

Datasheet: MCA1659

Description:	MOUSE ANTI SHEEP INTERLEUKIN-6
Specificity:	IL-6
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4B6
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)	▪			
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			5ug/ml (as a coating antibody)
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.

(1) **Membrane permeabilization is required for this application. Bio-Rad recommend the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

Target Species	Sheep
Species Cross Reactivity	Reacts with: Monkey N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Recombinant ovine IL-6.

**External Database
Links**

UniProt:

[P29455](#) [Related reagents](#)

Entrez Gene:

[443406](#) IL6 [Related reagents](#)

Specificity

Mouse anti Sheep Interleukin-6 antibody, clone 4B6 recognizes ovine interleukin-6 (IL-6) and has also been reported to recognise recombinant human IL-6 and bovine IL-6 transfected cells. Mouse anti Sheep Interleukin-6 antibody, clone 4B6 does not cross react with ovine IL-1 beta, IL-8, MCP-1 or TNF alpha.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10⁶ cells in 100ul.

ELISA

MCA1659 may also be used in combination with [AHP424](#) in a sandwich ELISA assays for ovine IL-6.

References

1. McWaters, P. *et al.* (2000) Characterisation of monoclonal antibodies to ovine interleukin-6 and the development of a sensitive capture ELISA. [Vet Immunol Immunopathol. 73 \(2\): 155-65.](#)
2. Wang, Z. *et al.* (2008) Acute hypercapnia improves indices of tissue oxygenation more than dobutamine in septic shock. [Am J Respir Crit Care Med. 177: 178-83.](#)
3. Su, F. *et al.* (2007) Beneficial effects of ethyl pyruvate in septic shock from peritonitis. [Arch Surg. 142: 166-71.](#)
4. Kabaroff, L. *et al.* (2006) Changes in ovine maternal temperature, and serum cortisol and interleukin-6 concentrations after challenge with *Escherichia coli* lipopolysaccharide during pregnancy and early lactation. [J Anim Sci. 84: 2083-8.](#)
5. Shashikant, B.N. *et al.* (2005) Dose response to rhCC10-augmented surfactant therapy in a lamb model of infant respiratory distress syndrome: physiological, inflammatory, and kinetic profiles. [J Appl Physiol. 99: 2204-11.](#)
6. Redondo, E. *et al.* (2014) Induction of interleukin-8 and interleukin-12 in neonatal ovine lung following experimental inoculation of bovine respiratory syncytial virus. [J Comp Pathol. 150 \(4\): 434-48.](#)
7. Karisnan, K. *et al.* (2015) Interleukin-1 Receptor Antagonist Protects against Lipopolysaccharide Induced Diaphragm Weakness in Preterm Lambs. [PLoS One. 10 \(4\): e0124390.](#)
8. 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.](#)
9. Dooley, L.M. *et al.* (2015) Effect of mesenchymal precursor cells on the systemic inflammatory response and endothelial dysfunction in an ovine model of collagen-induced arthritis. [PLoS One. 10 \(5\): e0124144.](#)
10. Herry, C.L. *et al.* (2016) Temporal Patterns in Sheep Fetal Heart Rate Variability Correlate to Systemic Cytokine Inflammatory Response: A Methodological Exploration of Monitoring Potential Using Complex Signals Bioinformatics. [PLoS One. 11 \(4\): e0153515.](#)
11. Ciliberti, M.G. *et al.* (2017) Peripheral blood mononuclear cell proliferation and cytokine production in sheep as affected by cortisol level and duration of stress. [J Dairy Sci. 100 \(1\): 750-756.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR117...) [FITC](#)

Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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