

Datasheet: MCA1078F

Description:	MOUSE ANTI HORSE CD4:FITC
Specificity:	CD4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	CVS4
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
Immunofluorescence			■	

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	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		
Immunogen	Equine thymocytes.		
External Database Links	UniProt: F6Y6X8 Related reagents		

Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag 8.653 mouse myeloma cell line.
Specificity	Mouse anti Horse CD4 antibody, clone CVS4 recognizes Equine CD4, a ~58 kDa cell surface glycoprotein that is primarily expressed on a subpopulation of T lymphocytes. As in humans, equine CD4 expression is mutually exclusive with CD8 expression on mature T-cells A study undertaken using Mouse anti Horse CD4, clone CVS4 to identify CD4 on several wild african equid species indicates that the CVS4 clone recognizes Somali wild ass (<i>Equus asinus</i>) but not Grévy's Zebra (<i>E. grevyi</i>) or Hartmann's Mountain Zebra (<i>E. zebra</i>). In addition to the CVS4 clone, other CVS clones recognising equine cell surface and MHC antigen are available from Bio-Rad.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	- Lunn, D.P. <i>et al.</i> (1991) Three monoclonal antibodies identifying antigens on all equine T lymphocytes, and two mutually exclusive T-lymphocyte subsets. Immunology. 74 (2): 251-7. - Kydd, J. <i>et al.</i> (1994) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991. Vet Immunol Immunopathol. 42 (1): 3-60. - Deeg, C.A. <i>et al.</i> (2004) The uveitogenic potential of retinal S-antigen in horses. Invest Ophthalmol Vis Sci. 45: 2286-92 - Pearson, W. <i>et al.</i> (2007) Low-dose ginseng (<i>Panax quinquefolium</i>) modulates the course and magnitude of the antibody response to vaccination against equid herpesvirus 1 in horses. Can J Vet Res. 71: 213-7. - Brault, S.A. <i>et al.</i> (2010) The immune response of foals to natural infection with equid herpesvirus-2 and its association with febrile illness. Vet Immunol Immunopathol. 137: 136-41. - Goodman, L.B. <i>et al.</i> (2007) A point mutation in a herpesvirus polymerase determines neuropathogenicity. PLoS Pathog. 3(11):e160. - Hamza, E. <i>et al.</i> (2012) CD4+CD25+ T cells expressing FoxP3 in Icelandic horses affected with insect bite hypersensitivity. Vet Immunol Immunopathol. 148 (1-2): 139-44. - Go, Y.Y. <i>et al.</i> (2010) Complex interactions between the major and minor envelope proteins of equine arteritis virus determine its tropism for equine CD3+ T lymphocytes and CD14+ monocytes. J Virol. 84: 4898-911 - Lunn, D.P. <i>et al.</i> (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. Vet Immunol Immunopathol. 62: 101-143 - Ibrahim, S. (2007) Analysis of monoclonal antibody cross-reactivity with leukocytes from equids and cloning of CD28. Anchor Text - Lai SW <i>et al.</i> (2004) Influence of <i>Ganoderma lucidum</i> on blood biochemistry and immunocompetence in horses. Am J Chin Med. 32 (6): 931-40. - Ferreira-Dias, G. <i>et al.</i> (2005) Seasonal reproduction in the mare: possible role of plasma leptin, body weight and immune status. Domest Anim Endocrinol. 29 (1): 203-13. - Agricola, R. <i>et al.</i> (2008) Blood lymphocyte subpopulations, neutrophil phagocytosis and proteinogram during late pregnancy and postpartum in mares. Reprod Domest Anim. 43 (2): 212-7. - de Bruijn, C.M. <i>et al.</i> (2007) Clinical, histopathological and immunophenotypical findings in five horses with cutaneous malignant lymphoma. Res Vet Sci. 83 (1): 63-72. - Roberto Da Costa, R.P. <i>et al.</i> (2003) Peripheral blood neutrophil function and lymphocyte subpopulations in cycling mares. Reprod Domest Anim. 38 (6): 464-9. - Uner, A. G. <i>et al.</i> (2013) Blood Levels of Selected Metabolic Factors, Cytokines, and Lymphocyte Subpopulations in Arabian and Thoroughbred Horses During the Longest and Shortest Days of the Year J Equine Vet Sci. 33 (11): 969-976. - Garcia-Tapia, D. <i>et al.</i> (2006) Replication of West Nile virus in equine peripheral blood mononuclear cells. Vet Immunol Immunopathol. 110 (3-4): 229-44.

18. Tessier, L. *et al.* (2015) Phenotypic and immunomodulatory properties of equine cord blood-derived mesenchymal stromal cells. [PLoS One. 10 \(4\): e0122954.](#)
19. Khol-Parisini, A. *et al.* (2012) Highly deoxynivalenol contaminated oats and immune function in horses. [Arch Anim Nutr. 66 \(2\): 149-61.](#)
20. Ziegler, A. *et al.* (2016) Identification and characterization of equine blood plasmacytoid dendritic cells. [Dev Comp Immunol. 65: 352-7.](#)
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Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. 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

Related Products

Recommended Useful Reagents

[MOUSE ANTI HORSE CD8:RPE \(MCA2385PE\)](#)

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
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