Datasheet: MCA832F

Description:	MOUSE ANTI BOVINE CD45:FITC
Specificity:	CD45
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC1
Isotype:	IgG1
Quantity:	100 TESTS

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	▪			Neat - 1/10

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species

Bovine

Product Form

Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

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
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1mg/ml

Immunogen	Bovine thoracic duct lymphocytes.
RRID	AB_2174255
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	**Mouse anti Bovine CD45 antibody, clone CC1** recognizes the bovine homologue of the human CD45 antigen, also known as leucocyte common antigen (LCA), CD45 is a pan leucocyte cell surface marker expressed on all cells of hematopoietic origin except for erythrocytes (Bembridge *et al.* 1993). CD45 occurs in a number of isoforms, which in bovine includes CD45R, CD45RA, CD45RB and CD45RO and which have restricted cellular expression.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

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2. Inchaisri, C. *et al.* (2000) Studies on the modulation of leucocyte subpopulations and immunoglobulins following intramammary infusion of beta 1,3-glucan into the bovine udder during the dry period. J Vet Med B Infect Dis Vet Public Health. 47 (5): 373-86.
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5. Niku, M. *et al.* (2006) Identification of major cell types in paraffin sections of bovine tissues. BMC Vet Res. 2: 5.
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7. Riondato, F. *et al.* (2008) Effects of road transportation on lymphocyte subsets in calves. Vet J. 175 (3): 364-8.
8. Huang, L. *et al.* (2010) A hierarchy of endothelial colony-forming cell activity displayed by bovine corneal endothelial cells. Invest Ophthalmol Vis Sci. 51: 3943-9.
9. Spalenza, V. *et al.* (2011) Identification of internal control genes for quantitative expression analysis by real-time PCR in bovine peripheral lymphocytes. Vet J. 189 (3): 278-83.
10. Lynch, E.M. *et al.* (2012) Effect of pre-weaning concentrate supplementation on peripheral distribution of leukocytes, functional activity of neutrophils, acute phase protein and behavioural responses of abruptly weaned and housed beef calves. BMC Vet Res. 8: 1.
11. Herry, V. *et al.* (2017) Local immunization impacts the response of dairy cows to *Escherichia coli* mastitis. Sci Rep. 7 (1): 3441.
12. Lee, J. *et al.* (2020) Bovine tongue epithelium-derived cells: A new source of bovine mesenchymal stem cells. Biosci Rep. 40 (4): BSR20181829.

13. Molinos, M. *et al.* (2023) Alterations of bovine nucleus pulposus cells with aging. Aging Cell. 22 (8): e13873.

Further Reading	1. Ballingall, K.T. *et al.* (2001) The CD45 locus in cattle: allelic polymorphism and evidence for exceptional positive natural selection. Immunogenetics. 52: 276-83.
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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA832F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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

'M395822:220519'

Printed on 18 Jan 2024