

## Datasheet: MCA2164GA

<b>Description:</b>	MOUSE ANTI CHICKEN CD4
<b>Specificity:</b>	CD4
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	2-35
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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.

<b>Target Species</b>	Chicken
<b>Species Cross Reactivity</b>	<p>Reacts with: Turkey</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Chicken embryonic thymocytes
<b>Fusion Partners</b>	Lymph node cells from immunized Balb/c mice were fused with cells of the SP2/0 myeloma cell line
<b>Specificity</b>	<b>Mouse anti Chicken CD4, clone 2-35</b> recognizes the chicken homologue of human CD4, a ~64 kDa cell surface protein expressed by thymocytes and a subset of T cells ( <a href="#">Luhtala et al. 1993</a> ). Mouse anti Chicken CD4, clone 2-35 has been demonstrated to recognize turkey CD4 ( <a href="#">Li et al. 1998</a> ).
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>Vainio, O. <i>et al.</i> (1989) Characterization of chicken CD4-expressing cells. <a href="#">Prog Clin Biol Res. 307: 45-56.</a></li> <li>Luhtala, M. <i>et al.</i> (1993) Analysis of chicken CD4 by monoclonal antibodies indicates evolutionary conservation between avian and mammalian species. <a href="#">Hybridoma. 12: 633-46.</a></li> <li>Koskinen, R. <i>et al.</i> (1999) Cloning and modeling of the first nonmammalian CD4. <a href="#">J Immunol. 162 (7): 4115-21.</a></li> <li>Li, Z. <i>et al.</i> (1999) Cross-reactive anti-chicken CD4 and CD8 monoclonal antibodies suggest polymorphism of the turkey CD8alpha molecule. <a href="#">Poult Sci. 78 (11): 1526-31.</a></li> <li>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. <a href="#">J Gen Virol. 91 (Pt 4): 847-57.</a></li> <li>Rosa, A.C. <i>et al.</i> (2014) Isolation and molecular characterization of Brazilian turkey reovirus from immunosuppressed young poults. <a href="#">Arch Virol. 159 (6): 1453-7.</a></li> <li>Sachan, S. <i>et al.</i> (2015) Adjuvant potential of resiquimod with inactivated Newcastle disease vaccine and its mechanism of action in chicken. <a href="#">Vaccine. 33 (36): 4526-32.</a></li> <li>Blohm, U. <i>et al.</i> (2016) Immunological Competence of Different Domestic Chicken Breeds Against Avian Influenza Infection. <a href="#">Avian Dis. 60 (1 Suppl): 262-8.</a></li> <li>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>) <a href="#">Int J Curr Microbiol App Sci. 6 (1): 15-19.</a></li> <li>Röhe, I. <i>et al.</i> (2017) Effect of feeding soybean meal and differently processed peas on the gut mucosal immune system of broilers. <a href="#">Poult Sci. 96 (7): 2064-73.</a></li> <li>Tang, Y. <i>et al.</i> (2020) Immune Modulation and the Development of Fowl Typhoid: A Model of Human Disease? <a href="#">Pathogens. 9 (10): 843.</a></li> <li>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. <a href="#">Vet Res. 53 (1): 59.</a></li> <li>Hohensee, L. <i>et al.</i> (2024) The role of PB1-F2 in adaptation of high pathogenicity avian influenza virus H7N7 in chickens. <a href="#">Vet Res. 55 (1): 5.</a></li> </ol>

14. Song, J. *et al.* (2022) GPR15-C10ORF99 functional pairing initiates colonic Treg homing in amniotes. [EMBO Rep. 23 \(3\): e53246.](#)
15. Härtle, S. *et al.* (2024) Delineation of chicken immune markers in the era of omics and multicolor flow cytometry [Frontiers in Veterinary Science. 23 May \[Epub ahead of print\].](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2164GA>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

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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)

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