

## Datasheet: MCA1078GA

<b>Description:</b>	MOUSE ANTI HORSE CD4
<b>Specificity:</b>	CD4
<b>Format:</b>	Purified
<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	▪			1/25 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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 - liquid
<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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/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,</li> </ol>

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR8...)	<a href="#">DyLight®800</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>

### Recommended Useful Reagents

[MOUSE ANTI HORSE CD8:FITC \(MCA2385F\)](#)  
[MOUSE ANTI HORSE CD8:RPE \(MCA2385PE\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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