# Datasheet: MCA2444GA

**BATCH NUMBER 148296**

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| **Description:** | MOUSE ANTI BOVINE MHC CLASS I MONOMORPHIC |
| **Specificity:** | MHC CLASS I MONOMORPHIC |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | IL-A88 |
| **Isotype:** | IgG2a |
| **Quantity:** | 0.1 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.

| | Yes | No | Not Determined | Suggested Dilution |
|---|---|---|---|---|
| Flow Cytometry | ▪ | | | 1/25 - 1/200 |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | ▪ | | | |

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 - liquid |
| **Preparation** | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |
| **Buffer Solution** | Phosphate buffered saline |
| **Preservative Stabilisers** | 0.09% Sodium Azide ($NaN_3$) |
| **Carrier Free** | Yes |

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| **Approx. Protein Concentrations** | IgG concentration 1.0 mg/ml |
| **Immunogen** | Bovine peripheral blood mononuclear cells. |
| **External Database Links** | **UniProt:**<br>Q30289 Related reagents |
| **Fusion Partners** | Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line. |
| **Specificity** | **Mouse anti Bovine MHC Class I Monomorphic antibody, clone IL-A88** recognizes a monomorphic determinant within the heavy chain of bovine MHC Class I.<br><br>Bovine MHC class I molecules are expressed at varying levels on most nucleated cells, with exception of neural cells. This antibody immunoprecipitates a band of approximately 45 kDa under reducing conditions. |
| **Flow Cytometry** | Use 10ul of the suggested working dilution to label 1x$10^6$ cells in 100ul. |
| **References** | 1. Ambagala, A.P. *et al.* (2000) An early pseudorabies virus protein down-regulates porcine MHC class I expression by inhibition of transporter associated with antigen processing (TAP). J Immunol. 164 (1): 93-9.<br>2. Daubenberger CA *et al.* (1999) Bovine gammadelta T-cell responses to the intracellular protozoan parasite *Theileria parva*. Infect Immun. 67 (5): 2241-9.<br>3. Araibi, E.H. *et al.* (2004) Downregulation of major histocompatibility complex class I in bovine papillomas. J Gen Virol. 85 (Pt 10): 2809-14.<br>4. Ashrafi, G.H. *et al.* (2002) Down-regulation of MHC class I by bovine papillomavirus E5 oncoproteins. Oncogene. 21: 248-59.<br>5. Suzuki, T. *et al.* (2003) Evaluation of the delta subunit of bovine adaptor protein complex 3 as a receptor for bovine leukaemia virus. J Gen Virol. 84 (Pt 5): 1309-16.<br>6. Stephens SA & Howard CJ (2002) Infection and transformation of dendritic cells from bovine afferent lymph by *Theileria annulata*. Parasitology. 124 (Pt 5): 485-93.<br>7. Toye, P.G. *et al.* (1990) Transfection into mouse L cells of genes encoding two serologically and functionally distinct bovine class I MHC molecules from a MHC-homozygous animal: evidence for a second class I locus in cattle. Immunology. 70: 20-6.<br>8. Marchetti, B. *et al.* (2002) The bovine papillomavirus oncoprotein E5 retains MHC class I molecules in the Golgi apparatus and prevents their transport to the cell surface. Oncogene. 21:7808-16<br>9. Bainbridge, DR. *et al.* (2001) Increased expression of major histocompatibility complex (MHC) class I transplantation antigens in bovine trophoblast cells before fusion with maternal cells. Reproduction.122: 907-13.<br>10. Norimatsu, M. *et al.* (2003) Differential response of bovine monocyte-derived macrophages and dendritic cells to infection with Salmonella typhimurium in a low-dose model in vitro. Immunology. 108: 55-61.<br>11. Goh, S. *et al.* (2016) Identification of *Theileria lestoquardi* Antigens Recognized by |

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| | CD8+ T Cells. PLoS One. 11 (9): e0162571. |
| **Storage** | Store at +4°C or at -20°C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
| **Guarantee** | 12 months from date of despatch |
| **Health And Safety Information** | Material Safety Datasheet documentation #10040 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA2444GA<br>10040 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Secondary Antibodies

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| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos., HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC, HRP |
| 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

'M366919:200529'

**Printed on 25 Mar 2023**