Datasheet: MCA1924

BATCH NUMBER 153284

Description:	MOUSE ANTI SHEEP GM-CSF
Specificity:	GM-CSF
Other names:	GRANULOCYTE MACROPHAGE COLONY STIMULATING FACTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3C2
Isotype:	IgG1
Quantity:	0.5 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			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting	▪			

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.

Target Species

Sheep

Species Cross Reactivity

Reacts with: Bovine

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
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	CHO expressed recombinant ovine GM-CSF.
External Database Links	**UniProt:** P28773 Related reagents **Entrez Gene:** 443400 CSF2 Related reagents
RRID	AB_323204
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NSO myeloma cell line.
Specificity	**Mouse anti Sheep GM-CSF, clone 3C2** recognizes both recombinant and native ovine Granulocyte-macrophage colony-stimulating factor, also known GM-CSF or CSF, a 16.3kDa cytokine responsible for the stimulation and growth of cells from granulocyte, macrophage, eosinophil and erythrocyte hematopoietic precursor cell linages. Mouse anti Sheep GM-CSF, clone 3C2 has is of particular interest as it has been shown to reconize GM-CSF in cattle while other clones such as 8D8 do not crosss react with cattle.. Mouse anti Sheep GM-CSF, clone 3C2 has been reported to neutralise the activity of both recombinant ovine and native GM-CSF. Removal of sodium azide is recommended prior to use in functional assays.
ELISA	Mouse anti Sheep GM-CSF antibody, clone 3C2 (**MCA1924** can be used in a sandwich ELISA as a capture antibody together with Mouse anti Sheep GM-CSF antibody, clone 8D8 (MCA1923) as the detection antibody. Conjugation of the detection antibody with LYNX Rapid or Rapid Plus Kits is recommended.
References	1. Entrican, G. *et al.* (1996) Development of a sandwich ELISA for ovine granulocyte/macrophage colony-stimulating factor. Vet Immunol Immunopathol. 50 (1-2): 105-15. 2. Deane, D. *et al.* (2000) Orf virus encodes a novel secreted protein inhibitor of

granulocyte-macrophage colony-stimulating factor and interleukin-2. J Virol. 74: 1313-20.
3. Foulon, E. and Foucras, G. (2008) Two populations of ovine bone marrow-derived dendritic cells can be generated with recombinant GM-CSF and separated on CD11b expression. J Immunol Methods. 339: 1-10.
4. Haig, D.M. *et al.* (1995) Haemopoietic cell responses in the blood and bone marrow of sheep infected with the abomasal nematode *Telodorsagia circumcincta.* J Comp Pathol. 112: 151-64.
5. Scott, J.L. (2009) Spermatozoa and seminal plasma induce a greater inflammatory response in the ovine uterus at oestrus than dioestrus. Reprod Fertil Dev. 21: 817-26.
6. John, H.A. *et al.* (1994) Generation of an ovine bone marrow-derived myelomonocyte-like cell line by retroviral-mediated transformation. Immunological characterization and the effect of cytokines and lipopolysaccharides. J Leukoc Biol. 55: 785-92.
7. Kennedy, H.E. *et al.* (2002) Modulation of immune responses to Mycobacterium bovis in cattle depleted of WC1(+) gamma delta T cells. Infect Immun. 70: 1488-500.
8. McInnes, C.J. *et al.* (2005) Glycosylation, disulfide bond formation, and the presence of a WSXWS-like motif in the orf virus GIF protein are critical for maintaining the integrity of Binding to ovine granulocyte-macrophage colony-stimulating factor and interleukin-2. J Virol. 79: 11205-13.
9. Schnabel, C.L. *et al.* (2013) Evaluation of the reactivity of commercially available monoclonal antibodies with equine cytokines. Vet Immunol Immunopathol. 156 (1-2): 1-19.

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
Acknowledgements	This reagent was evaluated at the Moredun Research Institute and The Roslin Institute at the University of Edinburgh as part of 'The route to identification of immunological correlates of protection in ruminants' Industrial Partnership Award funded by BBSRC (grant numbers BB/I019863/1; BB/I020519/1) with the support of Bio-Rad.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1924 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE

Goat Anti Mouse IgG IgA IgM (STAR87...)	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 (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

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