

Datasheet: MCA897GA

Description:	MOUSE ANTI SHEEP MHC CLASS I
Specificity:	MHC CLASS I
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	VPM19
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 (1)	▪			

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.

(1) Non-reducing conditions required

Target Species	Sheep
Species Cross Reactivity	<p>Reacts with: Cat</p> <p>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.</p>
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A 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	Sheep T cells.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS0 myeloma cell line.
Specificity	<p>Mouse anti Sheep MHC Class I antibody, clone VPM19 recognizes the ovine homologue of the human MHC Class I, a monomorphic determinant expressed on the heavy chain of sheep MHC Class I, (OLA Class I).</p> <p>The major histocompatibility complex (MHC) is a cluster of genes that are important in the immune response to infections. In sheep, this is often referred to as the ovine leukocyte antigen (OLA) region. Ovine MHC Class I functions in the recognition and presentation of foreign antigens to T-cells.</p> <p>Ovine MHC Class I is a membrane glycoprotein with a molecular weight of approximately 44kDa, expressed on the cell surface of all peripheral blood leucocytes.</p> <p>Clone VPM19 has been in used in a number of domestic animal disease states, in particular Maedi Visna virus infection, a disease of significant importance in commercial sheep flocks (Lee et al. 1996, Ryan et. al. 2000 and Wu et. al. 2008). Mouse anti Sheep MHC Class I antibody, clone VPM19 recognizes MHC class I in other species and has been used in a study of feline herpes virus infection (Montagnaro et. al. 2009).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Hopkins, J. & Dutia, B.M. (1990) Monoclonal antibodies to the sheep analogues of human CD45 (leucocyte common antigen), MHC class I and CD5. Differential expression after lymphocyte activation <i>in vivo</i>. Vet Immunol Immunopathol. 24 (4): 331-46. Lee, W.C. <i>et al.</i> (1996) The phenotype and phagocytic activity of macrophages during maedi-visna virus infection. Vet Immunol Immunopathol. 51 (1-2): 113-26. Ryan, S. <i>et al.</i> (2000) Infection of dendritic cells by the Maedi-Visna lentivirus. J Virol. 74 (21): 10096-103. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107: 366-72. Wu, C. <i>et al.</i> (2008) Mapping and characterization of visna/maedi virus cytotoxic T-lymphocyte epitopes. J Gen Virol. 89 (Pt 10): 2586-96. Montagnaro, S. <i>et al.</i> (2009) Feline herpesvirus-1 down-regulates MHC class I expression in an homologous cell system. J Cell Biochem. 106: 179-85.

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 Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA897GA>
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 IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
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 (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M381619:210512'

Printed on 18 Jan 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)