

# Datasheet: MCA340PE BATCH NUMBER 150997

Description:	MOUSE ANTI RAT CD45RA:RPE		
Specificity:	CD45RA (B CELLS ONLY)		
Format:	RPE		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	OX-33		
Isotype:	lgG1		
Quantity:	100 TESTS		

# **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				Neat - 1/10

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.

Target Species	Rat				
Product Form	Purified IgG conjuga	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized			
Reconstitution	Reconstitute with 1 r	Reconstitute with 1 ml distilled water			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)		
	RPE 488nm laser	496	578		
Buffer Solution	Phosphate buffered	Phosphate buffered saline			
Preservative	0.09% Sodium Azide	•			
Stabilisers	1% Bovine Serum	1% Bovine Serum Albumin			
	5% Sucrose				
Immunogen	Purified Rat spleen L	-CA			

# External Database Links

UniProt:

P04157 Related reagents

**Entrez Gene:** 

24699 Ptprc Related reagents

**RRID** 

AB 321427

#### **Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the NSO/U mouse myeloma cell line.

## **Specificity**

**Mouse anti Rat CD45RA antibody, clone OX-33** 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 10<sup>6</sup> cells in 100ul.

#### References

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- 2. Barclay, A.N. *et al.* (1987) Lymphocyte specific heterogeneity in the rat leucocyte common antigen (T200) is due to differences in polypeptide sequences near the NH2-terminus. EMBO J. 6:1259-1264.
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- 4. Whiteland, J.L. *et al.* (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>
- 5. McCall, M.N. *et al.* (1992) Expression of soluble isoforms of rat CD45. Analysis by electron microscopy and use in epitope mapping of anti-CD45R monoclonal antibodies. Immunology. 76: 310-7.
- 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. Brain Behav Immun. 29: 156-65.
- 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.</u> 9 (2): 163-74.
- 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. Surgery. 153 (2): 249-61.
- 13. Marolda, R. *et al.* (2013) Differential targeting of immune-cells by Pixantrone in experimental myasthenia gravis. <u>J Neuroimmunol</u>. 258 (1-2): 41-50.
- 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. Immun Ageing. 12: 12.
- 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 Neuroinflammation</u>. 16 (1): 216.
- 19. 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.
- 20. Cąkała-Jakimowicz, M. & Puzianowska-Kuznicka, M. (2022) Towards Understanding the Lymph Node Response to Skin Infection with Saprophytic *Staphylococcus epidermidis*. Biomedicines. 10 (5): 1021.

#### Storage

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

#### DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA340PE">https://www.bio-rad-antibodies.com/SDS/MCA340PE</a> 20487
Regulatory	For research purposes only

# **Related Products**

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA1209PE)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_us@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375538:210104'

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