Datasheet: MCA835GA

BATCH NUMBER 158535

Description:	MOUSE ANTI BOVINE CD5
Specificity:	CD5
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC17
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 - 1/100
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

Bovine

Species Cross Reactivity

Reacts with: Goat, Sheep

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	Bovine thymocytes
External Database Links	**UniProt:** P19238 Related reagents **Entrez Gene:** 280745 CD5 Related reagents
Fusion Partners	Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line
Specificity	**Mouse anti Bovine CD5 antibody, clone CC15** recognizes bovine CD5, a ~67 kDa type 1 single pass transmembrane molecule containing three scavenger receptor cysteine rich (SRCR) domains. Clone CC17 reacts with BoCD5.1, which is a polymorphic antigen expressed on cells of all *Bos taurus* animals and a small proportion of *Bos indicus* animals. Bo5.1, recognized by Mouse anti Bovine CD5, clone CC17 is the only isoform expressed by *Bos taurus* while *Bos indicus* may express Bo5.2 or both allelic forms of bovine CD5. (Howard *et al.*1989) . Bovine CD5 is expressed by all mature T-lymphocytes and a subpopulation of B-lymphocytes. It is also expressed by mature medullary thymocytes and at a lower level by immature cortical thymocytes (Howard *et al.* 1988).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul
References	1. Howard, C.J. *et al.* (1988) Two monoclonal antibodies (CC17, CC29) recognizing an antigen (Bo5) on bovine T lymphocytes, analogous to human CD5. Vet Immunol Immunopathol. 19(2): 127-39. 2. Howard, C.J. & Leibold, W. (1991) Individual antigens of cattle. Bovine CD5 (BoCD5). Vet Immunol Immunopathol. 27(1-3): 55-60. 3. Howard, C.J. *et al.* (1991) Competitive binding with putative Bo5 (CD5) cluster of monoclonal antibodies. Vet Immunol Immunopathol. 27(1-3): 147-51. 4. Hein, W.R. *et al.* (1991) Comparison of reactivity of monoclonal antibodies on bovine, ovine and caprine tissues and on cells from other animal species. Vet Immunol Immunopathol. 27(1-3): 32-4. 5. Chevallier, N. *et al.* (1998) Bovine leukemia virus-induced lymphocytosis and increased cell survival mainly involve the CD11b+ B-lymphocyte subset in sheep. J Virol. 72(5):

4413-20.
6. Haas, K.M. & Estes, D.M. (2000) Activation of bovine B cells via surface immunoglobulin M cross-linking or CD40 ligation results in different B-cell phenotypes. Immunology 99: 272-8.
7. Elhmouzi-Younes, J. *et al.* (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. Vet Res. 41(1): 4.
8. Nfon, C.K. *et al.* (2012) Innate immune response to Rift Valley fever virus in goats. PLoS Negl Trop Dis. 6: e1623.
9. Andreotti, C.S. *et al.* (2017) Characterization of immune response in *Staphylococcus aureus* chronically infected bovine mammary glands during active involution. Comp Immunol Microbiol Infect Dis. 54: 51-60.

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/MCA835GA 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 IgA IgM (STAR87...)	Alk. Phos., 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 (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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

'M387763:210714'

Printed on 19 Jan 2024

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