Datasheet: MCA2171F

BATCH NUMBER 170187

Description:	MOUSE ANTI CHICKEN MHC CLASS II MONOMORPHIC:FITC
Specificity:	MHC CLASS II MONOMORPHIC
Format:	FITC
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	▪			Neat

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

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)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen	Chicken bursa cells
RRID	AB_324487
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. *et al.* (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. *et al.* (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. *et al.* (2008) Functional analysis of neuropeptides in avian thymocyte development. Dev Comp Immunol. 32 (4): 410-20. 4. Wattrang, E. (2009) Phosphorothioate oligodeoxyribonucleotides induce in vitro proliferation of chicken B-cells. Vet Immunol Immunopathol. 131 (3-4): 218-28. 5. Petkov, D.I. *et al.* (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. *et al.* (2010) *In vitro* and *in vivo* characterization of glycoprotein C-deleted infectious laryngotracheitis virus. J Gen Virol. 91 (Pt 4): 847-57. 7. Kamble, N.M. *et al.* (2016) Interaction of a live attenuated *Salmonella gallinarum* vaccine candidate with chicken bone marrow-derived dendritic cells. Avian Pathol. 45 (2): 235-43. 8. Kamble, N.M. *et al.* (2016) Activation of chicken bone marrow-derived dendritic cells induced by a *Salmonella Enteritidis* ghost vaccine candidate. Poult Sci. 95 (10): 2274-80. 9. Eren, U. *et al.* (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. *et al. et al.* (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. *et al.* (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. *et al.* (2019) Interactions between lactobacilli and chicken macrophages induce antiviral responses against avian influenza virus. Res Vet Sci. 125: 441-50. 13. Garrido, D. *et al.* (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.
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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. This product is photosensitive and should be protected from light.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2171F
Regulatory	For research purposes only

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M433948:250116'

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