

## Datasheet: MCA2444F

<b>Description:</b>	MOUSE ANTI BOVINE MHC CLASS I MONOMORPHIC:FITC
<b>Specificity:</b>	MHC CLASS I MONOMORPHIC
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	IL-A88
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

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.

<b>Target Species</b>	Bovine		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml		
<b>Immunogen</b>	Bovine peripheral blood mononuclear cells.		

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q30289</a> <a href="#">Related reagents</a>
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63.Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Bovine MHC Class I Monomorphic antibody, clone IL-A88</b> recognizes a monomorphic determinant within the heavy chain of bovine MHC Class I.</p> <p>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.</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>Ambagala, A.P. <i>et al.</i> (2000) An early pseudorabies virus protein down-regulates porcine MHC class I expression by inhibition of transporter associated with antigen processing (TAP). <a href="#">J Immunol. 164 (1): 93-9.</a></li> <li>Daubenberger CA <i>et al.</i> (1999) Bovine gammadelta T-cell responses to the intracellular protozoan parasite <i>Theileria parva</i>. <a href="#">Infect Immun. 67 (5): 2241-9.</a></li> <li>Araibi, E.H. <i>et al.</i> (2004) Downregulation of major histocompatibility complex class I in bovine papillomas. <a href="#">J Gen Virol. 85 (Pt 10): 2809-14.</a></li> <li>Ashrafi, G.H. <i>et al.</i> (2002) Down-regulation of MHC class I by bovine papillomavirus E5 oncoproteins. <a href="#">Oncogene. 21: 248-59.</a></li> <li>Suzuki, T. <i>et al.</i> (2003) Evaluation of the delta subunit of bovine adaptor protein complex 3 as a receptor for bovine leukaemia virus. <a href="#">J Gen Virol. 84 (Pt 5): 1309-16.</a></li> <li>Stephens SA &amp; Howard CJ (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>Toye, P.G. <i>et al.</i> (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. <a href="#">Immunology. 70: 20-6.</a></li> <li>Marchetti, B. <i>et al.</i> (2002) The bovine papillomavirus oncoprotein E5 retains MHC class I molecules in the Golgi apparatus and prevents their transport to the cell surface. <a href="#">Oncogene. 21:7808-16</a></li> <li>Bainbridge, DR. <i>et al.</i> (2001) Increased expression of major histocompatibility complex (MHC) class I transplantation antigens in bovine trophoblast cells before fusion with maternal cells. <a href="#">Reproduction.122: 907-13.</a></li> <li>Norimatsu, M. <i>et al.</i> (2003) Differential response of bovine monocyte-derived macrophages and dendritic cells to infection with Salmonella typhimurium in a low-dose model in vitro. <a href="#">Immunology. 108: 55-61.</a></li> <li>Goh, S. <i>et al.</i> (2016) Identification of <i>Theileria lestoquardi</i> Antigens Recognized by CD8+ T Cells. <a href="#">PLoS One. 11 (9): e0162571.</a></li> </ol>
<b>Storage</b>	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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

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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 #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA929F\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M385410:210513'

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