Datasheet: MCA2443GA

BATCH NUMBER 155323

Description:	MOUSE ANTI BOVINE IgM
Specificity:	IgM
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	IL-A30
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	▪			1/25 - 1/50
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/5000
Immunoprecipitation	▪			
Western Blotting			▪	
Radioimmunoassays	▪			

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	Bovine
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	Bovine peripheral blood mononuclear cells depleted of T lymphocytes.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line
Specificity	**Mouse anti Bovine IgM, clone IL-A30** recognizes bovine IgM, expressed by bovine B-cells. Clone IL-A30 reacts with both serum IgM and cell surface IgM expressed by B lymphocytes. Mouse anti Bovine IgM, clone IL-A30 recognizes a monomorphic epitope within bovine IgM (Naessens *et al.*1988). Studies using clone IL-A30 have demonstrated that the percentage of IgM^{+ve} lymphocytes may vary widely ,ranging between 4 - 30%, within populations of healthy cattle, however the percentage of positive cells remains relatively constant within individual animals (Naessens *et al.*1988).
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul
References	1. Naessens, J. *et al.* (1988) Identification of isotypes and allotypes of bovine immunoglobulin M with monoclonal antibodies. Immunology. 63 (4): 569-74. 2. Williams, D.J. *et al.* (1990) Quantitation of bovine immunoglobulin isotypes and allotypes using monoclonal antibodies. Vet Immunol Immunopathol. 24 (3): 267-83. 3. Campbell, J.D. *et al.* (1998) A novel cell surface proliferation-associated marker expressed on T cells and up-regulated on germinal center B cells. J Leukoc Biol. 63 (5): 567-74. 4. Menge, C. *et al.* (2004) Bovine ileal intraepithelial lymphocytes represent target cells for Shiga toxin 1 from *Escherichia coli*. Infect Immun. 72 (4): 1896-905. 5. Naessens, J. (1997) Surface Ig on B lymphocytes from cattle and sheep. Int Immunol. 9 (3): 349-54. 6. Morrison, W.I. *et al.* (1996) Pathogenicity of *Theileria parva* is influenced by the host cell type infected by the parasite. Infect Immun. 64 (2): 557-62. 7. Nishimori, A. *et al.* (2016) Direct polymerase chain reaction from blood and tissue samples for rapid diagnosis of bovine leukemia virus infection. J Vet Med Sci. 78 (5): 791-6. 8. Sei, J.J. *et al.* (2016) Effect of Foot-and-Mouth Disease Virus Infection on the Frequency, Phenotype and Function of Circulating Dendritic Cells in Cattle. PLoS One. 11 (3): e0152192. 9. Goh, S. *et al.* (2016) Identification of *Theileria lestoquardi* Antigens Recognized by CD8+ T Cells. PLoS One. 11 (9): e0162571.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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/MCA2443GA 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
Rabbit Anti Mouse IgG (STAR13...)	HRP
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
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

Recommended Useful Reagents

MOUSE ANTI BOVINE IgA (MCA2438GA)
MOUSE ANTI BOVINE IgA:HRP (MCA2438P)
MOUSE ANTI BOVINE IgG (MCA2439GA)
MOUSE ANTI BOVINE IgG:HRP (MCA2439P)
MOUSE ANTI BOVINE IgG1 (MCA2440GA)
MOUSE ANTI BOVINE IgG1:HRP (MCA2440P)
MOUSE ANTI BOVINE IgG2 (MCA2441GA)
MOUSE ANTI BOVINE IgG2:HRP (MCA2441P)

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'M372959:200727'

Printed on 18 Jan 2024

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