

Datasheet: MCA2171GA

BATCH NUMBER 170186

Description:	MOUSE ANTI CHICKEN MHC CLASS II MONOMORPHIC
Specificity:	MHC CLASS II MONOMORPHIC
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	21-1A6
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	▪			1/50 - 1/100
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	Chicken
Product Form	Purified IgG - liquid
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 (NaN ₃)
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Chicken bursa cells
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line
Specificity	Mouse anti Chicken MHC Class II (monomorphic) antibody, clone 21-1A6, recognizes a monomorphic determinant on the chicken B-L molecule, the chicken class II major histocompatibility complex (MHC). The level of B-L expression is reported to increase during the bursal phase of B cell differentiation (Veromaa et al. 1988).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	1. Veromaa, T. <i>et al.</i> (1988) Expression of B-L and Bu-1 antigens in chickens bursectomized at 60 h of incubation. Eur J Immunol. 18 (2): 225-30. 2. Vainio, O. <i>et al.</i> (1988) Antigen-presenting cell-T cell interaction in the chicken is MHC class II antigen restricted. J Immunol. 140 (9): 2864-8. 3. Silva, A.B. <i>et al.</i> (2008) Functional analysis of neuropeptides in avian thymocyte development. Dev Comp Immunol. 32 (4): 410-20. 4. Watrang, E. (2009) Phosphorothioate oligodeoxyribonucleotides induce in vitro proliferation of chicken B-cells. Vet Immunol Immunopathol. 131 (3-4): 218-28. 5. Petkov, D.I. <i>et al.</i> (2009) Identification and characterization of two distinct bursal B-cell subpopulations following infectious bursal disease virus infection of White Leghorn chickens. Avian Dis. 53 (3): 347-55. 6. Pavlova, S.P. <i>et al.</i> (2010) <i>In vitro</i> and <i>in vivo</i> characterization of glycoprotein C-deleted infectious laryngotracheitis virus. J Gen Virol. 91 (Pt 4): 847-57. 7. Kamble, N.M. <i>et al.</i> (2016) Interaction of a live attenuated <i>Salmonella gallinarum</i> vaccine candidate with chicken bone marrow-derived dendritic cells. Avian Pathol. 45 (2): 235-43. 8. Kamble, N.M. <i>et al.</i> (2016) Activation of chicken bone marrow-derived dendritic cells induced by a <i>Salmonella Enteritidis</i> ghost vaccine candidate. Poult Sci. 95 (10): 2274-80. 9. Eren, U. <i>et al.</i> (2016) The several elements of intestinal innate immune system at the beginning of the life of broiler chicks. Microsc Res Tech. 79 (7): 604-14. 10. Jarosz, Ł. <i>et al. et al.</i> (2016) Effects of feed supplementation with glycine chelate and iron sulfate on selected parameters of cell-mediated immune response in broiler chickens. Res Vet Sci. 107: 68-74. 11. Jarosz, Ł.S. <i>et al.</i> (2018) The effect of feed supplementation with a copper-glycine chelate and copper sulphate on selected humoral and cell-mediated immune parameters, plasma superoxide dismutase activity, ceruloplasmin and cytokine concentration in broiler chickens. J Anim Physiol Anim Nutr (Berl). 102 (1): e326-e336. 12. Shojadoost, B. <i>et al.</i> (2019) Interactions between lactobacilli and chicken macrophages induce antiviral responses against avian influenza virus. Res Vet Sci. 125: 441-50. 13. Garrido, D. <i>et al.</i> (2018) The role of type I interferons (IFNs) in the regulation of

chicken macrophage inflammatory response to bacterial challenge. [Dev Comp Immunol. 86: 156-70.](#)

14. Yildiz, M. *et al.* (2019) Histological and immunohistochemical studies of the proximal caecum and caecal tonsils of quail (*Coturnix coturnix japonica*). [Anat Histol Embryol. 48 \(5\): 476-85.](#)

15. Eren, U. *et al.* (2022) TLR2 and TLR4 molecules and antigen-presenting cell compositions in cecal tonsils of broiler chicks (*Gallus gallus domesticus*.) in the first two weeks of the post-hatch period. [Anat Histol Embryol. 51 \(1\): 125-135.](#)

16. Saint-Martin, V. *et al.* (2024) The gut microbiota and its metabolite butyrate shape metabolism and antiviral immunity along the gut-lung axis in the chicken. [Commun Biol. 7 \(1\): 1185.](#)

17. Saxena, H.M. and Kaur, P. (2020) Insights into the Identity of the Putative Molecular Target of Infectious Bursal Disease Virus on Chicken Bursal Cells. [Acta Scientific Microbiology 3.11 \(2020\): 61-73.](#)

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/MCA2171GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP

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

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

'M433949:250116'

Printed on 16 Jan 2025