

Datasheet: MCA2164PE

BATCH NUMBER 167934

Description:	MOUSE ANTI CHICKEN CD4:RPE
Specificity:	CD4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	2-35
Isotype:	IgG2b
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 - 1/5

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 Chicken

Species Cross Reactivity Reacts with: Turkey
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 - lyophilized

Reconstitution Reconstitute with 1.0 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 A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin 5% sucrose
Immunogen	Chicken embryonic thymocytes
RRID	AB_2075649
Fusion Partners	Lymph node cells from immunized Balb/c mice were fused with cells of the SP2/0 myeloma cell line
Specificity	Mouse anti Chicken CD4, clone 2-35 recognizes the chicken homologue of human CD4, a ~64 kDa cell surface protein expressed by thymocytes and a subset of T cells (Luhtala et al. 1993). Mouse anti Chicken CD4, clone 2-35 has been demonstrated to recognize turkey CD4 (Li et al. 1998).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> Vainio, O. <i>et al.</i> (1989) Characterization of chicken CD4-expressing cells. Prog Clin Biol Res. 307: 45-56. Luhtala, M. <i>et al.</i> (1993) Analysis of chicken CD4 by monoclonal antibodies indicates evolutionary conservation between avian and mammalian species. Hybridoma. 12: 633-46. Koskinen, R. <i>et al.</i> (1999) Cloning and modeling of the first nonmammalian CD4. J Immunol. 162 (7): 4115-21. Li, Z. <i>et al.</i> (1999) Cross-reactive anti-chicken CD4 and CD8 monoclonal antibodies suggest polymorphism of the turkey CD8alpha molecule. Poult Sci. 78 (11): 1526-31. Pavlova, S.P. <i>et al.</i> (2010) <i>In vitro</i> and <i>in vivo</i> characterization of glycoprotein C-deleted infectious laryngotracheitis virus. J Gen Virol. 91 (Pt 4): 847-57. Rosa, A.C. <i>et al.</i> (2014) Isolation and molecular characterization of Brazilian turkey reovirus from immunosuppressed young poults. Arch Virol. 159 (6): 1453-7. Sachan, S. <i>et al.</i> (2015) Adjuvant potential of resiquimod with inactivated Newcastle disease vaccine and its mechanism of action in chicken. Vaccine. 33 (36): 4526-32. Blohm, U. <i>et al.</i> (2016) Immunological Competence of Different Domestic Chicken Breeds Against Avian Influenza Infection. Avian Dis. 60 (1 Suppl): 262-8. Kannan, T.A. <i>et al.</i> (2017) Age Related Changes in T Cell Subsets in Thymus and Spleen of Layer Chicken (<i>Gallus domesticus</i>) Int J Curr Microbiol App Sci. 6 (1): 15-19. Röhe, I. <i>et al.</i> (2017) Effect of feeding soybean meal and differently processed peas on the gut mucosal immune system of broilers. Poult Sci. 96 (7): 2064-73. Tang, Y. <i>et al.</i> (2020) Immune Modulation and the Development of Fowl Typhoid: A Model of Human Disease? Pathogens. 9 (10): 843. Konieczka, P. <i>et al.</i> (2022) Increased arginine, lysine, and methionine levels can improve the performance, gut integrity and immune status of turkeys but the effect is interactive and depends on challenge conditions. Vet Res. 53 (1): 59. Hohensee, L. <i>et al.</i> (2024) The role of PB1-F2 in adaptation of high pathogenicity avian influenza virus H7N7 in chickens. Vet Res. 55 (1): 5.

14. Song, J. *et al.* (2022) GPR15-C10ORF99 functional pairing initiates colonic Treg homing in amniotes. [EMBO Rep. 23 \(3\): e53246.](#)

Storage	Prior to reconstitution store at +4°C. Following reconstitution 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/MCA2164PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:RPE \(MCA691PE\)](#)

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](https://www.bio-rad-antibodies.com/datasheets)
'M429716:240416'

Printed on 16 Apr 2024