunol Immunopathol. 15 (1-2): 59-86. 2. Puri, N.K. & Brandon, M.R. (1987) Sheep MHC class II molecules. II. Identification and characterization of four distinct subsets of sheep MHC class II molecules. Immunology. 62 (4): 575-80. 3. Puri, N.K. <i>et al.</i> (1987) Monoclonal antibodies to sheep MHC class II molecules recognize all HLA-D or subsets of HLA-D region products. Hum Immunol. 20 (3): 195-207. 4. Ballingall, K.T. <i>et al.</i> (1995) Analysis of the fine specificities of sheep major histocompatibility complex class II-specific monoclonal antibodies using mouse L-cell transfectants. Anim Genet. 26 (2): 79-84. 5. Wang, Y. <i>et al.</i> (2017) Characterization of a secreted cystatin of the parasitic nematode <i>Haemonchus contortus</i> and its immune-modulatory effect on goat monocytes. Parasit Vectors. 10 (1): 425. 6. Wang, Y. <i>et al.</i> (2020) Characterization of a rhodanese homologue from <i>Haemonchus contortus</i> and its immune-modulatory effects on goat immune cells <i>in vitro</i>. Parasit Vectors. 13 (1): 454. 7. López-Fernández, A. <i>et al.</i> (2020) Effect of Allogeneic Cell-Based Tissue-Engineered Treatments in a Sheep Osteonecrosis Model. Tissue Eng Part A. 26 (17-18): 993-1004. 8. Wang, Y. <i>et al.</i> (2020) Modulatory functions of recombinant electron transfer flavoprotein α subunit protein from <i>Haemonchus contortus</i> on goat immune cells <i>in vitro</i>. Vet Parasitol. 288: 109300. 9. Ehsan, M. <i>et al.</i> (2021) <i>Fasciola gigantica</i>. tegumental calcium-binding EF-hand protein 4 exerts immunomodulatory effects on goat monocytes. Parasit Vectors. 14 (1): 276.

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/MCA2226F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

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

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](https://www.bio-rad-antibodies.com/datasheets)

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