

Datasheet: MCA1658

BATCH NUMBER 166653

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| 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 permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

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| 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 |

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| Preparation | Antibody purified from tissue culture supernatant |
| 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 10µl of the suggested working dilution to label 1x10 ⁶ 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 (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"> 1. 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. 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. Clin Diagn Lab Immunol. 11: 463-72. 3. Bannerman, D.D. <i>et al.</i> (2004) Characterization of the bovine innate immune response to intramammary infection with <i>Klebsiella pneumoniae</i>. J Dairy Sci. 87 (8): 2420-32. 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</i> |

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could contribute to anovulation and follicular persistence in cattle. [Theriogenology. 110: 61-73.](#)

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| 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. |
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| Storage | 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. |
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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| Guarantee | 12 months from date of despatch |
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| Health And Safety Information | Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1658 10040 |
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| Regulatory | For research purposes only |
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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 \(MCA928\)](#)

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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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