

Datasheet: MCA2166PE

Description:	MOUSE ANTI CHICKEN CD8 ALPHA:RPE
Specificity:	CD8 ALPHA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	11-39
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 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 conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

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 (NaN ₃) 1% bovine serum albumin 5% sucrose
Immunogen	Chicken T-cells.
RRID	AB_2260137
Fusion Partners	Lymph node cells from immunised Balb/c mice were fused with cells of the SP2/0 myeloma cell line.
Specificity	<p>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.</p> <p>Mouse anti chicken CD8 alpha, clone 11-39 has been demonstrated to cross react with Turkey (Li et al. 1999).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> Luhtala, M. <i>et al.</i> (1995) Characterization of chicken CD8-specific monoclonal antibodies recognizing novel epitopes. Scand J Immunol. 42 (1): 171-4. Luhtala, M. <i>et al.</i> (1997) Polymorphism of chicken CD8-alpha, but not CD8-beta. Immunogenetics. 46 (5): 396-401. Li, Z. <i>et al.</i> (1999) Cross-reactive anti-chicken CD4 and CD8 monoclonal antibodies suggest polymorphism of the turkey CD8alpha molecule. Poult Sci. 78 (11): 1526-31. McKenna, G.F. (2003) Immunopathologic investigations with an attenuated chicken anemia virus in day-old chickens. Avian Dis. 47: 1339-45. Morimura, T. <i>et al.</i> (1996) Apoptosis and CD8-down-regulation in the thymus of chickens infected with Marek's disease virus. Arch Virol. 141 (11): 2243-9. Luhtala M (1998) Chicken CD4, CD8alphabeta, and CD8alphaalpha T cell co-receptor molecules. Poult Sci. 77 (12): 1858-73. 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. J Immunol. 165 (12): 6716-22. 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. Bohls, R.L. <i>et al.</i> (2006) The use of flow cytometry to discriminate avian lymphocytes from contaminating thrombocytes. Dev Comp Immunol. 30 (9): 843-50. 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. Parasite Immunol. 31 (6): 312-27. Katevuo, K. & Vainio, O. (1996) Thymocyte emigration in the chicken: an over-representation of CD4+ cells over CD8+ in the periphery. Immunology. 89 (3):

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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.](#)

22. 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 \[Epub ahead of print\].](#)

Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.
DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #20487 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA2166PE>
20487

Regulatory

For research purposes only

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