

Datasheet: MCA1278

Description:	RAT ANTI HORSE CD2
Specificity:	CD2
Other names:	E-ROSETTE RECEPTOR, LFA-2
Format:	S/N
Product Type:	Monoclonal Antibody
Clone:	Mac288
Isotype:	IgG2a
Quantity:	2 ml

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	▪			1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

Target Species	Horse
Species Cross Reactivity	Does not react with:Pig
Product Form	Tissue Culture Supernatant - liquid
Preservative Stabilisers	0.09% sodium azide (NaN ₃)
Immunogen	Equine peripheral blood lymphocytes.

External Database
Links

UniProt:

[P37998](#)

[Related reagents](#)

Entrez Gene:

[100034205](#)

CD2

[Related reagents](#)

RRID

AB_321229

Fusion Partners

Spleen cells from immunized LOU Rats were fused with cells of the Y3 Ag1.2.3. myeloma cell line.

Specificity

Rat anti Horse CD2 antibody, clone Mac288 recognizes equine CD2, a 347 amino acid, single pass type-1 transmembrane glycoprotein containing single [Ig-like C2-type](#) and [Ig-like V-type](#) domains.

Equine CD2 is expressed by a large proportion of peripheral blood lymphocytes, most T-cells and few B-cells, it is not present on granulocytes. Immunohistochemical staining shows expression in most T cells of lymph node paracortex and occasional staining of lymphocytes in the follicular areas. In the thymus, rat anti horse CD2 antibody, clone Mac288 stains the majority of mature thymocytes in the medulla and at least half of the immature thymocytes in the cortex ([Kydd *et al.* 1994](#)). Rat anti Horse CD2 antibody, clone Mac288 recognizes CD2 in Haflinger and Lusitano horse breeds ([Ferreira-Dias *et al.* 2005](#)). Rat anti Horse CD2 antibody, clone Mac288 is a reliable pan T-cell marker for analysis of cell mediated immunity in horses infected with equine herpes virus by multi-parameter flow cytometry ([Platt *et al.* 2010](#)).

Flow Cytometry

Use 50µl of the suggested working dilution to label 7.5×10^5 cells in 100µl

References

1. Kydd, J.H. (1989) Maternal immune responses to pregnancy in equids. [PhD Thesis \(Cantab\)](#).
2. Tavernor, A.S. *et al.* (1994) Expression cloning of an equine T-lymphocyte glycoprotein CD2 cDNA. Structure-based analysis of conserved sequence elements. [Eur J Biochem. 219 \(3\): 969-76.](#)
3. Roberto Da Costa, R.P. *et al.* (2003) Peripheral blood neutrophil function and lymphocyte subpopulations in cycling mares. [Reprod Domest Anim. 38: 464-9.](#)
4. Pearson, W. *et al.* (2007) Low-dose ginseng (*Panax quinquefolium*) modulates the course and magnitude of the antibody response to vaccination against equid herpesvirus 1 in horses. [Can J Vet Res. 71: 213-7.](#)
5. Platt, R. *et al.* (2010) Cell-mediated immunity evaluation in foals infected with virulent equine herpesvirus-1 by multi-parameter flow cytometry. [Vet Immunol Immunopathol. 135: 275-81.](#)
6. McCandless, E.E. *et al.* (2013) Hydrocortisone inhibits IFN-γ production in equine, ovine, and bovine PBMCs. [Vet Immunol Immunopathol. 153: 128-33.](#)
7. Krakowski, L. *et al.* (2017) Changes in Blood Lymphocyte Subpopulations and Expression of MHC-II Molecules in Wild Mares Before and After Parturition. [J Vet Res. 61 \(2\): 217-21.](#)
8. Siqueira, R.F. and Fernandes, I.R. (2018) Cryopreservation of lymphocytes for

Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10336 available at: https://www.bio-rad-antibodies.com/SDS/MCA1278 10336
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR20...) [RPE](#)

Rabbit Anti Rat IgG (STAR17...) [FITC](#)

Rabbit Anti Rat IgG (STAR21...) [HRP](#)

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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
'M433171:240925'

Printed on 25 Sep 2024