

## Datasheet: MCA1085GA

<b>Description:</b>	MOUSE ANTI HORSE MHC CLASS II MONOMORPHIC
<b>Specificity:</b>	MHC CLASS II MONOMORPHIC
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CVS20
<b>Isotype:</b>	IgG1
<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	▪			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.

<b>Target Species</b>	Horse
<b>Species Cross Reactivity</b>	<p>Reacts with: Human, Bovine, Dog</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
<b>Product Form</b>	Purified IgG - liquid
<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> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	3132 cells.
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X.63-Ag8.653 mouse myeloma cell line
<b>Specificity</b>	<p><b>Mouse anti Horse MHC Class II Monomorphic antibody, clone CVS20</b> recognizes monomorphic equine MHC Class II and was classified at the International Equine Leucocyte Antigen Workshop. Clone CVS20 reacts with all equine B cells and 95% of equine T 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 is referred to as the equine leukocyte antigen (ELA) region.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kydd, J.H. &amp; Antczak, D.F. (1991) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991 <a href="#">Equine Immunol. 4: 5.</a></li> <li>2. 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 (2): 101-43.</a></li> <li>3. Weiss, D.J. <i>et al.</i> (2001) Regulation of expression of major histocompatibility antigens by bovine macrophages infected with <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> or <i>Mycobacterium avium</i> subsp. <i>avium</i>. <a href="#">Infect Immun. 69 (2): 1002-8.</a></li> <li>4. Out, T.A. <i>et al.</i> (2002) Local T-cell activation after segmental allergen challenge in the lungs of allergic dogs. <a href="#">Immunology. 105 (4): 499-508.</a></li> <li>5. 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: 419-30.</a></li> <li>6. Catchpole, B. <i>et al.</i> (2002) Generation of blood-derived dendritic cells in dogs with oral malignant melanoma. <a href="#">J Comp Pathol. 126: 238-41.</a></li> <li>7. Weiss, D.J. <i>et al.</i> (2006) Mucosal immune response in cattle with subclinical Johne's disease. <a href="#">Vet Pathol. 43: 127-35.</a></li> <li>8. Weiss, D.J. (2001) Evaluation of proliferative disorders in canine bone marrow by use of flow cytometric scatter plots and monoclonal antibodies. <a href="#">Vet Pathol. 38: 512-8.</a></li> <li>9. Sassa, Y. <i>et al.</i> (2010) Bovine macrophage degradation of scrapie and BSE PrPSc <a href="#">Vet Immunol Immunopathol. 133: 33-9.</a></li> <li>10. Carrade, D.D. <i>et al.</i> (2012) Comparative Analysis of the Immunomodulatory Properties of Equine Adult-Derived Mesenchymal Stem Cells(). <a href="#">Cell Med. 4 (1): 1-11.</a></li> <li>11. Hussein, H. <i>et al.</i> (2016) Cathepsin K inhibition renders equine bone marrow nucleated cells hypo-responsive to LPS and unmethylated CpG stimulation <i>in vitro</i>. <a href="#">Comp</a></li> </ol>

[Immunol Microbiol Infect Dis. 45: 40-7.](#)

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13. de Moraes, C.N. *et al.* (2016) Bovine endometrial cells: a source of mesenchymal stem/progenitor cells. [Cell Biol Int. 40 \(12\): 1332-1339.](#)

14. Maumus, M. *et al.* (2016) Utility of a Mouse Model of Osteoarthritis to Demonstrate Cartilage Protection by IFN $\gamma$ -Primed Equine Mesenchymal Stem Cells. [Front Immunol. 7: 392.](#)

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16. Abdelhamid, L. *et al.* (2017) Retinoic acid-mediated anti-inflammatory responses in equine immune cells stimulated by LPS and allogeneic mesenchymal stem cells. [Res Vet Sci. 114: 225-32.](#)

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19. Santos, V.H.D. *et al.* (2019) Evaluation of alginate hydrogel encapsulated mesenchymal stem cell migration in horses. [Res Vet Sci. 124: 38-45.](#)

20. Barberini, D.J. *et al.* (2018) Safety and tracking of intrathecal allogeneic mesenchymal stem cell transplantation in healthy and diseased horses. [Stem Cell Res Ther. 9 \(1\): 96.](#)

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**Further Reading** 1. Burk, J. *et al.* (2013) Equine cellular therapy-from stall to bench to bedside? [Cytometry A. 83: 103-13](#)

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**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight@800</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</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)

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