

## Datasheet: MCA1082PE

**BATCH NUMBER 149098**

<b>Description:</b>	MOUSE ANTI HORSE CD44:RPE
<b>Specificity:</b>	CD44
<b>Other names:</b>	H-CAM, PGP-1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CVS18
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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

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>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1.0 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G		
<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		
	5% Sucrose		

<b>Immunogen</b>	Equine leucocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q05078</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">100034221</a>    CD44    <a href="#">Related reagents</a></p>
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the X63-Ag 8.653 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Horse CD11a/CD18 antibody, clone CVS18</b> recognizes equine CD44, a plasma membrane glycoprotein broadly expressed on the cell surface of leucocytes. CD44 is the primary receptor for hyaluronate and functions in cell adhesion.</p> <p>Equine CD44 is widely expressed and Mouse anti Horse CD11a/CD18 antibody, clone CVS18 may be used as a pan equine leucocyte marker.</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. <i>et al.</i> (1994) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991. <a href="#">Vet Immunol Immunopathol. 42 (1): 3-60.</a></li> <li>2. Rappocciolo, G. <i>et al.</i> (2003) Down-regulation of MHC class I expression by equine herpesvirus-1 <a href="#">J Gen Virol. 84: 293-300</a></li> <li>3. De Schauwer, C. <i>et al.</i> (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. <a href="#">Cytometry A. 81: 312-23.</a></li> <li>4. Radcliffe, C.H. <i>et al.</i> (2010) Temporal analysis of equine bone marrow aspirate during establishment of putative mesenchymal progenitor cell populations. <a href="#">Stem Cells Dev. 19: 269-82.</a></li> <li>5. 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>6. Maia, L. <i>et al.</i> (2015) Feasibility and safety of intrathecal transplantation of autologous bone marrow mesenchymal stem cells in horses. <a href="#">BMC Vet Res. 11 (1): 361.</a></li> <li>7. Maia L <i>et al.</i> (2013) Immunophenotypic, immunocytochemistry, ultrastructural, and cytogenetic characterization of mesenchymal stem cells from equine bone marrow. <a href="#">Microsc Res Tech. 76 (6): 618-24.</a></li> <li>8. Soboll, G. <i>et al.</i> (2003) Mucosal co-administration of cholera toxin and influenza virus hemagglutinin-DNA in ponies generates a local IgA response. <a href="#">Vaccine. 21 (21-22): 3081-92.</a></li> <li>9. 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>10. Spaas, J.H. <i>et al.</i> (2015) Chondrogenic Priming at Reduced Cell Density Enhances Cartilage Adhesion of Equine Allogeneic MSCs - a Loading Sensitive Phenomenon in an Organ Culture Study with 180 Explants. <a href="#">Cell Physiol Biochem. 37 (2): 651-665.</a></li> <li>11. Gomiero, C. <i>et al.</i> (2016) Tenogenic induction of equine mesenchymal stem cells by means of growth factors and low-level laser technology. <a href="#">Vet Res Commun. 40 (1): 39-48.</a></li> <li>12. Clark, K.C. <i>et al.</i> (2016) Canine and Equine Mesenchymal Stem Cells Grown in</li> </ol>

- Serum Free Media Have Altered Immunophenotype. [Stem Cell Rev. 12 \(2\): 245-56.](#)
13. Alvarenga, M.A. (2016) Feasibility and Safety of Endometrial Injection of Autologous Bone Marrow Mesenchymal Stem Cells in Mares [J Eq Vet Sci. 42: 12-8.](#)
  14. Lepage, S.I. *et al.* (2016) Generation, Characterization, and Multilineage Potency of Mesenchymal-Like Progenitors Derived from Equine Induced Pluripotent Stem Cells. [Stem Cells Dev. 25 \(1\): 80-9.](#)
  15. Maia, L. *et al.* (2016) Conditioned medium: A new alternative for cryopreservation of equine umbilical cord mesenchymal stem cells. [Cell Biol Int. Nov 26. \[Epub ahead of print\]](#)
  16. 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.](#)
  17. Maia, L. *et al.* (2017) A proteomic study of mesenchymal stem cells from equine umbilical cord. [Theriogenology. 100: 8-15.](#)
  18. Rink, B.E. *et al.* (2017) Isolation and characterization of equine endometrial mesenchymal stromal cells. [Stem Cell Res Ther. 8 \(1\): 166.](#)
  19. Maia, L. *et al.* (2015) Feasibility and safety of intrathecal transplantation of autologous bone marrow mesenchymal stem cells in horses. [BMC Vet Res. 11: 63.](#)
  20. Dos Santos V, H. *et al.* (2019) Evaluation of alginate hydrogel encapsulated mesenchymal stem cell migration in horses. [Res Vet Sci. 124: 38-45.](#)
  21. 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.](#)
  22. Esteves, C.L. *et al.* (2017) Equine Mesenchymal Stromal Cells Retain a Pericyte-Like Phenotype. [Stem Cells Dev. 26 \(13\): 964-72.](#)
  23. Esteves, C.L. *et al.* (2017) Isolation and characterization of equine native MSC populations. [Stem Cell Res Ther. 8 \(1\): 80.](#)
  24. Tongu, E.A.O. *et al.* (2021) Allogenic mesenchymal stem cell-conditioned medium does not affect sperm parameters and mitigates early endometrial inflammatory responses in mares. [Theriogenology. 169: 1-8.](#)
  25. Murata, D. *et al.* (2022) Osteochondral regeneration of the femoral medial condyle by using a scaffold-free 3D construct of synovial membrane-derived mesenchymal stem cells in horses. [BMC Vet Res. 18 \(1\): 53.](#)
  26. Bernardino, P.N. *et al.* (2022) Therapeutics prior to mesenchymal stromal cell therapy improves outcome in equine orthopedic injuries. [Am J Vet Res. 83 \(10\): ajvr.22.04.0072.](#)

<b>Further Reading</b>	1. Burk, J. <i>et al.</i> (2013) Equine cellular therapy--from stall to bench to bedside? <a href="#">Cytometry A. 83 (1): 103-13.</a>
<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1082PE">https://www.bio-rad-antibodies.com/SDS/MCA1082PE</a> 20487
<b>Regulatory</b>	For research purposes only

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