

## Datasheet: MCA5655

<b>Description:</b>	MOUSE ANTI BOVINE MHC CLASS II DQ
<b>Specificity:</b>	MHC CLASS II DQ
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CC158
<b>Isotype:</b>	IgG2a
<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			▪	
Immunofluorescence	▪			
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>	Bovine
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
External Database Links	<b>UniProt:</b> <a href="#">Q30308</a> <a href="#">Related reagents</a>
RRID	AB_10863323
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	<p><b>Mouse anti Bovine MHC class II DQ antibody, clone CC158</b> recognizes Bovine MHC Class II DQ. MHC Class II molecules are constitutively expressed on antigen presenting cells such as dendritic cells, B lymphocytes, monocytes, macrophages, activated T lymphocytes and may be induced on a range of other cell types by interferon gamma.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes some of which are important in the immune response to infections. In cattle, this complex is referred to as the bovine leukocyte antigen (BoLA) region. There are 2 major types of MHC class IIa molecules encoded by the BoLA gene cluster, DR and DQ each composed of an alpha and beta chain.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul. .
References	<ol style="list-style-type: none"> <li>1. Stephens, S.A. &amp; Howard, C.J. (2002) Infection and transformation of dendritic cells from bovine afferent lymph by <i>Theileria annulata</i>. <a href="#">Parasitology. 124 (Pt 5): 485-93.</a></li> <li>2. Van Rhijn, I. <i>et al.</i> (2007) Massive, sustained gammadelta T cell migration from the bovine skin <i>in vivo</i>. <a href="#">J Leukoc Biol. 81: 968-73.</a></li> <li>3. Yamakawa, Y. <i>et al.</i> (2008) Identification and functional characterization of a bovine orthologue to DC-SIGN. <a href="#">J Leukoc Biol. 83 (6): 1396-403.</a></li> <li>4. Price, S.J. and Hope, J.C. (2009) Enhanced secretion of interferon-gamma by bovine gammadelta T cells induced by coculture with <i>Mycobacterium bovis</i>-infected dendritic cells: evidence for reciprocal activating signals. <a href="#">Immunology. 126: 201-8.</a></li> <li>5. Vohra, P. <i>et al.</i> (2019) Nature and consequences of interactions between Salmonella enterica serovar Dublin and host cells in cattle. <a href="#">Vet Res. 50 (1): 99.</a></li> </ol>
Storage	<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 frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA5655>  
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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)

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