

Datasheet: MCA1820F

Description:	MOUSE ANTI BOVINE INTERLEUKIN-4:FITC
Specificity:	IL-4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CC303
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. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			

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.

(1)Membrane permeabilization is required for this application. Bio-Rad recommend the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

Target Species

Bovine

Species Cross Reactivity

Reacts with: Dog, Pig, Sheep, Mustelid, Goat, Dolphin, Mink, Fin Whale, Horse
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 A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)
Stabilisers	1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
External Database Links	<p>UniProt: P30367 Related reagents</p> <p>Entrez Gene: 280824 IL4 Related reagents</p>
RRID	AB_10964404
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	Mouse anti Bovine Interleukin-4 antibody, clone CC303 recognizes bovine interleukin 4
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Pedersen, L.G. <i>et al.</i> (2002) Identification of monoclonal antibodies that cross-react with cytokines from different animal species. Vet Immunol Immunopathol. 88 (3-4): 111-22. 2. Aasted, B. <i>et al.</i> (2002) Cytokine profiles in peripheral blood mononuclear cells and lymph node cells from piglets infected in utero with porcine reproductive and respiratory syndrome virus. Clin Diagn Lab Immunol. 9 (6): 1229-34. 3. Nielsen, L. <i>et al.</i> (2009) Lymphotropism and host responses during acute wild-type canine distemper virus infections in a highly susceptible natural host. J Gen Virol. 90: 2157-65. 4. Jaber, J.R. <i>et al.</i> (2010) Cross-reactivity of anti-human, anti-porcine and anti-bovine cytokine antibodies with cetacean tissues. J Comp Pathol. 143: 45-51. 5. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. Vet Immunol Immunopathol. 132:109-15. 6. Fellman, C.L. <i>et al.</i> (2011) Cyclosporine A affects the in vitro expression of T cell activation-related molecules and cytokines in dogs. Vet Immunol Immunopathol. 140: 175-80. 7. Araújo, M.S. <i>et al.</i> (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. Vet Immunol Immunopathol. 141: 64-75. 8. Jensen, P.V. <i>et al.</i> (2003) Cytokine profiles in adult mink infected with Aleutian mink disease parvovirus. J Virol. 77: 7444-51. 9. Papadogiannakis, E.I. <i>et al.</i> (2009) Determination of intracellular cytokines IFN-gamma and IL-4 in canine T lymphocytes by flow cytometry following whole-blood culture. Can J Vet Res. 73: 137-43. 10. Rutigliano, J.A. <i>et al.</i> (2008) Screening monoclonal antibodies for cross-reactivity in

- the ferret model of influenza infection. [J Immunol Methods. 336: 71-7.](#)
11. Taubert A *et al.* (2008) Antigen-induced cytokine production in lymphocytes of *Eimeria bovis* primary and challenge infected calves. [Vet Immunol Immunopathol. 126 \(3-4\): 309-20.](#)
 12. Hamza, E. *et al.* (2007) Modulation of allergy incidence in icelandic horses is associated with a change in IL-4-producing T cells. [Int Arch Allergy Immunol. 144: 325-37.](#)
 13. Costa-Pereira, C. *et al.* (2015) One-year timeline kinetics of cytokine-mediated cellular immunity in dogs vaccinated against visceral leishmaniasis. [BMC Vet Res. 11 \(1\): 92.](#)
 14. Dean, G.S. *et al.* (2005) Minimum infective dose of *Mycobacterium bovis* in cattle. [Infect Immun. 73 \(10\): 6467-71.](#)
 15. Araújo, M.S. *et al.* (2009) T-cell-derived cytokines, nitric oxide production by peripheral blood monocytes and seric anti-Leishmania (*Leishmania*) chagasi IgG subclass patterns following immunization against canine visceral leishmaniasis using Leishvaccine and Leishmune. [Vaccine. 27 \(7\): 1008-17.](#)
 16. Yang, J. *et al.* (2012) Comparison of worm development and host immune responses in natural hosts of *Schistosoma japonicum*, yellow cattle and water buffalo. [BMC Vet Res. 8: 25.](#)
 17. Moreira, M.L. *et al.* (2016) Vaccination against canine leishmaniosis increases the phagocytic activity, nitric oxide production and expression of cell activation/migration molecules in neutrophils and monocytes. [Vet Parasitol. 220: 33-45.](#)
 18. Geherin, S.A. *et al.* (2013) Ovine skin-recirculating $\gamma\delta$ T cells express IFN- γ and IL-17 and exit tissue independently of CCR7. [Vet Immunol Immunopathol. 155 \(1-2\): 87-97.](#)
 19. Aguiar-Soares, R.D.O. *et al.* (2020) Phase I and II Clinical Trial Comparing the LBSap, Leishmune[®], and Leish-Tec[®] Vaccines against Canine Visceral Leishmaniasis. [Vaccines \(Basel\). 8 \(4\)Nov 17 \[Epub ahead of print\].](#)

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.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

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	From March 15,
----------------------------------	---	------------------	---	---------------	---	-----------------------

2021, we will no longer supply printed datasheets with our products.
Look out for updates on how to access your digital version at bio-rad-antibodies.com

'M365749:200529'

Printed on 01 Mar 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)