

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	Reacts with: Cat N.B. Antibody reactivity and working conditions may vary between species.
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	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). 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. 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. 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).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	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.
Shelf Life	18 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

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®549 , DyLight®649 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	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

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