

Datasheet: MCA1084PE

Description:	MOUSE ANTI HORSE CD13:RPE
Specificity:	CD13
Other names:	AMINOPEPTIDASE N
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	CVS19
Isotype:	IgG1
Quantity:	100 TESTS

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

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 R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline.		
Preservative	0.09% Sodium Azide (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin 5% Sucrose		
Immunogen	Equine leucocytes.		
Fusion Partners	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.

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

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](#).

Storage Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of reconstitution.

Health And Safety Information Material Safety Datasheet documentation #10075 available at:
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

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