Datasheet: MCA1899F

BATCH NUMBER 158531

Description:	MOUSE ANTI HORSE PAN B-CELLS:FITC
Specificity:	PAN B-CELLS
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CVS36
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
ELISA	▪			
Immunofluorescence			▪	

Where this product 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 product 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 Stabilisers

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

Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Purified Equine Ig.
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the X63-Ag8.653 myeloma cell line.
Specificity	**Mouse anti Horse Pan B-Cells, clone CVS36** is a monoclonal antibody directed against equine Ig light chains. Mouse anti Horse Pan B-Cells, clone CVS36 binds 100% of CD5-ve peripheral blood lymphocytes and recognized all equine B-cells (Lunn *et al.* 1998) As the antigen recognized by clone CVS36 appears to be present on the surface of all equine B-cells it is therefore is a reagent that can be used as a pan B-cell marker for domestic horses (Breathnach *et al.* 2005). Specific anti equine reagents have yet to be fully characterized for the typically recognized B-cell makers such as CD19, CD20, CD21, CD22 and CD79. While testing has demonstrated the cross reactivity of some monoclonal B-cell markers raised against other species with equine B cells, such as the Mouse anti Human CD79a antibody, (clone HM57), an overview of which may be found in the report of the second equine leucocyte antigen workshop (Lunn *et al.* 1998). With specificity for equine Ig light chains, clone CVS36 may be used to detect all equine immunoglobulin classes and subclasses in ELISA applications (Lunn *et al.* 1998).
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul
References	1. Schneider, R. (2010) Analysis of antibody subtypes and T lymphocyte activation following vaccination of healthy foals against West Nile Virus In M.Sc thesis University of Pennsylvania, Chapter 3, p.34-45 2. 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. 3. Umlauf, C. (2004) Herstellung und Charakterisierung monoklonaler Antikörper gegen equine Leukozyten In Phd thesis Ludwig-Maximillians-Universität München 4. Tomlinson, J.E. *et al.* (2018) Multispectral fluorescence-activated cell sorting of B and T cell subpopulations from equine peripheral blood. Vet Immunol Immunopathol. 199: 22-31. 5. Cequier, A. *et al.* (2022) Equine Mesenchymal Stem Cells Influence the Proliferative Response of Lymphocytes: Effect of Inflammation, Differentiation and MHC-Compatibility. Animals (Basel). 12 (8): 984.
Further Reading	1. Lunn, D.P. *et al.* (1991) Three monoclonal antibodies identifying antigens on all equine T lymphocytes, and two mutually exclusive T-lymphocyte subsets. Immunology. 74 (2): 251-7. 2. Sheoran, A.S. *et al.* (1998) Monoclonal antibodies to subclass-specific antigenic determinants on equine immunoglobulin gamma chains and their characterization. Vet Immunol Immunopathol. 62 (2): 153-65.
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.
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/MCA1899F 10041
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

MOUSE ANTI HORSE PAN B-CELLS (MCA1899GA)
MOUSE ANTI HORSE PAN B-CELLS:RPE (MCA1899PE)

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

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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