

Datasheet: MCA1658

Description:	MOUSE ANTI SHEEP INTERLEUKIN-1 BETA
Specificity:	IL-1 BETA
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1D4
Isotype:	IgG1
Quantity:	0.25 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)	▪			1/10
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.

(1) Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.

Target Species	Sheep
Species Cross Reactivity	<p>Reacts with: Goat, Bovine, Horse</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
Buffer Solution	Phosphate buffered saline

Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant ovine IL-1 Beta
External Database Links	<p>UniProt: P21621 Related reagents</p> <p>Entrez Gene: 443539 IL-1B Related reagents</p>
RRID	AB_322126
Specificity	<p>Mouse anti Sheep Interleukin-1 beta antibody, clone 1D4 recognizes ovine interleukin-1 beta, and shows no cross-reactivity with ovine IL-6, IL-8, TNF alpha or MCP-1.</p> <p>Mouse anti Sheep Interleukin-1 beta antibody, clone 1D4 demonstrates partial neutralizing activity of ovine IL-1 beta.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
ELISA	<p>Mouse anti Interleukin-1 beta antibody, clone 1D4 may be used as a capture antibody in a bovine IL-1 beta sandwich ELISA together with Rabbit anti Bovine interleukin-1β antibody (AHP851B) as the detection reagent for evaluation of IL-1β levels in bovine samples together with recombinant Bovine interleukin-1β (PBP008) used as standards.</p> <p>Alternatively, Mouse anti Interleukin-1 beta antibody, clone 1D4 can be used as a capture reagent together with Rabbit anti Ovine interleukin-1β antibody (AHP423) as a detection reagent for the evaluation of IL-1β levels in ovine, bovine or caprine samples, again utilizing recombinant bovine IL-1&beta (PBP008) as an internal standard.</p>
References	<ol style="list-style-type: none"> Martoriati, A. & Gérard, N. (2003) Interleukin-1 (IL-1) system gene expression in granulosa cells: kinetics during terminal preovulatory follicle maturation in the mare. Reprod Biol Endocrinol. 1: 42-51. Leite, F. <i>et al.</i> (2005) Incubation of bovine PMNs with conditioned medium from BHV-1 infected peripheral blood mononuclear cells increases their susceptibility to <i>Mannheimia haemolytica</i> leukotoxin. Vet Immunol Immunopathol. 103 (3-4): 187-93. Wenz, J.R. <i>et al.</i> (2010) Factors associated with concentrations of select cytokine and acute phase proteins in dairy cows with naturally occurring clinical mastitis. J Dairy Sci. 93: 2458-70. Rinaldi, M. <i>et al</i> (2010) A sentinel function for teat tissues in dairy cows: dominant innate immune response elements define early response to <i>E. coli</i> mastitis. Funct Integr Genomics. 10: 21-38. Bougarn, S. <i>et al.</i> (2010) Muramyl dipeptide synergizes with <i>Staphylococcus aureus</i> lipoteichoic acid to recruit neutrophils in the mammary gland and to stimulate mammary

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stress, DNA damage and inflammatory status in lambs [It J Anim Sci. 21 \(1\): 934-42.](#)

Further Reading	1. Rothel, J.S. <i>et al.</i> (1997) Analysis of ovine IL-1 beta production <i>in vivo</i> and <i>in vitro</i> by enzyme immunoassay and immunohistochemistry. Vet Immunol Immunopathol. 57 (3-4): 267-78.
Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
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

- Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
- Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
- Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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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Printed on 30 May 2022