Datasheet: MCA2224GA

BATCH NUMBER 1601

Description:	MOUSE ANTI SHEEP MHC CLASS I MONOMORPHIC
Specificity:	MHC CLASS I MONOMORPHIC
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	41.17
Isotype:	IgG1
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			▪	

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

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 G 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	Ovine lymphocytes
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse P3-NS/11-Ag4-1 myeloma cell line
Specificity	**Mouse anti Sheep MHC Class I antibody, clone 41.17** recognizes a monomorphic determinant on the class I MHC. 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. Ovine MHC class I molecules are expressed at varying levels on the majority of nucleated cells. Mouse anti Sheep MHC Class I antibody, clone 41.17 immunoprecipitates a band of ~44 kDa under reducing conditions and has also been reported to react with paraffin-embedded material following alcohol fixation.
Flow Cytometry	Use 10ul of the suggested working dilution to label 1 x 10^6 cells in 100ul
References	1. Puri, N.K. *et al.* (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: 59-86. 2. 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. 3. Berger, S.T. and Griffin, F.T. (2006) A comparison of ovine monocyte-derived macrophage function following infection with *Mycobacterium avium* ssp. *avium* and *Mycobacterium avium* ssp. *paratuberculosis*. Immunol Cell Biol. 84 (4): 349-56. 4. Foulon, E. and Foucras, G. (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): 1-10. 5. Godoy, R.F. *et al.* (2014) Do progenitor cells from different tissue have the same phenotype? Res Vet Sci. 96 (3): 454-9. 6. Rojas, J.M. *et al.* (2018) Peste des Petits Ruminants Virus Fusion and Hemagglutinin Proteins Trigger Antibody-Dependent Cell-Mediated Cytotoxicity in Infected Cells. Front Immunol. 9: 3172.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted.

	Storage in frost-free freezers is not recommended. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2224GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

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

'M366378:200529'

Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | Legal | Imprint