

Datasheet: MCA1653F

Description:	MOUSE ANTI BOVINE CD4:FITC
Specificity:	CD4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC8
Isotype:	IgG2a
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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

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

Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

External Database Links
UniProt:
[A7YY52](#) [Related reagents](#)

Fusion Partners Spleen cells from an immunised mouse were fused with cells of the mouse NS1 myeloma cell line.

Specificity CC8 precipitates a molecule of approximately 50kD and is considered to be the bovine homologue of Human CD4. The phenotype, tissue distribution and function of T-cells expressing the bovine CD4 antigen are similar to those in other species. However, expression on macrophages has not yet been detected.

Flow Cytometry Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. Method sheets are available on request.

References

- Bensaid, A. *et al.* (1991) Individual antigens of cattle. Bovine CD4 (BoCD4). [Vet. Immunol. Immunopathol. 27: 51-54.](#)
- Eskra, L. *et al.* (1991) Effect of monoclonal antibodies on in vitro function of T-cell subsets. [Vet. Immunol. Immunopathol. 27: 215-231.](#)
- Howard, C.J. *et al.* (1991) Summary of workshop findings for leukocyte antigens of cattle. *Vet. Immunol.*

Immunopathol. 27: 21-27.

4. Gutierrez, M. *et al.* (1999) The detection of CD2+, CD4+, CD8+, and WC1+ T lymphocytes, B cells and macrophages in fixed and paraffin embedded bovine tissue using a range of antigen recovery and signal amplification techniques. [Vet. Immunol. Immunopathol. 71: 321-334.](#)
5. Sidders, B. *et al.* (2008) Screening of highly expressed mycobacterial genes identifies Rv3615c as a useful differential diagnostic antigen for the Mycobacterium tuberculosis complex. [Infect Immun. 76: 3932-9.](#)
6. Brackenbury, L.S. *et al.* (2005) Identification of a cell population that produces alpha/beta interferon in vitro and in vivo in response to noncytopathic bovine viral diarrhoea virus. [J Virol. 79: 7738-44.](#)
7. Buddle, B.M. *et al.* (2003) Revaccination of neonatal calves with Mycobacterium bovis BCG reduces the level of protection against bovine tuberculosis induced by a single vaccination. [Infect Immun. 71: 6411-9.](#)
8. Gerner, W. *et al.* (2009) Identification of major histocompatibility complex restriction and anchor residues of foot-and-mouth disease virus-derived bovine T-cell epitopes. [J Virol. 83: 4039-50.](#)
9. Harris, J. *et al.* (2002) Expression of caveolin by bovine lymphocytes and antigen-presenting cells [Immunology. 105: 190-5.](#)
10. Lynch, E.M. *et al.* (2010) Effect of abrupt weaning at housing on leukocyte distribution, functional activity of neutrophils, and acute phase protein response of beef calves. [BMC Vet Res. 6: 39.](#)
11. Hu, X.D. *et al.* (2009) Immunotherapy with combined DNA vaccines is an effective treatment for M. bovis infection in cattle [Vaccine. 27: 1317-22.](#)
12. Coad, M. *et al.* (2010) Repeat tuberculin skin testing leads to desensitisation in naturally infected tuberculous cattle which is associated with elevated interleukin-10 and decreased interleukin-1 beta responses. [Vet Res. 41: 14.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet Documentation #10041 available at: <http://www.abdserotec.com/uploads/MSDS/10041.pdf>

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA929F\)](#)

Other formats and applications

This reagent is also available in a [ALEXA FLUOR® 647](#), [Purified](#), [RPE](#), [S/N](#) format and is useful for Immunohistology - Frozen, Immunoprecipitation, Immunofluorescence

For research purposes only, unless otherwise specified in writing by AbD Serotec.

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