

# Datasheet: MCA43GA

**BATCH NUMBER 1709**

<b>Description:</b>	MOUSE ANTI RAT CD45
<b>Specificity:</b>	CD45
<b>Other names:</b>	LCA
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-1
<b>Isotype:</b>	IgG1
<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	▪			1/100
Immunohistology - Frozen (1)	▪			
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunofluorescence	▪			

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)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.**

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<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>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Rat thymocyte membrane glycoproteins.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P04157</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">24699</a>    Ptpnc    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_566759
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD45 antibody, clone OX-1</b> recognizes CD45, also known as the leucocyte common antigen (LCA). The leucocyte common antigen consists of a family of heavily glycosylated membrane glycoproteins of molecular weight 180 – 240kDa.</p> <p>Antibodies recognising a common epitope on all of these isoforms are termed CD45, whilst those recognising only individual isoforms are termed CD45RA, CD45RO etc. OX-1 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes.</p> <p>CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.</p> <p>This product is routinely tested in flow cytometry on rat splenocytes</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Sunderland, C.A. <i>et al.</i> (1979) Purification with monoclonal antibody of a predominant leukocyte-common antigen and glycoprotein from rat thymocytes. <a href="#">Eur J Immunol. 9 (2): 155-9.</a></li> <li>2. Woollett, G.R. <i>et al.</i> (1985) Molecular and antigenic heterogeneity of the rat leukocyte-common antigen from thymocytes and T and B lymphocytes. <a href="#">Eur J Immunol. 15 (2): 168-73.</a></li> <li>3. Martín, A. <i>et al.</i> (1995) Passive dual immunization against tumour necrosis factor-alpha (TNF-alpha) and IL-1 beta maximally ameliorates acute aminonucleoside nephrosis. <a href="#">Clin Exp Immunol. 99 (2): 283-8.</a></li> <li>4. Sato, K. <i>et al.</i> (2001) Carbon monoxide generated by heme oxygenase-1 suppresses the rejection of mouse-to-rat cardiac transplants. <a href="#">J Immunol. 166 (6): 4185-94.</a></li> <li>5. Murakami, K. <i>et al.</i> (2000) Regulation of mast cell signaling through high-affinity IgE</li> </ol>

- receptor by CD45 protein tyrosine phosphatase. [Int Immunol. 12 \(2\): 169-76.](#)
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#### 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.

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<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/MCA43GA">https://www.bio-rad-antibodies.com/SDS/MCA43GA</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

<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)  
'M367696:200529'

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