Datasheet: MCA1085GA

Description:	MOUSE ANTI HORSE MHC CLASS II MONOMORPHIC
Specificity:	MHC CLASS II MONOMORPHIC
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	CVS20
Isotype:	IgG1
Quantity:	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.

	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.

Target Species

Horse

Species Cross Reactivity

Reacts with: Human, Bovine, Dog
N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% sodium azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	3132 cells.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X.63-Ag8.653 mouse myeloma cell line
Specificity	**Mouse anti Horse MHC Class II Monomorphic antibody, clone CVS20** recognizes monomorphic equine MHC Class II and was classified at the International Equine Leucocyte Antigen Workshop. Clone CVS20 reacts with all equine B cells and 95% of equine T cells. The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In horses, this is referred to as the equine leukocyte antigen (ELA) region.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl
References	1. Kydd, J.H. & Antczak. D.F. (1991) Report of the First International Workshop on Equine Leucocyte Antigens, Cambridge, UK, July 1991 Equine Immunol. 4: 5. 2. Lunn, D.P. *et al.* (1998) Report of the Second Equine Leucocyte Antigen Workshop, Squaw valley, California, July 1995. Vet Immunol Immunopathol. 62 (2): 101-43. 3. Weiss, D.J. *et al.* (2001) Regulation of expression of major histocompatibility antigens by bovine macrophages infected with *Mycobacterium avium* subsp. *paratuberculosis* or *Mycobacterium avium* subsp. *avium*. Infect Immun. 69 (2): 1002-8. 4. Out, T.A. *et al.* (2002) Local T-cell activation after segmental allergen challenge in the lungs of allergic dogs. Immunology. 105 (4): 499-508. 5. Carrade, D.D. *et al.* (2011) Clinicopathologic findings following intra-articular injection of autologous and allogeneic placentally derived equine mesenchymal stem cells in horses. Cytotherapy. 13: 419-30. 6. Catchpole, B. *et al.* (2002) Generation of blood-derived dendritic cells in dogs with oral malignant melanoma. J Comp Pathol. 126: 238-41. 7. Weiss, D.J. *et al.* (2006) Mucosal immune response in cattle with subclinical Johne's disease. Vet Pathol. 43: 127-35. 8. Weiss, D.J. (2001) Evaluation of proliferative disorders in canine bone marrow by use of flow cytometric scatter plots and monoclonal antibodies. Vet Pathol. 38: 512-8. 9. Sassa, Y. *et al.* (2010) Bovine macrophage degradation of scrapie and BSE PrPSc Vet Immunol Immunopathol. 133: 33-9. 10. Carrade, D.D. *et al.* (2012) Comparative Analysis of the Immunomodulatory Properties of Equine Adult-Derived Mesenchymal Stem Cells(). Cell Med. 4 (1): 1-11. 11. Hussein, H. *et al.* (2016) Cathepsin K inhibition renders equine bone marrow nucleated cells hypo-responsive to LPS and unmethylated CpG stimulation *in vitro*. Comp

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19. Dos Santos, V.H. *et al.* (2019) Evaluation of alginate hydrogel encapsulated mesenchymal stem cell migration in horses. Res Vet Sci. 124: 38-45.
20. Barberini, D.J. *et al.* (2018) Safety and tracking of intrathecal allogeneic mesenchymal stem cell transplantation in healthy and diseased horses. Stem Cell Res Ther. 9 (1): 96.
21. Witonsky, S. *et al.* (2019) Can levamisole upregulate the equine cell-mediated macrophage (M1) dendritic cell (DC1) T-helper 1 (CD4 Th1) T-cytotoxic (CD8) immune response *in vitro.*? J Vet Intern Med. 33 (2): 889-96.
22. Lopez, B.S. *et al.* (2019) The effect of age on foal monocyte-derived dendritic cell (MoDC) maturation and function after exposure to killed bacteria. Vet Immunol Immunopathol. 210: 38-45.
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24. Korbonits, L. *et al.* (2022) *Mycobacterium avium* subsp. *paratuberculosis* Infected Cows Reveal Divergent Immune Response in Bovine Peripheral Blood Derived Lymphocyte Proteome. Metabolites. 12 (10): 924..

Further Reading

1. Burk, J. *et al.* (2013) Equine cellular therapy-from stall to bench to bedside? Cytometry A. 83: 103-13

Storage

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety

Material Safety Datasheet documentation #10040 available at:

Information	https://www.bio-rad-antibodies.com/SDS/MCA1085GA 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Goat Anti Mouse IgG (STAR76...)	RPE
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 (STAR13...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

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