

## Datasheet: MCA2166F

<b>Description:</b>	MOUSE ANTI CHICKEN CD8 ALPHA:FITC
<b>Specificity:</b>	CD8 ALPHA
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	11-39
<b>Isotype:</b>	IgG1
<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	▪			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 - 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

<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Chicken T-cells.
<b>RRID</b>	AB_2075649
<b>Fusion Partners</b>	Lymph node cells from immunised Balb/c mice were fused with cells of the SP2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti chicken CD8 alpha, clone 11-39</b> recognizes the alpha chain of the chicken CD8 homologue, a 33-35 kDa cell surface protein. CD8 is expressed as either alpha/alpha homodimers or alpha/beta heterodimers on a subpopulation of T cells and NK cells. Mouse anti chicken CD8 alpha, clone 11-39 recognizes all polymorphic forms of chicken CD8 alpha.</p> <p>Mouse anti chicken CD8 alpha, clone 11-39 has been demonstrated to cross react with Turkey (<a href="#">Li et al. 1999</a>).</p>
<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>Luhtala, M. <i>et al.</i> (1995) Characterization of chicken CD8-specific monoclonal antibodies recognizing novel epitopes. <a href="#">Scand J Immunol. 42 (1): 171-4.</a></li> <li>Luhtala, M. <i>et al.</i> (1997) Polymorphism of chicken CD8-alpha, but not CD8-beta. <a href="#">Immunogenetics. 46 (5): 396-401.</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>McKenna, G.F. (2003) Immunopathologic investigations with an attenuated chicken anemia virus in day-old chickens. <a href="#">Avian Dis. 47: 1339-45.</a></li> <li>Morimura, T. <i>et al.</i> (1996) Apoptosis and CD8-down-regulation in the thymus of chickens infected with Marek's disease virus. <a href="#">Arch Virol. 141 (11): 2243-9.</a></li> <li>Luhtala M (1998) Chicken CD4, CD8alphabeta, and CD8alphaalpha T cell co-receptor molecules. <a href="#">Poult Sci. 77 (12): 1858-73.</a></li> <li>Imhof, B.A. <i>et al.</i> (2000) Intestinal CD8 alpha alpha and CD8 alpha beta intraepithelial lymphocytes are thymus derived and exhibit subtle differences in TCR beta repertoires. <a href="#">J Immunol. 165 (12): 6716-22.</a></li> <li>Arstila, T.P. &amp; Lassila, O. (1993) Androgen-induced expression of the peripheral blood gamma delta T cell population in the chicken. <a href="#">J Immunol. 151 (12): 6627-33.</a></li> <li>Bohls, R.L. <i>et al.</i> (2006) The use of flow cytometry to discriminate avian lymphocytes from contaminating thrombocytes. <a href="#">Dev Comp Immunol. 30 (9): 843-50.</a></li> <li>Powell, F.L. <i>et al.</i> (2009) The turkey, compared to the chicken, fails to mount an effective early immune response to <i>Histomonas meleagridis</i> in the gut. <a href="#">Parasite Immunol. 31 (6): 312-27.</a></li> <li>Katevuo, K. &amp; Vainio, O. (1996) Thymocyte emigration in the chicken: an over-representation of CD4+ cells over CD8+ in the periphery. <a href="#">Immunology. 89 (3):</a></li> </ol>

[419-23.](#)

12. Morimura, T. *et al.* (1995) Immunomodulation of peripheral T cells in chickens infected with Marek's disease virus: involvement in immunosuppression. [J Gen Virol. 76 \( Pt 12\): 2979-85.](#)

13. Powell, F. *et al.* (2009) Development of reagents to study the turkey's immune response: Identification and molecular cloning of turkey CD4, CD8 $\alpha$  and CD28. [Dev Comp Immunol. 33 \(4\): 540-6.](#)

14. Juul-Madsen, H.R. *et al.* (2002) Major histocompatibility complex-linked immune response of young chickens vaccinated with an attenuated live infectious bursal disease virus vaccine followed by an infection. [Poult Sci. 81 \(5\): 649-56.](#)

15. Wang, Y. *et al.* (2003) A novel method to analyze viral antigen-specific cytolytic activity in the chicken utilizing flow cytometry. [Vet Immunol Immunopathol. 95 \(1-2\): 1-9.](#)

16. Arstila, T.P. *et al.* (1995) Primed avian  $\gamma\delta$  T cells respond to mycobacterial antigens, but show no preference for the 65-kDa heat shock protein. [Cell Immunol. 162 \(1\): 74-9.](#)

17. Arstila, T.P. *et al.* (1994)  $\gamma\delta$  and  $\alpha\beta$  T cells are equally susceptible to apoptosis. [Scand J Immunol. 40 \(2\): 209-15.](#)

18. Rosa, A.C. *et al.* (2014) Isolation and molecular characterization of Brazilian turkey reovirus from immunosuppressed young poults. [Arch Virol. 159 \(6\): 1453-7.](#)

19. Röhe I. *et al.* (2017) Effect of feeding soybean meal and differently processed peas on the gut mucosal immune system of broilers. [Poult Sci. 96 \(7\): 2064-73.](#)

20. Kannan, T.A. *et al.* (2017) Age Related Changes in T Cell Subsets in Thymus and Spleen of Layer Chicken (*Gallus domesticus*) [Int J Curr Microbiol App Sci. 6 \(1\): 15-9.](#)

21. Konieczka, P. *et al.* (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.](#)

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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 #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2166F>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

**North & South America** Tel: +1 800 265 7376  
Fax: +1 919 878 3751

**Worldwide** Tel: +44 (0)1865 852 700  
Fax: +44 (0)1865 852 739

**Europe** Tel: +49 (0) 89 8090 95 21  
Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

'M413116:221118'

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