Datasheet: MCA1651F

Description:	MOUSE ANTI BOVINE CD205:FITC
Specificity:	CD205
Other names:	DEC-205, WC6 ANTIGEN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC98
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	▪			Neat - 1/10

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: 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 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 G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline pH7.4

Preservative Stabilisers	0.09% sodium azide (NaN_3) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
RRID	AB_647063
Specificity	**Mouse anti Bovine CD205 antibody, clone CC98** recognizes the bovine CD205 cell surface antigen, a ~210-220 kDa molecule expressed by T cells that are CD2+ve but not WC1+ve. CD205 is also expressed by B cells, and weakly stains B cell follicles. Bovine CD205 has previously been described as the WC6 antigen (Gliddon *et al.* 2004). Dendritic cells (veiled cells) in afferent lymph are strong expressors of CD205 as are dendritic cells in various other tissues.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Howard, C.J. & Naessens, J. (1993) Summary of workshop findings for cattle (tables 1 and 2). Vet Immunol Immunopathol. 39 (1-3): 25-47. 2. Howard, C.J. *et al.* (1996) Afferent lymph veiled cells stimulate proliferative responses in allogeneic CD4+ and CD8+ T cells but not gamma delta TCR+ T cells. Immunology. 88 (4): 558-64. 3. Naessens, J. *et al.* (1993) Cross-reactivity of workshop antibodies with cells from domestic and wild ruminants. Vet Immunol Immunopathol. 39 (1-3): 283-90. 4. Gliddon, D.R. *et al.* (2004) DEC-205 expression on migrating dendritic cells in afferent lymph. Immunology. 111 (3): 262-72. 5. Akesson, C.P. *et al.* (2008) Phenotypic characterisation of intestinal dendritic cells in sheep. Dev Comp Immunol. 32: 837-49. 6. Ferret-Bernard, S. *et al.* (2011) Mesenteric lymph node cells from neonates present a prominent IL-12 response to CpG oligodeoxynucleotide via an IL-15 feedback loop of amplification. Vet Res. 42:19. 7. Ferret-Bernard, S. *et al.* (2010) Cellular and molecular mechanisms underlying the strong neonatal IL-12 response of lamb mesenteric lymph node cells to R-848. PLoS One. 5: e13705. 8. Fach, S.J. *et al.* (2007) Neonatal ovine pulmonary dendritic cells support bovine respiratory syncytial virus replication with enhanced interleukin (IL)-4 And IL-10 gene transcripts. Viral Immunol. 20: 119-30. 9. Eicher, S.D. *et al.* (2011) β-Glucan plus ascorbic acid in neonatal calves modulates immune functions with and without *Salmonella enterica* serovar Dublin. Vet Immunol Immunopathol. 142: 258-64. 10. Olivier, M. *et al.* (2012) Capacities of Migrating CD1b Lymph Dendritic Cells to Present *Salmonella* Antigens to Naive T Cells PLoS One. 7: e30430. 11. Thonur, L. *et al.* (2012) Toll-like receptor gene expression in fresh and archived ovine pseudoafferent lymph DEC205+ dendritic cells. J Comp Pathol. 147 (2-3): 296-304. 12. Sigmundsdottir, H. *et al.* (2007) DCs metabolize sunlight-induced vitamin D3 to 'program' T cell attraction to the epidermal chemokine CCL27. Nat Immunol. 8: 285-93.

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19. Broberg, L. *et al.* (2021) Isolation and characterization of eosinophils in bovine blood and small intestine. Vet Immunol Immunopathol. 242: 110352.
20. Marzo, S. *et al.* (2021) Characterisation of dendritic cell frequency and phenotype in bovine afferent lymph reveals kinetic changes in costimulatory molecule expression. Vet Immunol Immunopathol. 243: 110363.
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22. Kornuta, C.A. *et al.* (2021) MANα1-2MAN decorated liposomes enhance the immunogenicity induced by a DNA vaccine against BoHV-1. Transbound Emerg Dis. 68 (2): 587-97.
23. Kornuta, C.A. *et al.* (2025) Galectin-8 and GEL01 as potential adjuvants to enhance the immune response induced by a DNA vaccine against bovine alphaherpesvirus Type-1. Virology. 604: 110402.

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/MCA1651F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2b NEGATIVE CONTROL:FITC (MCA691F)

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

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