Datasheet: MCA2166F

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.

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 G 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.

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 recognises 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 Poultry Science. Feb 23 [Epub ahead of print] 20. Abd El-Hack, M. & Alagawany, M. (2015) Performance, egg quality, blood profile, immune

function, and antioxidant enzyme activities in laying hens fed diets with thyme powder Journal of Animal and Feed Sciences. 24 (2): 127-33.
21. 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 Appl 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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
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 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

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