

## Datasheet: AHP423

**BATCH NUMBER 167803**

<b>Description:</b>	RABBIT ANTI SHEEP INTERLEUKIN-1 BETA
<b>Specificity:</b>	IL-1 BETA
<b>Format:</b>	Serum
<b>Product Type:</b>	Polyclonal Antibody
<b>Isotype:</b>	Polyclonal IgG
<b>Quantity:</b>	0.1 ml

### 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			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			1/500
Immunoprecipitation			▪	
Western Blotting	▪			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

#### Target Species

Sheep

#### Species Cross Reactivity

Reacts with: Bovine

Based on sequence similarity, is expected to react with: Goat

**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

Serum - liquid

#### Antiserum Preparation

Antisera to ovine IL-1 beta were raised by repeated immunisation of rabbits with highly purified antigen.

<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Immunogen</b>	Recombinant IL-1 beta.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P21621</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">443539</a> IL-1B    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_322127
<b>Specificity</b>	<p><b>Rabbit anti Sheep interleukin 1β antibody</b> recognizes ovine interleukin-1 beta (IL-1 beta). No cross-reactivity is seen with ovine IL-6, IL-8, MCP-1 or TNF alpha.</p> <p>Rabbit anti Sheep interleukin 1β antibody neutralizes the bioactivity of ovine IL-1 beta. Removal of sodium azide is recommended prior to use in functional assays.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>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></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. Dernfalk, J. <i>et al.</i> (2007) The xMAP technique can be used for detection of the inflammatory cytokines IL-1beta, IL-6 and TNF-alpha in bovine samples. <a href="#">Vet Immunol Immunopathol. 118: 40-9.</a></li> <li>4. Bagu, E.T. <i>et al.</i> (2010) Post-natal changes in testicular concentrations of interleukin-1 alpha and beta and interleukin-6 during sexual maturation in bulls. <a href="#">Reprod Domest Anim. 45 (2): 336-41.</a></li> <li>5. Silvestre, F.T. <i>et al.</i> (2011) Effects of differential supplementation of fatty acids during the peripartum and breeding periods of Holstein cows: II. Neutrophil fatty acids and function, and acute phase proteins. <a href="#">J Dairy Sci. 94 (5): 2285-301.</a></li> <li>6. Atik, A. <i>et al.</i> (2012) Long-term pulmonary effects of intrauterine exposure to endotoxin following preterm birth in sheep. <a href="#">Reprod Sci. 19 (12): 1352-64.</a></li> <li>7. Vordermeier, M. <i>et al.</i> (2012) Cytokine responses of Holstein and Sahiwal zebu derived monocytes after mycobacterial infection. <a href="#">Trop Anim Health Prod. 44: 651-5.</a></li> <li>8. Doull, L. <i>et al.</i> (2015) Late production of CXCL8 in ruminant oro-nasal turbinate cells in response to <i>Chlamydia abortus</i> infection. <a href="#">Vet Immunol Immunopathol. 168 (1-2): 97-102.</a></li> <li>9. Xu, A. <i>et al.</i> (2015) The Ovine Fetal and Placental Inflammatory Response to Umbilical Cord Occlusions With Worsening Acidosis. <a href="#">Reprod Sci. 22 (11): 1409-20.</a></li> <li>10. Cortes, M. <i>et al.</i> (2017) RNAseq profiling of primary microglia and astrocyte cultures in near-term ovine fetus: A glial in vivo-in vitro multi-hit paradigm in large mammalian brain. <a href="#">J Neurosci Methods. 276: 23-32.</a></li> <li>11. Cao, M. <i>et al.</i> (2019) α7 Nicotinic Acetylcholine Receptor Signaling Modulates Ovine Fetal Brain Astrocytes Transcriptome in Response to Endotoxin. <a href="#">Front Immunol. 10: 1063.</a></li> </ol>

12. Damiano, S. *et al.* (2022) Red orange and lemon extract preserve from oxidative stress, DNA damage and inflammatory status in lambs [It J Anim Sci. 21 \(1\): 934-42.](#)
13. Ciliberti, M.G. *et al.* (2024) Role of hazelnut skin supplementation on plasma antioxidant status and cytokine profile in growing lambs. [Front Vet Sci. 11: 1340141.](#)

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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.

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 #10081 available at: <https://www.bio-rad-antibodies.com/SDS/AHP423>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Rabbit IgG (Fc) (STAR121...) [Biotin](#), [FITC](#), [HRP](#)

Sheep Anti Rabbit IgG (STAR35...) [RPE](#)

Goat Anti Rabbit IgG (H/L) (STAR124...) [HRP](#)

### Recommended Useful Reagents

[TidyBlot WESTERN BLOT DETECTION REAGENT:HRP \(STAR209P\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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