

## Datasheet: MCA5941GA

**BATCH NUMBER 170108**

<b>Description:</b>	MOUSE ANTI SHEEP IgE
<b>Specificity:</b>	IgE
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1E7
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.1 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			▪	
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			1/500 - 1/2000
Immunoprecipitation			▪	
Western Blotting	▪			
Immunofluorescence	▪			

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.

<b>Target Species</b>	Sheep
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<b>Species Cross Reactivity</b>	<p>Reacts with: Goat</p> <p>Does not react with: Horse, Human</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>
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<b>Product Form</b>	Purified IgG - liquid
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<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml
<b>Immunogen</b>	Recombinant ovine IgE1-2 expressed in <i>E.coli</i>
<b>Specificity</b>	<p><b>Mouse anti Sheep IgE, clone 1E7</b>, recognizes ovine Immunoglobulin E (IgE) and does not cross react with ovine IgM, IgA, IgG1 or IgG2.</p> <p>IgE is an immunoglobulin primarily produced from plasma cells and, in normal serum, present at very low concentrations. Western blot analysis against affinity purified ovine IgE using Mouse anti Sheep IgE clone 1E7 demonstrates a single major band of approximately 80 kDa under reducing conditions, and a band at approximately 200 kDa is observed after electrophoresis under non-reducing conditions. These bands correspond with the expected molecular weights of the epsilon chain and the complete ovine IgE molecule (<a href="#">Kooyman et al. 1997</a>).</p> <p>IgE is important in both type 1 hypersensitivity and immunity to parasite infections, in particular parasitic worm infections. Mouse anti Sheep IgE, clone 1E7 has been used to investigate parasite nematode infections of sheep by <i>Haemonchus contortus</i> (<a href="#">Vervelde et al. 1997</a> and <a href="#">Kooyman et al. 1997</a>). Clone 1E7 has also been reported to recognize bovine IgE, and, as such, it is useful to detect response to binfection in cattle by nematode worms such as <i>Dictyocaulus viviparus</i> (<a href="#">Bricarello et al. 2007</a> and <a href="#">Kooyman et al. 2002</a>).</p> <p>In addition to this specific anti IgE monoclonal antibody, monoclonal antibodies specific to both bovine and ovine, IgA, IgM and IgG subclasses are available from Bio-Rad.</p>
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kooyman, F.N. <i>et al.</i> (1997) Production of a monoclonal antibody specific for ovine immunoglobulin E and its application to monitor serum IgE responses to <i>Haemonchus contortus</i> infection. <a href="#">Parasitology 114:395-406</a></li> <li>2. Kooyman, F.N. <i>et al.</i> (2002) Serum immunoglobulin E response in calves infected with the lungworm <i>Dictyocaulus viviparus</i> and its correlation with protection. <a href="#">Parasite Immunol. 24:47-56</a></li> <li>3. Vervelde, L. <i>et al.</i> (2003) Vaccination-induced protection of lambs against the parasitic nematode <i>Haemonchus contortus</i> correlates with high IgG antibody responses to the LDNF glycan antigen. <a href="#">Glycobiology 13:795-804</a></li> <li>4. Bricarello, P.A. <i>et al.</i> (2007) Field study on nematode resistance in Nelore-breed cattle. <a href="#">Vet Parasitol.148:272-8</a></li> </ol>
<b>Storage</b>	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.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5941GA">https://www.bio-rad-antibodies.com/SDS/MCA5941GA</a>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

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

### Recommended Useful Reagents

[MOUSE ANTI BOVINE IgG1 \(MCA627GA\)](#)

[MOUSE ANTI BOVINE IgA \(MCA2438GA\)](#)

[MOUSE ANTI BOVINE IgA:HRP \(MCA2438P\)](#)

[MOUSE ANTI BOVINE IgG \(MCA2439GA\)](#)

[MOUSE ANTI BOVINE IgG1 \(MCA2440GA\)](#)

[MOUSE ANTI BOVINE IgG:HRP \(MCA2439P\)](#)

[MOUSE ANTI BOVINE IgG1:HRP \(MCA2440P\)](#)

[MOUSE ANTI BOVINE IgG2 \(MCA2441GA\)](#)

[MOUSE ANTI BOVINE IgG2:HRP \(MCA2441P\)](#)

[MOUSE ANTI BOVINE IgM \(MCA2443GA\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)

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Printed on 29 Jan 2026