

# Datasheet: MCA340R BATCH NUMBER 154521

Description:	MOUSE ANTI RAT CD45RA (B CELLS ONLY)
Specificity:	CD45RA (B CELLS ONLY)
Format:	Purified
<b>Product Type:</b>	Monoclonal Antibody
Clone:	OX-33
Isotype:	lgG1
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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.

<sup>\*</sup> This clone has been described reacting with paraffin-embedded material following PLP fixation (periodate-lysine-paraformaldehyde) - refer to reference. Whiteland *et al.*(1)Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code <u>BUF09</u>) for this purpose.

Target Species	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified Rat spleen L-CA
External Database Links	UniProt: P04157 Related reagents
	Entrez Gene:  24699 Ptprc Related reagents
RRID	AB_321426
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.
Specificity	<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 ( <u>Barclay et al. 1987</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
References	<ol> <li>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. <u>Eur J Immunol. 15 (2): 168-73.</u></li> <li>Barclay, A.N. <i>et al.</i> (1987) Lymphocyte specific heterogeneity in the rat leucocyte common antigen (T200) is due to differences in polypeptide sequences near the NH2-terminus. <u>EMBO J. 6:1259-1264.</u></li> <li>Barclay, A.N. <i>et al.</i> (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. <u>Immunology. 42:593-600.</u></li> <li>Whiteland, J.L. <i>et al.</i> (1995) Immunohistochemical detection of T-cell subsets and other leukocytes in paraffin-embedded rat and mouse tissues with monoclonal antibodies. <u>J Histochem Cytochem. 43 (3): 313-20.</u></li> <li>McCall, M.N. <i>et al.</i> (1992) Expression of soluble isoforms of rat CD45. Analysis by</li> </ol>

- 6. Cho, W.S. *et al.* (2012) NiO and Co3O4 nanoparticles induce lung DTH-like responses and alveolar lipoproteinosis. <u>Eur Respir J. 39 (3): 546-57.</u>
- 7. Williamson Lauren L. *et al.* (2015) Got worms? Perinatal exposure to helminths prevents persistent immune sensitization and cognitive dysfunction induced by early-life

infection Brain, Behavior, and Immunity. pii: S0889-1591(15)00240-8.

- 8. Pilatz, A. *et al.* (2015) Experimental *Escherichia coli* epididymitis in rats: assessment of testicular involvement in a long-term follow-up. <u>Andrologia. 47 (2): 160-7.</u>
- 9. Stefanski, V. *et al.* (2013) Differential effect of severe and moderate social stress on blood immune and endocrine measures and susceptibility to collagen type II arthritis in male rats. <u>Brain Behav Immun. 29: 156-65.</u>
- 10. Trama, A.M. *et al.* (2012) Lymphocyte phenotypes in wild-caught rats suggest potential mechanisms underlying increased immune sensitivity in post-industrial environments. <u>Cell Mol Immunol. 9 (2): 163-74.</u>
- 11. Okamura, T. *et al.* (2013) Phenotypic Characterization of LEA Rat: A New Rat Model of Nonobese Type 2 Diabetes. J Diabetes Res. 2013: 986462.
- 12. Denecke, C. *et al.* (2013) Synergistic effects of prolonged warm ischemia and donor age on the immune response following donation after cardiac death kidney transplantation. <u>Surgery. 153 (2): 249-61.</u>
- 13. Marolda, R. *et al.* (2013) Differential targeting of immune-cells by Pixantrone in experimental myasthenia gravis. <u>J Neuroimmunol. 258 (1-2): 41-50.</u>
- 14. Han, X. *et al.* (2013) *Porphyromonas gingivalis* infection-associated periodontal bone resorption is dependent on receptor activator of NF-κB ligand. <u>Infect Immun. 81 (5):</u> 1502-9.
- 15. Pongratz, G. *et al.* (2015) A sustained high fat diet for two years decreases IgM and IL-1 beta in ageing Wistar rats. <u>Immun Ageing. 12: 12.</u>
- 16. Lu, J.H. *et al.* (2015) GABAergic neurons in cerebellar interposed nucleus modulate cellular and humoral immunity via hypothalamic and sympathetic pathways. <u>J</u> Neuroimmunol. 283: 30-8.
- 17. Chang, J.C. *et al.* (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a Rat Model of Lung Transplantation. <u>Exp Clin Transplant.</u> 17 (1): 84-92.
- 18. Dabrowska, S. *et al.* (2019) Human bone marrow mesenchymal stem cell-derived extracellular vesicles attenuate neuroinflammation evoked by focal brain injury in rats. <u>J</u> Neuroinflammation. 16 (1): 216.

#### 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.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA340R">https://www.bio-rad-antibodies.com/SDS/MCA340R</a> 10040
Regulatory	For research purposes only

## Related Products

### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) RPE

Goat Anti Mouse IgG (STAR70...) FITC

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 (STAR9...) <u>FITC</u>

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Goat Anti Mouse IgG (STAR77...) HRP

# **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA1209)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M372677:200709'

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