

## Datasheet: MCA1078F

**BATCH NUMBER 148647**

<b>Description:</b>	MOUSE ANTI HORSE CD4:FITC
<b>Specificity:</b>	CD4
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CVS4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Horse		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<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		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1mg/ml		

<b>Immunogen</b>	Equine thymocytes.
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">F6Y6X8</a> <a href="#">Related reagents</a>
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag 8.653 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Horse CD4 antibody, clone CVS4</b> 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</p> <p>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>).</p> <p>In addition to the CVS4 clone, other <a href="#">CVS clones</a> recognising equine cell surface and MHC antigen are available from Bio-Rad.</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>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. <a href="#">Immunology. 74 (2): 251-7.</a></li> <li>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>Deeg, C.A. <i>et al.</i> (2004) The uveitogenic potential of retinal S-antigen in horses. <a href="#">Invest Ophthalmol Vis Sci. 45: 2286-92</a></li> <li>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. <a href="#">Can J Vet Res. 71: 213-7.</a></li> <li>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. <a href="#">Vet Immunol Immunopathol. 137: 136-41.</a></li> <li>Goodman, L.B. <i>et al.</i> (2007) A point mutation in a herpesvirus polymerase determines neuropathogenicity. <a href="#">PLoS Pathog. 3(11):e160.</a></li> <li>Hamza, E. <i>et al.</i> (2012) CD4+CD25+ T cells expressing FoxP3 in Icelandic horses affected with insect bite hypersensitivity. <a href="#">Vet Immunol Immunopathol. 148 (1-2): 139-44.</a></li> <li>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. <a href="#">J Virol. 84: 4898-911</a></li> <li>Lunn, D.P. <i>et al.</i> (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. <a href="#">Vet Immunol Immunopathol. 62: 101-143</a></li> <li>Ibrahim, S. <i>et al.</i> (2007) Screening of anti-human leukocyte monoclonal antibodies for reactivity with equine leukocytes. <a href="#">Vet Immunol Immunopathol. 119 (1-2): 63-80.</a></li> </ol>

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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.

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**Guarantee**                      12 months from date of despatch

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**Health And Safety Information**                      Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1078F>  
 10041

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**Regulatory**                      For research purposes only

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## Related Products

## Recommended Useful Reagents

### MOUSE ANTI HORSE CD8:RPE (MCA2385PE)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)  
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