

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 immunised BALB/c mice were fused with cells of the mouse NS0 myeloma cell line.
Specificity	<p>Mouse anti Sheep MHC Class I monoclonal 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 used in studies on a number of domestic animal diseases, 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). Clone VPM19 has been cited as recognising MHC class I in some 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"> 1. 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. 2. 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. 3. Chan, S.S. <i>et al.</i> (2002) Generation and characterization of ovine dendritic cells derived from peripheral blood monocytes. Immunology. 107: 366-72. 4. Ryan, S. <i>et al.</i> (2000) Infection of dendritic cells by the Maedi-Visna lentivirus. J Virol. 74 (21): 10096-103. 5. 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. 6. 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 in vivo. Vet Immunol Immunopathol. 24 (4): 331-46.

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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®680](#),
[DyLight®800](#), [FITC](#), [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](https://www.bio-rad-antibodies.com/datasheets)

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