

## Datasheet: MCA5655PE

|                      |                                       |
|----------------------|---------------------------------------|
| <b>Description:</b>  | MOUSE ANTI BOVINE MHC CLASS II DQ:RPE |
| <b>Specificity:</b>  | MHC CLASS II DQ                       |
| <b>Format:</b>       | RPE                                   |
| <b>Product Type:</b> | Monoclonal Antibody                   |
| <b>Clone:</b>        | CC158                                 |
| <b>Isotype:</b>      | IgG2a                                 |
| <b>Quantity:</b>     | 100 TESTS                             |

## 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 | ■   |    |                | Neat               |

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 conjugated to R. Phycoerythrin (RPE) - lyophilized                                   |                            |                          |
| <b>Reconstitution</b>           | Reconstitute with 1.0ml distilled water                                                           |                            |                          |
| <b>Max Ex/Em</b>                | <b>Fluorophore</b>                                                                                | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                 | RPE 488nm laser                                                                                   | 496                        | 578                      |
| <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> )                                                            |                            |                          |
|                                 | 1% Bovine Serum Albumin                                                                           |                            |                          |
|                                 | 5% Sucrose                                                                                        |                            |                          |
| <b>External Database Links</b>  | <b>UniProt:</b><br><a href="#">Q30308</a> <a href="#">Related reagents</a>                        |                            |                          |
| <b>Fusion Partners</b>          | Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line. |                            |                          |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Specificity</b>                   | <p><b>Mouse anti Bovine MHC class II DQ antibody, clone CC158</b> recognises 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 which are DR and DQ each composed of an alpha and beta chain.</p>                                                                                                                                                                   |
| <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. 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. 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>3. Price, S.J. and Hope, J.C. (2009) Enhanced secretion of interferon-gamma by bovine gammadelta T cells induced by coculture with Mycobacterium bovis-infected dendritic cells: evidence for reciprocal activating signals. <a href="#">Immunology. 126: 201-8.</a></li> <li>4. Van Rhijn, I. <i>et al.</i> (2007) Massive, sustained gammadelta T cell migration from the bovine skin in vivo. <a href="#">J Leukoc Biol. 81: 968-73.</a></li> </ol> |
| <b>Storage</b>                       | <p>Prior to reconstitution store at +4°C.</p> <p>After reconstitution store at +4°C.</p> <p>DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Shelf Life</b>                    | 12 months from date of reconstitution.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10075 available at: 10075: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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