

## Datasheet: MCA1084F

<b>Description:</b>	MOUSE ANTI HORSE CD13:FITC
<b>Specificity:</b>	CD13
<b>Other names:</b>	AMINOPEPTIDASE N
<b>Format:</b>	FITC
<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	■			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 G		
<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 0.1 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.		

**Specificity** **Mouse anti Horse CD13 antibody, clone CVS19** 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.

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 ([Saiki \*et al.\* 1993](#)).

Mouse anti Horse CD13 antibody, clone CVS19 may be used for differentiating myeloid and lymphoid lineage cells in tumors of the haematopoietic system.

In addition to clone CVS19, other [CVS](#) clones recognising equine MHC and cell surface antigens are available.

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Kydd, J.H. & Antczak, D.F. (1991) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991 [Equine Immunology 4: 5](#).
2. Dunkel, B. *et al.* (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. [Vet Immunol Immunopathol. 131: 25-32](#).
3. Lunn, D.P. *et al.* (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. [Vet Immunol Immunopathol. 62: 101-143](#)
4. Loftus J.P *et al.* (2006) Matrix metalloproteinase-9 in laminae of black walnut extract treated horses correlates with neutrophil abundance. [Vet Immunol Immunopathol. 113: 267-76](#).
5. Aalberts, M. *et al.* (2012) Spermatozoa recruit prostasomes in response to capacitation induction. [Biochim Biophys Acta.1834: 2326-35](#).
6. Maia, L. *et al.* (2013) Immunophenotypic, immunocytochemistry, ultrastructural, and cytogenetic characterization of mesenchymal stem cells from equine bone marrow. [Microsc Res Tech. 76: 618-24](#).
7. Radcliffe, C.H. *et al.* (2010) Temporal analysis of equine bone marrow aspirate during establishment of putative mesenchymal progenitor cell populations. [Stem Cells Dev. 19: 269-82](#).
8. 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.

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**Guarantee** 18 months from date of despatch.

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

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**Regulatory** For research purposes only

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**Printed on 11 Oct 2019**

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