

## Datasheet: MCA340R

**BATCH NUMBER 173234**

<b>Description:</b>	MOUSE ANTI RAT CD45RA (B CELLS ONLY)
<b>Specificity:</b>	CD45RA (B CELLS ONLY)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-33
<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	▪			1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
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)PLP fixation is recommended for optimal results, see [Whiteland \*et al.\*](#) for details

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A 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>	Purified Rat spleen L-CA
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P04157</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24699</a>    Ptprc    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_321426
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Rat CD45RA antibody, clone OX-33</b> is directed against a high molecular weight band of the leucocyte common antigen. MRC OX-33 only labels B-cells among thoracic duct lymphocytes with little labeling in bone marrow and none on thymocytes ( <a href="#">Barclay et al. 1987</a> ).
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label $1 \times 10^6$ cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. McCall, M.N. <i>et al.</i> (1992) Expression of soluble isoforms of rat CD45. Analysis by electron microscopy and use in epitope mapping of anti-CD45R monoclonal antibodies. <a href="#">Immunology. 76: 310-7.</a></li> <li>2. Cho, W.S. <i>et al.</i> (2012) NiO and Co3O4 nanoparticles induce lung DTH-like responses and alveolar lipoproteinosis. <a href="#">Eur Respir J. 39 (3): 546-57.</a></li> <li>3. Trama, A.M. <i>et al.</i> (2012) Lymphocyte phenotypes in wild-caught rats suggest potential mechanisms underlying increased immune sensitivity in post-industrial environments. <a href="#">Cell Mol Immunol. 9 (2): 163-74.</a></li> <li>4. Han, X. <i>et al.</i> (2013) <i>Porphyromonas gingivalis</i> infection-associated periodontal bone resorption is dependent on receptor activator of NF-<math>\kappa</math>B ligand. <a href="#">Infect Immun. 81 (5): 1502-9.</a></li> <li>5. Marolda, R. <i>et al.</i> (2013) Differential targeting of immune-cells by Pixantrone in experimental myasthenia gravis. <a href="#">J Neuroimmunol. 258 (1-2): 41-50.</a></li> <li>6. Okamura, T. <i>et al.</i> (2013) Phenotypic Characterization of LEA Rat: A New Rat Model of Nonobese Type 2 Diabetes. <a href="#">J Diabetes Res. 2013: 986462.</a></li> <li>7. Denecke, C. <i>et al.</i> (2013) Synergistic effects of prolonged warm ischemia and donor age on the immune response following donation after cardiac death kidney transplantation. <a href="#">Surgery. 153 (2): 249-61.</a></li> <li>8. Stefanski, V. <i>et al.</i> (2013) Differential effect of severe and moderate social stress on blood immune and endocrine measures and susceptibility to collagen type II arthritis in</li> </ol>

- male rats. [Brain Behav Immun. 29: 156-65.](#)
9. Pilatz, A. *et al.* (2015) Experimental *Escherichia coli* epididymitis in rats: assessment of testicular involvement in a long-term follow-up. [Andrologia. 47 \(2\): 160-7.](#)
10. Pongratz, G. *et al.* (2015) A sustained high fat diet for two years decreases IgM and IL-1 beta in ageing Wistar rats. [Immun Ageing. 12: 12.](#)
11. Lu, J.H. *et al.* (2015) GABAergic neurons in cerebellar interposed nucleus modulate cellular and humoral immunity via hypothalamic and sympathetic pathways. [J Neuroimmunol. 283: 30-8.](#)
12. Williamson, L.L. *et al.* (2016) Got worms? Perinatal exposure to helminths prevents persistent immune sensitization and cognitive dysfunction induced by early-life infection. [Brain Behav Immun. 51: 14-28.](#)
13. Ogawa, B. *et al.* (2019) Strain differences in histopathological features of lymphoid tissues of SD and F344 rats in a T cell-dependent antibody response assay of cyclophosphamide. [J Toxicol Pathol. 32 \(3\): 143-54.](#)
14. Chang, J.C. *et al.* (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a Rat Model of Lung Transplantation. [Exp Clin Transplant. 17 \(1\): 84-92.](#)
15. Dabrowska, S. *et al.* (2019) Human bone marrow mesenchymal stem cell-derived extracellular vesicles attenuate neuroinflammation evoked by focal brain injury in rats. [J Neuroinflammation. 16 \(1\): 216.](#)
16. Cakała-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*. [Biomedicines. 10 \(5\): 1021.](#)

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**Storage** 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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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA340R>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

- Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
- Goat Anti Mouse IgG (STAR70...) [FITC](#)
- Goat Anti Mouse IgG (STAR77...) [HRP](#)
- Goat Anti Mouse IgG (STAR76...) [RPE](#)
- Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#), [DyLight®650](#), [DyLight®680](#), [DyLight®800](#), [FITC](#), [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### **Recommended Negative Controls**

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

**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)  
'M446633:260105'

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