

Datasheet: MCA2445PE

BATCH NUMBER INN1111

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| Description: | MOUSE ANTI BOVINE MHC CLASS II MONOMORPHIC:RPE |
| Specificity: | MHC CLASS II MONOMORPHIC |
| Format: | RPE |
| Product Type: | Monoclonal Antibody |
| Clone: | IL-A21 |
| Isotype: | IgG2a |
| Quantity: | 100 TESTS/1ml |

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 | ▪ | | | Neat |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

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| Target Species | Bovine |
| Product Form | Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilised |
| Reconstitution | Reconstitute with 1.0 ml distilled water |
| Preparation | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative | 0.09% Sodium Azide (NaN ₃) |
| Stabilisers | 1% Bovine Serum Albumin 5% Sucrose |
| Fusion Partners | Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line. |

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| Specificity | <p>Mouse anti Bovine MHC Class II Monomorphic antibody, clone IL-A21 recognizes a monomorphic epitope within the bovine MHC II cell surface antigen. Clone IL-A21 is reported to react with an epitope which is common to both BoLA DR and DQ (Howard et al.1997).</p> <p>Expression of MHC II molecules have been demonstrated on bovine B cells, activated T cells, alveolar macrophages, monocytes and mammary and bronchial epithelial cells.</p> <p>Clone IL-A21 is reported to inhibit T cell proliferation following FMDV infection.</p> |
| Flow Cytometry | <p>Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.</p> |
| References | <ol style="list-style-type: none"> 1. Collen, T. <i>et al.</i> (1991) A T cell epitope in VP1 of Foot-and-mouth disease virus is immunodominant for vaccinated cattle. J. Immunol. 146: 749-755. 2. Davies, S.J. <i>et al.</i> (1992) Characterization of bovine MHC class II polymorphism using three typing methods: serology, RFLP and IEF. Eur. J. Immunogenet. 19: 253-262. 3. DeMartini, J.C. <i>et al.</i> (1993) Differential in vitro and in vivo expression of MHC class II antigens in bovine lymphocytes infected by <i>Theileria parva</i>. Vet. Immunol. Immunopathol. 35: 253-273. 4. Howard, C.J. <i>et al.</i> (1997) Identification of two distinct populations of dendritic cells in afferent lymph that vary in their ability to stimulate T cells. J. Immunol. 159: 5372-7382. 5. Ballingall, K.T. <i>et al.</i> (2001) Transcription of the unique ruminant class II major histocompatibility complex- <i>DYA</i> and <i>DIB</i> genes in dendritic cells. Eur. J. Immunol. 31: 82-86. 6. Sathiyaseelan, T. <i>et al.</i> (2002) Immunological characterization of a gammadelta T-cell stimulatory ligand on autologous monocytes. Immunology. 105:181-9 7. Daubenberger, C. <i>et al.</i> (1999) Bovine gammadelta T-cell responses to the intracellular protozoan parasite <i>Theileria parva</i> Infect Immun. 67:2241-9. 8. Constantinoiu, C.C. <i>et al.</i> (2010) Local immune response against larvae of <i>Rhipicephalus (Boophilus) microplus</i> in <i>Bos taurus indicus</i> and <i>Bos taurus taurus</i> cattle. Int J Parasitol. 40: 865-75. |
| Storage | <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> |
| Guarantee | <p>12 months from date of reconstitution.</p> |
| Health And Safety Information | <p>Material Safety Datasheet documentation available at: https://www.bio-rad-antibodies.com/SDS/MCA2445PE</p> <p>Material Safety Datasheet Documentation #10075 available at: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf</p> |
| Regulatory | <p>For research purposes only</p> |

Related Products

Recommended Negative Controls

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

Product inquiries: 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
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Printed on 14 May 2026

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