

Datasheet: MCA5774

Description:	MOUSE ANTI CHICKEN BETA 2 MICROGLOBULIN
Specificity:	BETA 2 MICROGLOBULIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	F21-21
Isotype:	lgG1
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			
Immunohistology - Frozen	•			
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation	•			
Western Blotting	•			
Functional Assays				

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 - liquid
Preparation	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant
Buffer Solution	Borate buffered saline.

Preservative Stabilisers	<0.1% Sodium Azide (NaN <sub>3</sub> )		
Approx. Protein Concentrations	IgG concentration 0.5mg/ml		
External Database Links	UniProt: P21611 Related reagents		
	Entrez Gene:  414830 B2M Related reagents		
RRID	AB_10842663		
Specificity	Mouse anti Chicken β2 microglobulin antibody, clone F21-21 recognises chicken β2 microglobulin, a component of MHC class I molecules and is expressed on nearly all nucleated cells.		
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.		
References	1. Dunon, D. <i>et al.</i> (1990) T cell precursor migration towards beta 2-microglobulin is involved in thymus colonization of chicken embryos. EMBO J. 9 (10): 3315-22.  2. Burgess, S.C. & Davison, T.F. (1999) Counting absolute numbers of specific leukocyte subpopulations in avian whole blood using a single-step flow cytometric technique: comparison of two inbred lines of chickens. J Immunol Methods. 227 (1-2): 169-76.  3. Juul-Madsen, H.R. <i>et al.</i> (2000) Molecular characterization of major and minor MHC class I and II genes in B21-like haplotypes in chickens. Anim Genet. 31 (4): 252-61.  4. Lawson S <i>et al.</i> (2001) Turkey and chicken interferon-gamma, which share high sequence identity, are biologically cross-reactive. Dev Comp Immunol. 25 (1): 69-82.  5. Juul-Madsen, H.R. <i>et al.</i> (2002) Major histocompatibility complex-linked immune response of young chickens vaccinated with an attenuated live infectious bursal disease virus vaccine followed by an infection. Poult Sci. 81 (5): 649-56.  6. Levy, A.M. <i>et al.</i> (2003) Major histocompatibility complex class I is downregulated in Marek's disease virus infected chicken embryo fibroblasts and corrected by chicken interferon. Comp Immunol Microbiol Infect Dis. 26 (3): 189-98.  7. Juul-Madsen, H.R. <i>et al.</i> (2004) Influence of early or late start of first feeding on growth and immune phenotype of broilers. Br Poult Sci. 45 (2): 210-22.  8. Buitenhuis, A.J. <i>et al.</i> (2006) Altered circulating levels of serotonin and immunological changes in laying hens divergently selected for feather pecking behavior. Poult Sci. 85 (10): 1722-8.  9. Wallny, H.J. <i>et al.</i> (2006) Peptide motifs of the single dominantly expressed class I molecule explain the striking MHC-determined response to Rous sarcoma virus in chickens. Proc Natl Acad Sci U S A. 103 (5): 1434-9.		

haplotypes. Poult Sci. 85 (6): 986-98.

10. Juul-Madsen, H.R. et al. (2006) Immune response to a killed infectious bursal disease

11. Walker, B.A. et al. (2011) The dominantly expressed class I molecule of the chicken

virus vaccine in inbred chicken lines with different major histocompatibility complex

MHC is explained by coevolution with the polymorphic peptide transporter (TAP) genes. Proc Natl Acad Sci U S A. 108 (20): 8396-401.

12. Butter, C. *et al.* (2013) The peptide motif of the single dominantly expressed class I molecule of the chicken MHC can explain the response to a molecular defined vaccine of infectious bursal disease virus (IBDV). Immunogenetics. 65 (8): 609-18.

**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 #10077 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5774">https://www.bio-rad-antibodies.com/SDS/MCA5774</a> 10077
Regulatory	For research purposes only

### Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE

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

Rabbit Anti Mouse IgG (STAR9...) 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 'M392057:211020'

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