

Datasheet: MCA835GA

| | |
|----------------------|-----------------------|
| 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 | <p>UniProt: P19238 Related reagents</p> <p>Entrez Gene: 280745 CD5 Related reagents</p> |
| Fusion Partners | Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line |
| Specificity | <p>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 <i>Bos taurus</i> animals and a small proportion of <i>Bos indicus</i> animals.</p> <p>Bo5.1, recognized by Mouse anti Bovine CD5, clone CC17 is the only isoform expressed by <i>Bos taurus</i> while <i>Bos indicus</i> may express Bo5.2 or both allelic forms of bovine CD5. (Howard et al.1989) .</p> <p>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).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul |
| References | <ol style="list-style-type: none"> Howard, C.J. & Leibold, W. (1991) Individual antigens of cattle. Bovine CD5 (BoCD5). Vet Immunol Immunopathol. 27(1-3): 55-60. 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. Howard, C.J. et al. (1991) Competitive binding with putative Bo5 (CD5) cluster of monoclonal antibodies. Vet Immunol Immunopathol. 27(1-3): 147-51. 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. Elh mouzi-Younes, J. et al. (2010) Ovine CD16+/CD14- blood lymphocytes present all the major characteristics of natural killer cells. Vet Res. 41(1): 4. 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. Nfon, C.K. *et al.* (2012) Innate immune response to Rift Valley fever virus in goats.

[PLoS Negl Trop Dis. 6: e1623.](#)

8. 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: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

| | |
|---|---|
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Rabbit Anti Mouse IgG (STAR8...) | DyLight®800 |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , 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](https://www.bio-rad-antibodies.com/datasheets)

'M387763:210714'

Printed on 21 Mar 2022

