

Datasheet: MCA5774

BATCH NUMBER 220414

Description:	MOUSE ANTI CHICKEN BETA 2 MICROGLOBULIN
Specificity:	BETA 2 MICROGLOBULIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	F21-21
Isotype:	IgG1
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	▪			
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	<p>Reacts with: Turkey</p> <p>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.</p>
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant

Buffer Solution	Borate buffered saline.
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 0.5mg/ml
External Database Links	<p>UniProt: P21611 Related reagents</p> <p>Entrez Gene: 414830 B2M Related reagents</p>
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 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Pinard, M.H. & Hepkema, B.G. (1993) Biochemical and serological identification of major histocompatibility complex antigens in outbred chickens. Vet Immunol Immunopathol. 39 (4): 407-19. 2. 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. 3. 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. 4. 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. 5. Skjødt, K. <i>et al.</i> (1986) Isolation and characterization of chicken and turkey beta 2-microglobulin. Mol Immunol. 23 (12): 1301-9. 6. Pickel JM <i>et al.</i> (1990) An avian B-lymphocyte protein associated with beta 2-microglobulin. Immunogenetics. 32 (1): 1-7. 7. 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. 8. 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. 9. Juul-Madsen, H.R. <i>et al.</i> (2006) Immune response to a killed infectious bursal disease virus vaccine in inbred chicken lines with different major histocompatibility complex haplotypes. Poult Sci. 85 (6): 986-98. 10. Butter, C. <i>et al.</i> (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.

11. Juul-Madsen, H.R. *et al.* (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.](#)
12. Møller, L.B. *et al.* (1991) Variations in the cytoplasmic region account for the heterogeneity of the chicken MHC class I (B-F) molecules. [Immunogenetics. 34 \(2\): 110-20.](#)
13. Wallny, H.J. *et al.* (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.](#)
14. Walker, B.A. *et al.* (2011) The dominantly expressed class I molecule of the chicken MHC is explained by coevolution with the polymorphic peptide transporter (TAP) genes. [Proc Natl Acad Sci U S A. 108 \(20\): 8396-401.](#)
15. Hepkema, B.G. *et al.* (1991) Biochemical identification of B-F and B-G allelic variants of the chicken major histocompatibility complex. [Anim Genet. 22 \(4\): 323-32.](#)
16. 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.](#)
17. Lawson S *et al.* (2001) Turkey and chicken interferon-gamma, which share high sequence identity, are biologically cross-reactive. [Dev Comp Immunol. 25 \(1\): 69-82.](#)

Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10077 available at: https://www.bio-rad-antibodies.com/SDS/MCA5774 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](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
 'M368377:200529'

Printed on 12 Aug 2023

