

Datasheet: MCA340FT

BATCH NUMBER 166946

Description:	MOUSE ANTI RAT CD45RA:FITC
Specificity:	CD45RA (B CELLS ONLY)
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	OX-33
Isotype:	IgG1
Quantity:	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.

	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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Purified Rat spleen L-CA
External Database Links	<p>UniProt: P04157 Related reagents</p> <p>Entrez Gene: 24699 Ptpnc Related reagents</p>
RRID	AB_322582
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 (Barclay et al. 1987).
Flow Cytometry	<p>This antibody does not always give a clear separation between positives and negatives in some cell preparations. If users find this to be the case we recommend the use of R. Phycoerythrin conjugated reagent MCA340PE which generally exhibits a peak of higher mean fluorescence.</p> <p>Use 10ul of the suggested working dilutions to label 10⁶ cells in 100ul.</p>
References	<ol style="list-style-type: none"> 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. Immunology. 76: 310-7. 2. Cho, W.S. <i>et al.</i> (2012) NiO and Co3O4 nanoparticles induce lung DTH-like responses and alveolar lipoproteinosis. Eur Respir J. 39 (3): 546-57. 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. Cell Mol Immunol. 9 (2): 163-74. 4. Han, X. <i>et al.</i> (2013) <i>Porphyromonas gingivalis</i> infection-associated periodontal bone resorption is dependent on receptor activator of NF-κB ligand. Infect Immun. 81 (5): 1502-9. 5. Marolda, R. <i>et al.</i> (2013) Differential targeting of immune-cells by Pixantrone in experimental myasthenia gravis. J Neuroimmunol. 258 (1-2): 41-50. 6. Okamura, T. <i>et al.</i> (2013) Phenotypic Characterization of LEA Rat: A New Rat Model of Nonobese Type 2 Diabetes. J Diabetes Res. 2013: 986462. 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. Surgery. 153 (2): 249-61. 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 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.](#)

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. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA340FT>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

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