

## Datasheet: MCA2166PE

<b>Description:</b>	MOUSE ANTI CHICKEN CD8 ALPHA:RPE
<b>Specificity:</b>	CD8 ALPHA
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	11-39
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](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 <b>N.B.</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	<table><tr><th>Fluorophore</th><th>Excitation Max (nm)</th><th>Emission Max (nm)</th></tr><tr><td>RPE 488nm laser</td><td>496</td><td>578</td></tr></table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
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								

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin 5% sucrose
<b>Immunogen</b>	Chicken T-cells.
<b>RRID</b>	AB_2260137
<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>1. 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>2. 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>3. 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>4. 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>5. 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>6. Luhtala M (1998) Chicken CD4, CD8alphabeta, and CD8alphaalpha T cell co-receptor molecules. <a href="#">Poult Sci. 77 (12): 1858-73.</a></li> <li>7. 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>8. 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>9. 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>10. 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>11. 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>

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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.](#)

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

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**Storage**

This product is shipped at ambient temperature.

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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

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

For research purposes only

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