

## Datasheet: MCA1659

**BATCH NUMBER 148516**

<b>Description:</b>	MOUSE ANTI SHEEP INTERLEUKIN-6
<b>Specificity:</b>	IL-6
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	4B6
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://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.**

<b>Target Species</b>	Sheep
<b>Species Cross Reactivity</b>	<p>Reacts with: Monkey</p> <p><b>N.B.</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.</p>
<b>Product Form</b>	Purified IgG - liquid

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant ovine IL-6.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P29455</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">443406</a>    IL6    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_322149
<b>Specificity</b>	<b>Mouse anti Sheep Interleukin-6 antibody, clone 4B6</b> 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.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>ELISA</b>	MCA1659 may also be used in combination with <a href="#">AHP424</a> in a sandwich ELISA assays for ovine IL-6.
<b>References</b>	<ol style="list-style-type: none"> <li>1. McWaters, P. <i>et al.</i> (2000) Characterisation of monoclonal antibodies to ovine interleukin-6 and the development of a sensitive capture ELISA. <a href="#">Vet Immunol Immunopathol. 73 (2): 155-65.</a></li> <li>2. Wang, Z. <i>et al.</i> (2008) Acute hypercapnia improves indices of tissue oxygenation more than dobutamine in septic shock. <a href="#">Am J Respir Crit Care Med. 177: 178-83.</a></li> <li>3. Su, F. <i>et al</i> (2007) Beneficial effects of ethyl pyruvate in septic shock from peritonitis. <a href="#">Arch Surg.142: 166-71.</a></li> <li>4. Kabaroff, L. <i>et al.</i> (2006) Changes in ovine maternal temperature, and serum cortisol and interleukin-6 concentrations after challenge with <i>Escherichia coli</i> lipopolysaccharide during pregnancy and early lactation. <a href="#">J Anim Sci. 84: 2083-8.</a></li> <li>5. Shashikant, B.N. <i>et al.</i> (2005) Dose response to rhCC10-augmented surfactant therapy in a lamb model of infant respiratory distress syndrome: physiological, inflammatory, and kinetic profiles. <a href="#">J Appl Physiol. 99: 2204-11.</a></li> <li>6. Redondo, E. <i>et al.</i> (2014) Induction of interleukin-8 and interleukin-12 in neonatal ovine lung following experimental inoculation of bovine respiratory syncytial virus. <a href="#">J Comp Pathol. 150 (4): 434-48.</a></li> <li>7. Karisnan, K. <i>et al.</i> (2015) Interleukin-1 Receptor Antagonist Protects against Lipopolysaccharide Induced Diaphragm Weakness in Preterm Lambs. <a href="#">PLoS One. 10 (4):</a></li> </ol>

[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.

---

**Guarantee** 12 months from date of despatch

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1659>  
10040

---

**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 \(MCA928\)](#)

**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

Fax: +44 (0)1865 852 739

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

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

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

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)

'M365587:200529'

Printed on 12 Aug 2023