Datasheet: MCA1658
BATCH NUMBER 166653

Product Details

**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

### 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).

<table>
<thead>
<tr>
<th>Application</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Cytometry (1)</td>
<td>✗</td>
<td></td>
<td></td>
<td>1/10</td>
</tr>
<tr>
<td>Immunohistology - Frozen</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunohistology - Paraffin</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ELISA</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunoprecipitation</td>
<td></td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Western Blotting</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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](http://www.bio-rad-antibodies.com/protocols)) is recommended for this purpose.

### Target Species

Sheep

### Species Cross Reactivity

Reacts with: Goat, Bovine, Horse

**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  Antibody purified from tissue culture supernatant

Buffer Solution  Phosphate buffered saline

Preservative Stabilisers  <0.1% sodium azide (NaN₃)

Approx. Protein Concentrations  IgG concentration 1.0 mg/ml

Immunogen  Recombinant ovine IL-1 Beta

External Database Links  

UniProt:  P21621  Related reagents

Entrez Gene:  443539  IL-1B  Related reagents

RRID  AB_322126

Specificity  

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.

Mouse anti Sheep Interleukin-1 beta antibody, clone 1D4 demonstrates partial neutralizing activity of ovine IL-1 beta.

Flow Cytometry  Use 10μl of the suggested working dilution to label 1x10⁶ cells in 100μl

ELISA  

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. 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.

References  


4. Leite, F. et al. (2005) Incubation of bovine PMNs with conditioned medium from BHV-1 infected peripheral blood mononuclear cells increases their susceptibility to Mannheimia
23. Stassi, A.F. et al. (2018) Altered expression of IL-1β, IL-1RI, IL-1RII, IL-1RA and IL-4
could contribute to anovulation and follicular persistence in cattle. *Theriogenology*, **110**: 61-73.

**Further Reading**


**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.

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

**Guarantee**

12 months from date of despatch

**Health And Safety Information**


**Regulatory**

For research purposes only

**Related Products**

**Recommended Secondary Antibodies**

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

**Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

**Printed on 18 Jan 2024**