

Datasheet: AHP423

Description:	RABBIT ANTI SHEEP INTERLEUKIN-1 BETA
Specificity:	IL-1 BETA
Format:	Serum
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	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.

	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 (NaN₃)

Stabilisers

Immunogen Recombinant IL-1 beta.

External Database Links

UniProt:

[P21621](#)

[Related reagents](#)

Entrez Gene:

[443539](#)

IL-1B

[Related reagents](#)

RRID

AB_322127

Specificity

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

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. 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.](#)
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. 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.](#)
7. Vordermeier, M. *et al.* (2012) Cytokine responses of Holstein and Sahiwal zebu derived monocytes after mycobacterial infection. [Trop Anim Health Prod. 44: 651-5.](#)
8. 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.](#)
9. 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.](#)
10. Cortes, M. *et al.* (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. [J Neurosci Methods. 276: 23-32.](#)
11. 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.](#)
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.](#)

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	Material Safety Datasheet documentation #10081 available at: https://www.bio-rad-antibodies.com/SDS/AHP423 10081
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

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

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

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

Recommended Useful Reagents

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

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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
'M437986:250320'

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