Datasheet: MCA1085F

BATCH NUMBER 164413

Description:	MOUSE ANTI HORSE MHC CLASS II MONOMORPHIC:FITC
Specificity:	MHC CLASS II MONOMORPHIC
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CVS20
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

Species Cross Reactivity

Reacts with: Human, Bovine, Dog

N.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.

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 Stabilisers	0.09% sodium azide (NaN_3) 1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	3132 cells.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X.63-Ag8.653 mouse myeloma cell line
Specificity	**Mouse anti Horse MHC Class II Monomorphic antibody, clone CVS20** 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. 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.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Lunn, D.P. *et al.* (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. Vet Immunol Immunopathol. 62 (2): 101-43. 2. Weiss, D.J. *et al.* (2001) Regulation of expression of major histocompatibility antigens by bovine macrophages infected with *Mycobacterium avium* subsp. *paratuberculosis* or *Mycobacterium avium* subsp. *avium*. Infect Immun. 69 (2): 1002-8. 3. Out, T.A. *et al.* (2002) Local T-cell activation after segmental allergen challenge in the lungs of allergic dogs. Immunology. 105 (4): 499-508. 4. Catchpole, B. *et al.* (2002) Generation of blood-derived dendritic cells in dogs with oral malignant melanoma. J Comp Pathol. 126: 238-41. 5. Weiss, D.J. *et al.* (2006) Mucosal immune response in cattle with subclinical Johne's disease. Vet Pathol. 43: 127-35. 6. Sassa, Y. *et al.* (2010) Bovine macrophage degradation of scrapie and BSE PrPSc Vet Immunol Immunopathol. 133: 33-9. 7. Carrade, D.D. *et al.* (2011) Clinicopathologic findings following intra-articular injection of autologous and allogeneic placentally derived equine mesenchymal stem cells in horses. Cytotherapy. 13: 419-30. 8. Weiss, D.J. (2001) Evaluation of proliferative disorders in canine bone marrow by use of flow cytometric scatter plots and monoclonal antibodies. Vet Pathol. 38: 512-8. 9. 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. 10. Hussein, H. *et al.* (2016) Cathepsin K inhibition renders equine bone marrow nucleated cells hypo-responsive to LPS and unmethylated CpG stimulation *in vitro*. Comp Immunol Microbiol Infect Dis. 45: 40-7. 11. Hussein, H. *et al.* (2016) Cathepsin K inhibition renders equine bone marrow nucleated cells hypo-responsive to LPS and unmethylated CpG stimulation *in vitro*. Comp Immunol Microbiol Infect Dis. 45: 40-7.

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26. Lopez,.B.S. *et al.* (2024) The effect of cortisol on equine monocyte–derived dendritic cell phenotype and cytokine production Vet Med Sci. 10 (2): e1333 [Epub ahead of print].
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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

Storage	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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1085F 10041
Regulatory	For research purposes only

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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

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