

# Datasheet: MCA1086F

**BATCH NUMBER 165569**

<b>Description:</b>	MOUSE ANTI HORSE 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>	CVS22
<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.

Target Species	Horse		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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 <sub>3</sub> )		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

<b>Immunogen</b>	Equine leucocytes.
<b>Fusion Partners</b>	Spleen cells from immunized mice were fused with cells of the X63.Ag 8.653 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Horse MHC Class I Monomorphic antibody, clone CVS22</b> recognizes monomorphic equine MHC Class I and was classified at the International Equine Leucocyte Antigen Workshop. MHC class I is expressed by all nucleated cells.</p> <p>The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In horses, this complex is referred to as the equine leukocyte antigen (ELA) region.</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Lunn, D.P. <i>et al.</i> (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. <a href="#">Vet Immunol Immunopathol. 62:101-143</a></li> <li>2. Mérand, C. <i>et al.</i> (2009) Young foal and adult horse monocyte-derived dendritic cells differ by their degree of phenotypic maturity. <a href="#">Vet Immunol Immunopathol. 131 (1-2): 1-8.</a></li> <li>3. Carrade, D.D. <i>et al.</i> (2011) Clinicopathologic findings following intra-articular injection of autologous and allogeneic placentally derived equine mesenchymal stem cells in horses. <a href="#">Cytotherapy. 13 (4): 419-30.</a></li> <li>4. Soboll Hussey, G. <i>et al.</i> (2014) Innate immune responses of airway epithelial cells to infection with equine herpesvirus-1. <a href="#">Vet Microbiol. 170 (1-2): 28-38.</a></li> <li>5. Tessier, L. <i>et al.</i> (2015) Phenotypic and immunomodulatory properties of equine cord blood-derived mesenchymal stromal cells. <a href="#">PLoS One. 10 (4): e0122954.</a></li> <li>6. Maumus M <i>et al.</i> (2016) Utility of a Mouse Model of Osteoarthritis to Demonstrate Cartilage Protection by IFNγ-Primed Equine Mesenchymal Stem Cells. <a href="#">Front Immunol. 7: 392.</a></li> <li>7. Barberini, D.J. <i>et al.</i> (2018) Safety and tracking of intrathecal allogeneic mesenchymal stem cell transplantation in healthy and diseased horses. <a href="#">Stem Cell Res Ther. 9 (1): 96.</a></li> <li>8. Kamm, J.L. <i>et al.</i> (2021) Immune response to allogeneic equine mesenchymal stromal cells. <a href="#">Stem Cell Res Ther. 12 (1): 570.</a></li> <li>9. Rapacz-leonard, A. <i>et al.</i> (2018) Major histocompatibility complex class I in the horse (<i>Equus caballus</i>) placenta during pregnancy and parturition. <a href="#">Placenta. 74: 36-46.</a></li> </ol>
<b>Storage</b>	<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>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1086F">https://www.bio-rad-antibodies.com/SDS/MCA1086F</a></p> <p>10041</p>

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**Regulatory**For research purposes only

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**North & South** Tel: +1 800 265 7376**America** Fax: +1 919 878 3751Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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)

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