

Datasheet: MCA1660

**BATCH NUMBER 149224**

<b>Description:</b>	MOUSE ANTI SHEEP INTERLEUKIN-8
<b>Specificity:</b>	IL-8
<b>Other names:</b>	CXCL8
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	8M6
<b>Isotype:</b>	IgG2a
<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)	▪			1/10
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			5ug/ml
Immunoprecipitation			▪	
Western Blotting	▪			
Functional Assays (2)	▪			

Where this product 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 product 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 [BUF09A](#)) for this purpose.**

(2)Removal of the preservative is recommended prior to use in functional assays - Bio-Rad recommend the use of a [Slide-A-Lyser® dialysis cassette](#) for this purpose.

### Target Species

Sheep

### Species Cross Reactivity

Reacts with: Dog, Rabbit, Bovine, Pig, Mustelid, Ferret, Mink, Cat

**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.

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<b>Product Form</b>	Purified IgG - liquid
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
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<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
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<b>Immunogen</b>	Recombinant ovine IL-8.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P36925</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">443418</a> IL8 <a href="#">Related reagents</a>
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<b>Synonyms</b>	CXCL8
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<b>RRID</b>	AB_322152
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<b>Specificity</b>	<p><b>Mouse anti Ovine Interleukin-8 antibody, clone 8M6</b> recognizes ovine interleukin-8 (IL-8), also known as C-X-C motif chemokine 8. IL-8 is a 79 amino acid ~9-11 kDa chemoattractant for neutrophils, basophils and T-cells. IL-8 is produced by several cell types including neutrophils, monocytes and macrophages in response to inflammatory stimulation. Mouse anti ovine Interleukin-8 antibody, clone 8M6 shows no cross-reactivity with ovine IL-1 beta, IL-6, MCP-1 or TNF alpha.</p> <p>Responses to infectious stimuli may vary among ovine species, the response to <i>Mannheimia haemolytica</i>, a causative agent of pneumonia, peritonitis and gangrenous mastitis in ovids, is exaggerated in Bighorn sheep (<i>Ovis canadensis</i>) compared to domestic sheep (<i>Ovis aries</i>) with significantly elevated IL-8 levels in response to infection (<a href="#">Herndon et al. 2010</a>).</p> <p>Mouse anti ovine interleukin-8 antibody, clone 8M6 has been utilized to identify cells and cell types expressing IL-8 in inflamed porcine tissue (<a href="#">Laursen et al. 2014</a>) showing here also that neutrophils are the predominant cell type expressing IL-8 whilst epithelial and endothelial cells in the vicinity of inflammatory lesions also express the cytokine. Clone 8M6 neutralizes the bioactivity of ovine IL-8.</p> <p>Mouse anti Ovine Interleukin-8 antibody, clone 8M6 has been used in conjunction with Rabbit anti Sheep Interleukin-8 antibody (<a href="#">AHP425</a>) for the development of a sensitive ELISA to measure IL-8 concentrations in bovine samples (<a href="#">Cronin et al. 2015</a>).</p>
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
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## ELISA

Mouse anti Sheep Interleukin-8 antibody, clone 8M6 may be used in combination with [AHP425](#) in sandwich ELISA assays for ovine IL-8.

## References

1. Caswell, J.L. *et al.* (1998) Expression of the neutrophil chemoattractant interleukin-8 in the lesions of bovine pneumonic pasteurellosis. [Vet Pathol. 35: 124-31.](#)
2. Pedersen, L.G. *et al.* (2002) Identification of monoclonal antibodies that cross-react with cytokines from different animal species. [Vet Immunol Immunopathol. 88 \(3-4\): 111-22.](#)
3. Aasted, B. *et al.* (2002) Cytokine profiles in peripheral blood mononuclear cells and lymph node cells from piglets infected in utero with porcine reproductive and respiratory syndrome virus. [Clin Diagn Lab Immunol. 9 \(6\): 1229-34.](#)
4. Herndon, C.N. *et al.* (2010) Differential expression of interleukin-8 by polymorphonuclear leukocytes of two closely related species, *Ovis canadensis* and *Ovis aries*, in response to *Mannheimia haemolytica* infection. [Infect Immun. 78: 3578-84.](#)
5. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132:109-15.](#)
6. Zelnickova, P. *et al.* (2008) Age-dependent changes of proinflammatory cytokine production by porcine peripheral blood phagocytes. [Vet Immunol Immunopathol. 124: 367-78.](#)
7. Bonnefont, C.M. *et al.* (2012) Genetic susceptibility to *S. aureus* mastitis in sheep: differential expression of mammary epithelial cells in response to live bacteria or supernatant. [Physiol Genomics. 44: 403-16.](#)
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13. Cronin, J.G. *et al.* (2015) Enzyme linked immunosorbent assay for quantification of bovine interleukin-8 to study infection and immunity in the female genital tract. [Am J Reprod Immunol. 73 \(4\): 372-82.](#)
14. 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.](#)
15. Rainard, P. *et al.* (2008) The chemokine CXCL3 is responsible for the constitutive chemotactic activity of bovine milk for neutrophils. [Mol Immunol. 45 \(15\): 4020-7.](#)
16. Stinson LF *et al.* (2014) Effects of cytokine-suppressive anti-inflammatory drugs on inflammatory activation in *ex vivo* human and ovine fetal membranes. [Reproduction. 147 \(3\): 313-20.](#)
17. Tahoun, A. *et al.* (2015) Functional analysis of bovine TLR5 and association with IgA responses of cattle following systemic immunisation with H7 flagella. [Vet Res. 46: 9.](#)
18. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132 \(2-4\): 109-15.](#)

19. Ernehlm, K. *et al.* (2016) Genital tract lesions in sexually mature Göttingen minipigs during the initial stages of experimental vaginal infection with *Chlamydia trachomatis* serovar D. [BMC Vet Res. 12 \(1\): 200.](#)
20. Melville, J.M. *et al.* (2017) Human amnion epithelial cells modulate the inflammatory response to ventilation in preterm lambs. [PLoS One. 12 \(3\): e0173572.](#)

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<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1660">https://www.bio-rad-antibodies.com/SDS/MCA1660</a> 10040
<b>Regulatory</b>	For research purposes only

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## 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 IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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)  
'M365588:200529'

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