

## Datasheet: MCA5774

<b>Description:</b>	MOUSE ANTI CHICKEN BETA 2 MICROGLOBULIN
<b>Specificity:</b>	BETA 2 MICROGLOBULIN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	F21-21
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Chicken
<b>Species Cross Reactivity</b>	<p>Reacts with: Turkey</p> <p><b>N.B.</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>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by ion exchange chromatography from tissue culture supernatant
<b>Buffer Solution</b>	Borate buffered saline.

<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P21611</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">414830</a>    B2M    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_10842663
<b>Specificity</b>	<b>Mouse anti Chicken β2 microglobulin antibody, clone F21-21</b> recognises chicken β2 microglobulin, a component of MHC class I molecules and is expressed on nearly all nucleated cells.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Pinard, M.H. &amp; Hepkema, B.G. (1993) Biochemical and serological identification of major histocompatibility complex antigens in outbred chickens. <a href="#">Vet Immunol Immunopathol. 39 (4): 407-19.</a></li> <li>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. <a href="#">Comp Immunol Microbiol Infect Dis. 26 (3): 189-98.</a></li> <li>3. Dunon, D. <i>et al.</i> (1990) T cell precursor migration towards beta 2-microglobulin is involved in thymus colonization of chicken embryos. <a href="#">EMBO J. 9 (10): 3315-22.</a></li> <li>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. <a href="#">Br Poult Sci. 45 (2): 210-22.</a></li> <li>5. Skjødt, K. <i>et al.</i> (1986) Isolation and characterization of chicken and turkey beta 2-microglobulin. <a href="#">Mol Immunol. 23 (12): 1301-9.</a></li> <li>6. Pickel JM <i>et al.</i> (1990) An avian B-lymphocyte protein associated with beta 2-microglobulin. <a href="#">Immunogenetics. 32 (1): 1-7.</a></li> <li>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. <a href="#">Poult Sci. 85 (10): 1722-8.</a></li> <li>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. <a href="#">Poult Sci. 81 (5): 649-56.</a></li> <li>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. <a href="#">Poult Sci. 85 (6): 986-98.</a></li> <li>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). <a href="#">Immunogenetics. 65 (8): 609-18.</a></li> <li>11. Juul-Madsen, H.R. <i>et al.</i> (2000) Molecular characterization of major and minor MHC</li> </ol>

- 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.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10077 available at: 10077: <https://www.bio-rad-antibodies.com/uploads/MSDS/10077.pdf>

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**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](http://bio-rad-antibodies.com/datasheets)  
'M392057:211020'

Printed on 21 Mar 2022