

Datasheet: MCA340FT

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 G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Purified Rat spleen L-CA		
External Database Links	UniProt: P04157 Related reagents		
	Entrez Gene:		

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 labelling in bone marrow and none on thymocytes ([Barclay et al. 1987](#)).

Flow Cytometry 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.

Use 10ul of the suggested working dilutions to label 10⁶ cells in 100ul.

References

1. Woollett, G.R. *et al.* (1985) Molecular and antigenic heterogeneity of the rat leukocyte-common antigen from thymocytes and T and B lymphocytes. [Eur J Immunol. 15 \(2\): 168-73.](#)
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.](#)
3. Barclay, A.N. *et al.* (1981) The localization of populations of lymphocytes defined by monoclonal antibodies in rat lymphoid tissues. [Immunology. 42:593-600.](#)
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. [J Histochem Cytochem. 43 \(3\): 313-20.](#)
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. [Eur Respir J. 39 \(3\): 546-57.](#)
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. [Andrologia. 47 \(2\): 160-7.](#)
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. [Cell Mol Immunol. 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. [J Neuroimmunol. 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. [Infect Immun. 81 \(5\): 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. [J Neuroimmunol. 283: 30-8.](#)

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

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

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