

## Datasheet: MCA1660

<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

**RRID** AB\_322152

### 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<sup>®</sup> (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<sup>®</sup> 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.

**Product Form** Purified IgG - liquid

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.09% Sodium Azide (NaN<sub>3</sub>)

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Recombinant ovine IL-8.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P36925</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">443418</a>    IL8    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CXCL8
<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. 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>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>ELISA</b>	Mouse anti Sheep Interleukin-8 antibody, clone 8M6 may be used in combination with <a href="#">AHP425</a> in sandwich ELISA assays for ovine IL-8.
<b>References</b>	<ol style="list-style-type: none"> <li>Caswell, J.L. et al. (1998) Expression of the neutrophil chemoattractant interleukin-8 in the lesions of bovine pneumonic pasteurellosis. <a href="#">Vet Pathol. 35: 124-31.</a></li> <li>Pedersen, L.G. et al. (2002) Identification of monoclonal antibodies that cross-react with cytokines from different animal species. <a href="#">Vet Immunol Immunopathol. 88 (3-4): 111-22.</a></li> <li>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. <a href="#">Clin Diagn Lab Immunol. 9 (6): 1229-34.</a></li> <li>Herndon, C.N. et al. (2010) Differential expression of interleukin-8 by polymorphonuclear leukocytes of two closely related species, <i>Ovis canadensis</i> and <i>Ovis aries</i>, in response to <i>Mannheimia haemolytica</i> infection. <a href="#">Infect Immun. 78: 3578-84.</a></li> <li>Martel, C.J. &amp; Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. <a href="#">Vet Immunol Immunopathol. 132:109-15.</a></li> <li>Zelnickova, P. et al. (2008) Age-dependent changes of proinflammatory cytokine production by porcine peripheral blood phagocytes. <a href="#">Vet Immunol Immunopathol. 124: 367-78.</a></li> </ol>

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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.](#)
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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. Erneholt, 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.](#)

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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.

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<b>Guarantee</b>	18 months from date of despatch.
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: 10040: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

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|-----------------------------------|---------------------|
| Rabbit Anti Mouse IgG (STAR12...) | <a href="#">RPE</a> |
| Rabbit Anti Mouse IgG (STAR13...) | <a href="#">HRP</a> |

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

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

## Recommended Negative Controls

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

**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)

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Tel: +44 (0)1865 852 700

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