

## Datasheet: MCA5761

**BATCH NUMBER 172725**

|                      |                                |
|----------------------|--------------------------------|
| <b>Description:</b>  | MOUSE ANTI CHICKEN MHC CLASS I |
| <b>Specificity:</b>  | MHC CLASS I                    |
| <b>Format:</b>       | Purified                       |
| <b>Product Type:</b> | Monoclonal Antibody            |
| <b>Clone:</b>        | F21-2                          |
| <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.

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| <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   |

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| <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>        | <b>UniProt:</b><br><a href="#">Q6X3Z0</a> <a href="#">Related reagents</a>  |
| <b>RRID</b>                           | AB_10730837   |
| <b>Specificity</b>                    | <p><b>Mouse anti Chicken MHC Class 1 antibody, clone F21-2</b> recognizes Chicken MHC Class I expressed on the majority of nucleated cells.</p> <p>Chicken MHC Class molecules (B-F and B-L molecules) are highly conserved, with tissue distribution, structure and functions being similar to their mammalian counterparts. Avian MHC Class I molecules, known also as B-F antigens, consist of a glycosylated polymorphic transmembrane <math>\alpha</math>-chain non-covalently bound to the invariant <math>\beta</math>2-microglobulin subunit.</p> <p>Mouse anti Chicken MHC Class I, clone F21-2 recognizes Turkey MHC Class I (<a href="#">Meyerhoff et al. 2012</a>).</p>   |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>1. Crone, M. <i>et al.</i> (1985) Mouse monoclonal antibodies to class I and class II antigens of the chicken MHC. Evidence for at least two class I products of the B complex. <a href="#">Immunogenetics. 21: 181-7.</a></li> <li>2. Salomonsen, J. <i>et al.</i> (1991) Chicken major histocompatibility complex-encoded B-G antigens are found on many cell types that are important for the immune system. <a href="#">Proc Natl Acad Sci U S A. 88 (4): 1359-63.</a></li> <li>3. Walker, B.A. <i>et al.</i> (2011) The dominantly expressed class I molecule of the chicken MHC is explained by coevolution with the polymorphic peptide transporter (TAP) genes. <a href="#">Proc Natl Acad Sci U S A. 108: 8396-401.</a></li> <li>4. Meyerhoff, R.R. <i>et al.</i> (2012) Comprehensive analysis of commercially available mouse antichickens monoclonal antibodies for cross-reactivity with peripheral blood leukocytes from commercial turkeys. <a href="#">Poult Sci. 91: 383-92.</a></li> </ol> |
| <b>Further Reading</b>                | 1. Kaufman, J. <i>et al.</i> (1989) B-G cDNA clones have multiple small repeats and hybridize to both chicken MHC regions. <a href="#">Immunogenetics. 30 (6): 440-51.</a>  |
| <b>Storage</b>                        | <p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in</p>   |

frost-free freezers is not recommended.

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| <b>Guarantee</b> | 12 months from date of despatch |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10077 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA5761">https://www.bio-rad-antibodies.com/SDS/MCA5761</a> |
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| <b>Regulatory</b> | For research purposes only |
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## 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](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://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](http://bio-rad-antibodies.com/datasheets)

'M392050:211020'

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