

## Datasheet: MCA1658

<b>Description:</b>	MOUSE ANTI SHEEP INTERLEUKIN-1 BETA
<b>Specificity:</b>	IL-1 BETA
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1D4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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 permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.**

<b>Target Species</b>	Sheep
<b>Species Cross Reactivity</b>	<p>Reacts with: Goat, Bovine, Horse</p> <p><b>N.B.</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>
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Antibody purified from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% sodium azide (NaN <sub>3</sub> )
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant ovine IL-1 Beta
External Database Links	<p><b>UniProt:</b></p> <p><a href="#">P21621</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">443539</a>    IL-1B    <a href="#">Related reagents</a></p>
RRID	AB_322126
Specificity	<p><b>Mouse anti Sheep Interleukin-1 beta antibody, clone 1D4</b> 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 10µl of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100µl
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 (<a href="#">AHP851B</a>) as the detection reagent for evaluation of IL-1β levels in bovine samples together with recombinant Bovine interleukin-1β (<a href="#">PBP008</a>) 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 (<a href="#">AHP423</a>) as a detection reagent for the evaluation of IL-1β levels in ovine, bovine or caprine samples, again utilizing recombinant bovine IL-1&amp;beta (<a href="#">PBP008</a>) as an internal standard.</p>
References	<ol style="list-style-type: none"> <li>1. Martoriati, A. &amp; Gérard, N. (2003) Interleukin-1 (IL-1) system gene expression in granulosa cells: kinetics during terminal preovulatory follicle maturation in the mare. <a href="#">Reprod Biol Endocrinol. 1: 42-51.</a></li> <li>2. Bannerman, D.D. <i>et al.</i> (2004) <i>Escherichia coli</i> and <i>Staphylococcus aureus</i> elicit differential innate immune responses following intramammary infection. <a href="#">Clin Diagn Lab Immunol. 11: 463-72.</a></li> <li>3. Bannerman, D.D. <i>et al.</i> (2004) Characterization of the bovine innate immune response to intramammary infection with <i>Klebsiella pneumoniae</i>. <a href="#">J Dairy Sci. 87 (8): 2420-32.</a></li> <li>4. 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. <a href="#">Vet Immunol Immunopathol. 103 (3-4): 187-93.</a></li> <li>5. Matthews, K. <i>et al.</i> (2007) The effect of gene gun-delivered pGM-CSF on the</li> </ol>

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<b>Further Reading</b>	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. <a href="#">Vet Immunol Immunopathol. 57 (3-4): 267-78.</a>
<b>Storage</b>	<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>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1658">https://www.bio-rad-antibodies.com/SDS/MCA1658</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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