

Datasheet: MCA2166F

Description:	MOUSE ANTI CHICKEN CD8 ALPHA:FITC
Specificity:	CD8 ALPHA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	11-39
Isotype:	lgG1
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 <a href="https://www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry				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/positive controls.

Target Species	Chicken			
Species Cross Reactivity	Reacts with: Turkey <b>N.B.</b> Antibody reactiv	ity and working condit	ions may vary between	species.
Product Form	Purified IgG - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	FITC	490	525	
Preparation	Purified IgG prepared	by affinity chromatod	raphy on Protein G fror	n tissue culture sup
Preparation  Buffer Solution	Purified IgG prepared Phosphate buffered s	-	raphy on Protein G fror	n tissue culture sup
Buffer Solution  Preservative	Phosphate buffered s	aline	raphy on Protein G fron	n tissue culture sup
Buffer Solution	Phosphate buffered s	aline	raphy on Protein G fror	n tissue culture sup
Buffer Solution Preservative	Phosphate buffered s	aline	raphy on Protein G fror	n tissue culture sup
Buffer Solution  Preservative Stabilisers  Approx. Protein	Phosphate buffered s  0.09% Sodium Azide  1% Bovine Serum	aline	raphy on Protein G fror	n tissue culture sup

#### **Fusion Partners**

Lymph node cells from immunised Balb/c mice were fused with cells of the SP2/0 myeloma cell line

### **Specificity**

**Mouse anti chicken CD8 alpha, clone 11-39** 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.

Mouse anti chicken CD8 alpha, clone 11-39 has been demonstrated to cross react with Turkey (<u>Li</u> et al. 1999).

### Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

#### References

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- 3. Li, Z. *et al.* (1999) Cross-reactive anti-chicken CD4 and CD8 monoclonal antibodies suggest polymorphism of the turkey CD8alpha molecule. <u>Poult Sci. 78 (11): 1526-31.</u>
- 4. McKenna, G.F. (2003) Immunopathologic investigations with an attenuated chicken anemia virus in day-old chickens. <u>Avian Dis. 47: 1339-45.</u>
- 5. Morimura, T. *et al.* (1996) Apoptosis and CD8-down-regulation in the thymus of chickens infected with Marek's disease virus. <u>Arch Virol. 141 (11): 2243-9.</u>
- 6. Luhtala M (1998) Chicken CD4, CD8alphabeta, and CD8alphaalpha T cell co-receptor molecules. Poult Sci. 77 (12): 1858-73.
- 7. Imhof, B.A. *et al.* (2000) Intestinal CD8 alpha alpha and CD8 alpha beta intraepithelial lymphocytes are thymus derived and exhibit subtle differences in TCR beta repertoires. <u>J Immunol.</u> 165 (12): 6716-22.
- 8. Arstila, T.P. & Lassila, O. (1993) Androgen-induced expression of the peripheral blood gamma delta T cell population in the chicken. <u>J Immunol</u>. 151 (12): 6627-33.
- 9. Bohls, R.L. *et al.* (2006) The use of flow cytometry to discriminate avian lymphocytes from contaminating thrombocytes. <u>Dev Comp Immunol. 30 (9): 843-50.</u>
- 10. Powell, F.L. *et al.* (2009) The turkey, compared to the chicken, fails to mount an effective early immune response to Histomonas meleagridis in the gut. <u>Parasite Immunol. 31 (6): 312-27.</u>
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- 12. Morimura, T. *et al.* (1995) Immunomodulation of peripheral T cells in chickens infected with Marek's disease virus: involvement in immunosuppression. <u>J Gen Virol. 76 ( Pt 12): 2979-85.</u>
- 13. Powell, F. *et al.* (2009) Development of reagents to study the turkey's immune response: Identification and molecular cloning of turkey CD4, CD8α and CD28. <u>Dev Comp Immunol. 33 (4):</u> 540-6.
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- 15. Wang, Y. *et al.* (2003) A novel method to analyze viral antigen-specific cytolytic activity in the chicken utilizing flow cytometry. <u>Vet Immunol Immunopathol. 95 (1-2): 1-9.</u>
- 16. Arstila, T.P. *et al.* (1995) Primed avian γδ T cells respond to mycobacterial antigens, but show no preference for the 65-kDa heat shock protein. <u>Cell Immunol. 162 (1): 74-9.</u>
- 17. Arstila, T.P. *et al.* (1994)  $\gamma\delta$  and  $\alpha\beta$  T cells are equally susceptible to apoptosis. <u>Scand J Immunol.</u> 40 (2): 209-15.
- 18. Rosa, A.C. *et al.* (2014) Isolation and molecular characterization of Brazilian turkey reovirus from immunosuppressed young poults. <u>Arch Virol.</u> 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.

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

Worldwide

Regulatory For research purposes only

## Related Products

## **Recommended Negative Controls**

### MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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