

Datasheet: MCA1647GA

Description:	MOUSE ANTI BOVINE CD1w3
Specificity:	CD1w3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CC43
Isotype:	IgG2b
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	▪			1/100

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	<p>Reacts with: Goat, Sheep</p> <p>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.</p>
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
Specificity	<p>Mouse anti Bovine CD1w3 antibody, clone CC43 recognizes the bovine CD1w3 cell surface antigen, a ~44 kDa molecule expressed as a heterodimer with beta 2 microglobulin.</p> <p>Bovine CD1w3 is expressed by immature cortical thymocytes but not by mature CD2+ or WC1+ cells in peripheral lymphoid tissues. It is also expressed by B cells, monocytes and subsets of dendritic cells. Experiments investigating the binding specificity of Mouse anti Bovine CD1w3 antibody, clone CC43, indicate that the antibody binds to the bovine CD1d molecule (Nguyen 2013). Bovine CD1d binds short chain glycosphingolipids (Wang et al. 2012).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> Howard, C.J. <i>et al.</i> (1993) A new bovine leukocyte antigen cluster comprising two monoclonal antibodies, CC43 and CC118, possibly related to CD1. Vet Immunol Immunopathol. 39: 69-76. Naessens, J. <i>et al.</i> (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. Vet Immunol Immunopathol. 39 (1-3): 283-90. Naessens, J. <i>et al.</i> (1997) Nomenclature and characterization of leukocyte differentiation antigens in ruminants. Immunol Today. 18 (8): 365-8. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47. Nguyen, T.K. <i>et al.</i> (2013) The bovine CD1D gene has an unusual gene structure and is expressed but cannot present α-galactosylceramide with a C26 fatty acid. Int Immunol. 25: 91-8. Van Rhijn, I. <i>et al.</i> (2006) The bovine CD1 family contains group 1 CD1 proteins, but no functional CD1d. J Immunol. 176: 4888-93. Rhind, S.M. <i>et al.</i> (1996) Discrimination of two subsets of CD1 molecules in the sheep. Vet Immunol Immunopathol. 52: 265-70. Gibson, A. <i>et al.</i> (2012) Identification of a lineage negative cell population in bovine peripheral blood with the ability to mount a strong type I interferon response. Dev Comp Immunol. 36: 332-41. Goldfinch, N. <i>et al.</i> (2010) Conservation of mucosal associated invariant T (MAIT) cells and the MR1 restriction element in ruminants, and abundance of MAIT cells in spleen. Vet Res. 41: 62. Gunnes, G. <i>et al.</i> (2000) Accessory cell populations in draining lymph nodes of lambs in the elicitation phase of DNCB-induced contact hypersensitivity. Vet Immunol Immunopathol. 76: 75-88. Jörundsson, E. (2000) Distribution of MHC-II and CD1 molecules in the skin of lambs and changes during experimentally-induced contact hypersensitivity. Vet Immunol Immunopathol. 74: 87-101.
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
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
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Regulatory	For research purposes only
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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
Rabbit Anti Mouse IgG (STAR9...)	FITC
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

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M410928:221031'

Printed on 31 Oct 2022