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 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 recomended that the user titrates the antibody 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	0.1% Sodium Azide
Immunogen	Equine peripheral blood lymphocytes.
External Database Links	**UniProt:** P37998 Related reagents **Entrez Gene:** 100034205 CD2 Related reagents

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 (Üner *et al.* 2013) 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 50ul of the suggested working dilution to label 7.5 x 10^5 cells in 100ul.
References	1. 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. 2. Pearson, W. *et al.* (2007) Low-dose ginseng (Panax quinquefolium) modulates the course and magnitude of the antibody response to vaccination against equid herpesvirus I in horses. Can J Vet Res. 71: 213-7. 3. Kydd, J.H. (1989) Maternal immune responses to pregnancy in equids. PhD Thesis (Cantab). 4. 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. 5. Roberto Da Costa, R.P. *et al.* (2003) Peripheral blood neutrophil function and lymphocyte subpopulations in cycling mares. Reprod Domest Anim. 38: 464-9. 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. Üner, A.G. *et al.* (2013) Blood Levels of Leptin and Lymphocyte Subpopulations in Haflinger Mares on Winter and Summer Solstices. Animal Health, Prod. and Hyg. 1: 183 - 7 8. 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.
Storage	Store at +4°C or at -20°C if preferred. 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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10336 available at: 10336: https://www.bio-rad-antibodies.com/uploads/MSDS/10336.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR21...) HRP
Rabbit Anti Rat IgG (STAR17...) FITC
Rabbit Anti Rat IgG (STAR20...) RPE

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