

## Datasheet: AHP423

<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.

#### Preservative

<0.1% Sodium Azide (NaN<sub>3</sub>)

## Stabilisers

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**Immunogen** Recombinant IL-1 beta.

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**External Database Links**

**UniProt:**

[P21621](#)    [Related reagents](#)

**Entrez Gene:**

[443539](#) IL-1B    [Related reagents](#)

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**RRID** AB\_322127

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**Specificity** **Rabbit anti Sheep interleukin 1 $\beta$  antibody** recognizes ovine interleukin-1 beta (IL-1 beta). No cross-reactivity is seen with ovine IL-6, IL-8, MCP-1 or TNF alpha.

Rabbit anti Sheep interleukin 1 $\beta$  antibody neutralizes the bioactivity of ovine IL-1 beta. Removal of sodium azide is recommended prior to use in functional assays.

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**References**

1. Rothel, J.S. *et al.* (1997) Analysis of ovine IL-1 beta production *in vivo* and *in vitro* by enzyme immunoassay and immunohistochemistry. [Vet Immunol Immunopathol. 57 \(3-4\): 267-78.](#)
2. Bannerman, D.D. *et al.* (2004) *Escherichia coli* and *Staphylococcus aureus* elicit differential innate immune responses following intramammary infection. [Clin Diagn Lab Immunol. 11: 463-72.](#)
3. Dernfalk, J. *et al.* (2007) The xMAP technique can be used for detection of the inflammatory cytokines IL-1beta, IL-6 and TNF-alpha in bovine samples. [Vet Immunol Immunopathol. 118: 40-9.](#)
4. Moyes, K.M. *et al.* (2009) Identification of potential markers in blood for the development of subclinical and clinical mastitis in dairy cattle at parturition and during early lactation. [J Dairy Sci. 92: 5419-28.](#)
5. Silvestre, F.T. *et al.* (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. [J Dairy Sci. 94 \(5\): 2285-301.](#)
6. Vordermeier, M. *et al.* (2012) Cytokine responses of Holstein and Sahiwal zebu derived monocytes after mycobacterial infection. [Trop Anim Health Prod. 44: 651-5.](#)
7. Xu, A. *et al.* (2015) The Ovine Fetal and Placental Inflammatory Response to Umbilical Cord Occlusions With Worsening Acidosis. [Reprod Sci. 22 \(11\): 1409-20.](#)
8. Bagu, E.T. *et al.* (2010) Post-natal changes in testicular concentrations of interleukin-1 alpha and beta and interleukin-6 during sexual maturation in bulls. [Reprod Domest Anim. 45 \(2\): 336-41.](#)
9. Atik, A. *et al.* (2012) Long-term pulmonary effects of intrauterine exposure to endotoxin following preterm birth in sheep. [Reprod Sci. 19 \(12\): 1352-64.](#)
10. Cortes, M. *et al.* (2016) 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 [Journal of Neuroscience Methods. Nov 14 \[Epub ahead of print\]](#)
11. Doull, L. *et al.* (2015) Late production of CXCL8 in ruminant oro-nasal turbinate cells in response to *Chlamydia abortus* infection. [Vet Immunol Immunopathol. 168 \(1-2\): 97-102.](#)

12. Cao, M. *et al.* (2019)  $\alpha 7$  Nicotinic Acetylcholine Receptor Signaling Modulates Ovine Fetal Brain Astrocytes Transcriptome in Response to Endotoxin. [Front Immunol. 10: 1063.](#)

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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: 10081: <https://www.bio-rad-antibodies.com/uploads/MSDS/10081.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Sheep Anti Rabbit IgG (STAR34...) [FITC](#)

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

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

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

**Worldwide**

Tel: +44 (0)1865 852 700

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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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