Datasheet: MCA2166F

BATCH NUMBER 162433

Description:	MOUSE ANTI CHICKEN CD8 ALPHA:FITC
Specificity:	CD8 ALPHA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	11-39
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	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

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

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Chicken T-cells.
RRID	AB_2075649
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 (Li *et al.* 1999).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Luhtala, M. *et al.* (1995) Characterization of chicken CD8-specific monoclonal antibodies recognizing novel epitopes. Scand J Immunol. 42 (1): 171-4. 2. Luhtala, M. *et al.* (1997) Polymorphism of chicken CD8-alpha, but not CD8-beta. Immunogenetics. 46 (5): 396-401. 3. Li, Z. *et al.* (1999) Cross-reactive anti-chicken CD4 and CD8 monoclonal antibodies suggest polymorphism of the turkey CD8alpha molecule. Poult Sci. 78 (11): 1526-31. 4. McKenna, G.F. (2003) Immunopathologic investigations with an attenuated chicken anemia virus in day-old chickens. Avian Dis. 47: 1339-45. 5. Morimura, T. *et al.* (1996) Apoptosis and CD8-down-regulation in the thymus of chickens infected with Marek's disease virus. Arch Virol. 141 (11): 2243-9. 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. J Immunol. 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. J Immunol. 151 (12): 6627-33. 9. Bohls, R.L. *et al.* (2006) The use of flow cytometry to discriminate avian lymphocytes from contaminating thrombocytes. Dev Comp Immunol. 30 (9): 843-50. 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. Parasite Immunol. 31 (6): 312-27. 11. Katevuo, K. & Vainio, O. (1996) Thymocyte emigration in the chicken: an over-representation of CD4+ cells over CD8+ in the periphery. Immunology. 89 (3):

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, CD8α 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 γδ 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) γδ and αβ 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.

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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2166F 10041
Regulatory	For research purposes only

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

Email: antibody_sales_us@bio-rad.com Email: antibody_sales_uk@bio-rad.com 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

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