Datasheet: MCA1082F

Description:	MOUSE ANTI HORSE CD44:FITC
Specificity:	CD44
Other names:	H-CAM, PGP-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CVS18
Isotype:	IgG1
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	▪			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 A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen

Equine leucocytes.

External Database Links

UniProt:
Q05078 Related reagents

Entrez Gene:

100034221 CD44 Related reagents

Fusion Partners

Spleen cells from immunised mice were fused with cells of the X63-Ag 8.653 mouse myeloma cell line.

Specificity

Mouse anti Horse CD11a/CD18 antibody, clone CVS18 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.

Equine CD44 is widely expressed and Mouse anti Horse CD11a/CD18 antibody, clone CVS18 may be used as a pan equine leucocyte marker.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Kydd, J. *et al.* (1994) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991. Vet Immunol Immunopathol. 42 (1): 3-60.
2. Rappocciolo,G. *et al.* (2003) Down-regulation of MHC class I expression by equine herpesvirus-1 J Gen Virol. 84: 293-300
3. De Schauwer, C. *et al.* (2012) In search for cross-reactivity to immunophenotype equine mesenchymal stromal cells by multicolor flow cytometry. Cytometry A. 81: 312-23.
4. Radcliffe, C.H. *et al.* (2010) Temporal analysis of equine bone marrow aspirate during establishment of putative mesenchymal progenitor cell populations. Stem Cells Dev. 19: 269-82.
5. Carrade, D.D. *et al.* (2012) Comparative Analysis of the Immunomodulatory Properties of Equine Adult-Derived Mesenchymal Stem Cells(). Cell Med. 4 (1): 1-11.
6. Maia, L. *et al.* (2015) Feasibility and safety of intrathecal transplantation of autologous bone marrow mesenchymal stem cells in horses. BMC Vet Res. 11 (1): 361.
7. Maia L *et al.* (2013) Immunophenotypic, immunocytochemistry, ultrastructural, and cytogenetic characterization of mesenchymal stem cells from equine bone marrow. Microsc Res Tech. 76 (6): 618-24.
8. Soboll, G. *et al.* (2003) Mucosal co-administration of cholera toxin and influenza virus hemagglutinin-DNA in ponies generates a local IgA response. Vaccine. 21 (21-22): 3081-92.
9. Tessier L *et al.* (2015) Phenotypic and immunomodulatory properties of equine cord blood-derived mesenchymal stromal cells. PLoS One. 10 (4): e0122954.
10. Spaas, J.H. *et al.* (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. Cell Physiol Biochem. 37 (2): 651-665.
11. Gomiero, C. *et al.* (2016) Tenogenic induction of equine mesenchymal stem cells by means of growth factors and low-level laser technology. Vet Res Commun. 40 (1): 39-48.
12. Clark, K.C. *et al.* (2016) Canine and Equine Mesenchymal Stem Cells Grown in 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 IFNγ-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.

Further Reading	1. Burk, J. *et al.* (2013) Equine cellular therapy--from stall to bench to bedside? Cytometry A. 83 (1): 103-13.
Storage	Store at +4^{o}C for one month or at -20^{o}C for longer. 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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

'M301602:170109'

Printed on 05 May 2018