

Datasheet: MCA2479

Description:	MOUSE ANTI DUCK CD8 ALPHA		
Specificity:	CD8 ALPHA		
Other names:	T-cell surface glycoprotein CD8 alpha chain		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	Du CD8-1		
Isotype:	lgG2b		
Quantity:	0.25 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	•			1 - 10 ug/ml
Immunohistology - Frozen				
Immunohistology - Paraffin	•			
ELISA				
Immunoprecipitation	•			
Western Blotting				

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	Duck
Species Cross Reactivity	Does not react with:Chicken
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from ascites
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)

Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	293T cells expressing Pekin Duck CD8 alpha.
RRID	AB_609604
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the SP2/0 mouse myeloma cell line.
Specificity	Mouse anti Duck CD8 alpha antibody, clone Du CD8-1 recognizes Pekin duck CD8 alpha (CD8a). CD8a is expressed by thymocytes, splenocytes, peripheral lymphoid cells and the vast majority of bursal cells.
	Most avian immunity research has been carried out on chickens and relatively little is known about the immune system of ducks, though there is a resemblance between the main lymphoid organs: the spleen, thymus and bursa of Fabricius. At the cellular level, like mammalian T cells, duck lymphocytes are responsive to phytohaemagglutinin.
	Double-staining with clone Du CD8-1 and MCA2480 Mouse anti Duck IgY light chain clone 14A3 revealed the presence of a CD8 ^{high} /14A3 ⁻ cytotoxic T cell population and a CD8 ^{low} /14A3 ⁺ B cell population in duck spleen and also revealed a high percentage of CD8 ⁺ /14A3 ⁺ cells in duck bursa (Kothlow et al. 1985). Mouse anti Duck CD8 alpha antibody, clone Du CD8-1 has been shown to not react with Mallard (Anas platyrhynchos).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

- 1. Kothlow, S. *et al.* (2005) Characterization of duck leucocytes by monoclonal antibodies. Dev Comp Immunol. 29 (8): 733-48.
- 2. Yu, X. *et al.* (2012) Attenuated *Salmonella typhimurium* delivering DNA vaccine encoding duck enteritis virus UL24 induced systemic and mucosal immune responses and conferred good protection against challenge. Vet Res. 43: 56.
- 3. Lian, B. *et al.* (2011) Induction of immune responses in ducks with a DNA vaccine encoding duck plague virus glycoprotein C. <u>Virol J. 8: 214.</u>
- 4. Chen, S. *et al.* (2015) Age-related development and tissue distribution of T cell markers (CD4 and CD8a) in Chinese goose. Immunobiology. 220 (6): 753-61.
- 5. Chen, S. *et al.* (2015) Immunobiological activity and antiviral regulation efforts of Chinese goose (*Anser cygnoides*) CD8α during NGVEV and GPV infection. <u>Poult Sci. 94</u> (1): 17-24.
- 6. Chen, S. *et al.* (2016) Immune-Related Gene Expression Patterns in GPV- or H9N2-Infected Goose Spleens. Int J Mol Sci. 17(12):1990.
- 7. Cornelissen, J.B. *et al.* (2013) Differences in highly pathogenic avian influenza viral pathogenesis and associated early inflammatory response in chickens and ducks. <u>Avian Pathol. 42 (4): 347-64.</u>
- 8. Wu, Y. *et al.* (2019) Changes in the small intestine mucosal immune barrier in Muscovy ducklings infected with Muscovy duck reovirus <u>Veterinary Microbiology</u>. 233: 85-92.
- 9. Apinda, N. *et al.* (2022) Simultaneous Protective Immune Responses of Ducks against Duck Plague and Fowl Cholera by Recombinant Duck Enteritis Virus Vector Expressing

	Pasteurella multocida OmpH Gene. Vaccines (Basel). 10 (8)Aug 19 [Epub ahead of print].
Further Reading	1. Higgins, D.A. & Teoh, C.S. (1988) Duck lymphocytes. II. Culture conditions for optimum transformation response to phytohaemagglutinin. <u>J Immunol Methods</u> . 106 (1): 135-45.
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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2479 10040

Related Products

Regulatory

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR117...) FITC

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M389430:210806'

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