

Datasheet: MCA1820PE

BATCH NUMBER 1607

Description:	MOUSE ANTI BOVINE INTERLEUKIN-4:RPE
Specificity:	IL-4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CC303
Isotype:	IgG2a
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 (1)	▪			Neat - 1/5

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/postive 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 R. Phycoerythrin (RPE) - lyophilized			
Reconstitution	Reconstitute with 1 ml distilled water			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	RPE 488nm laser	496	578	

Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
External Database Links	<p>UniProt: P30367 Related reagents</p> <p>Entrez Gene: 280824 IL4 Related reagents</p>
RRID	AB_324011
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 1×10^6 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) Lymphtropism 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. *et al.* (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.

DO NOT FREEZE

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1820PE>
20487

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

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
----------------------------------	---	------------------	---	---------------	---

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

'M375367:210104'

Printed on 22 Feb 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)