

## Datasheet: MCA1084GA

**BATCH NUMBER 0112R**

<b>Description:</b>	MOUSE ANTI HORSE CD13
<b>Specificity:</b>	CD13
<b>Other names:</b>	AMINOPEPTIDASE N
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	CVS19
<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 G
<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 1.0 mg/ml
<b>Immunogen</b>	Equine leucocytes.
<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the mouse X63-Ag8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Horse CD13 antibody, clone CVS19</b> recognizes the equine CD13 cell surface antigen, also known as Aminopeptidase N, a single-pass type II membrane protein belonging to the peptidase N family with a molecular weight of between 150 - 170 kDa.</p> <p>CD13 is widely expressed by a range of cell types including all blood neutrophils, basophils, monocytes, fibroblasts, kidney epithelial cells, endothelial cells and mesenchymal stem cells, but not by T or B cells. It is involved in a broad spectrum of biological processes and is believed to be linked to a number of disease states including tumor invasion (<a href="#">Saiki et al. 1993</a>).</p> <p>Mouse anti Horse CD13 antibody, clone CVS19 may be used for differentiating myeloid and lymphoid lineage cells in tumors of the haematopoietic system.</p> <p>In addition to clone CVS19, other <a href="#">CVS</a> clones recognising equine MHC and cell surface antigens are available.</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>1. Kydd, J.H. &amp; Antczak, D.F. (1991) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991 <a href="#">Equine Immunology 4: 5.</a></li> <li>2. Dunkel, B. <i>et al.</i> (2009) Neutrophil and platelet activation in equine recurrent airway obstruction is associated with increased neutrophil CD13 expression, but not platelet CD41/61 and CD62P or neutrophil-platelet aggregate formation. <a href="#">Vet Immunol Immunopathol. 131: 25-32.</a></li> <li>3. 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>4. Loftus J.P <i>et al.</i> (2006) Matrix metalloproteinase-9 in laminae of black walnut extract treated horses correlates with neutrophil abundance. <a href="#">Vet Immunol Immunopathol. 113: 267-76.</a></li> <li>5. Aalberts, M. <i>et al.</i> (2012) Spermatozoa recruit prostasomes in response to capacitation induction. <a href="#">Biochim Biophys Acta.1834: 2326-35.</a></li> <li>6. Maia, L. <i>et al.</i> (2013) Immunophenotypic, immunocytochemistry, ultrastructural, and cytogenetic characterization of mesenchymal stem cells from equine bone marrow. <a href="#">Microsc Res Tech. 76: 618-24.</a></li> <li>7. Radcliffe, C.H. <i>et al.</i> (2010) Temporal analysis of equine bone marrow aspirate during establishment of putative mesenchymal progenitor cell populations. <a href="#">Stem Cells Dev. 19: 269-82.</a></li> </ol>

8. Ziegler, A. *et al.* (2016) Identification and characterization of equine blood plasmacytoid dendritic cells. [Dev Comp Immunol. 65: 352-7.](#)
9. Soboll Hussey, G. *et al.* (2011) Evaluation of immune responses following infection of ponies with an EHV-1 ORF1/2 deletion mutant. [Vet Res. 42: 23.](#)

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**Storage** Store at +4°C for one month or at -20°C for longer.

This product should be stored undiluted.  
Storage in frost-free freezers is not recommended. 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 #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1084GA>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)

Goat Anti Mouse IgG (STAR76...) [RPE](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

<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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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)  
'M364768:200529'

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