

Datasheet: MCA43FT

Description:	MOUSE ANTI RAT CD45:FITC
Specificity:	CD45
Other names:	LCA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	OX-1
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	Antibody purified 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	Rat thymocyte membrane glycoproteins.
External Database Links	<p>UniProt: P04157 Related reagents</p> <p>Entrez Gene: 24699 Ptpnc Related reagents</p>
RRID	AB_322580
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	<p>Mouse anti Rat CD45 antibody, clone OX-1 recognizes CD45, also known as the leucocyte common antigen (LCA). The leucocyte common antigen consists of a family of heavily glycosylated membrane glycoproteins of molecular weight 180 – 240kDa.</p> <p>Antibodies recognising a common epitope on all of these isoforms are termed CD45, whilst those recognising only individual isoforms are termed CD45RA, CD45RO etc. OX-1 reacts with all forms of CD45 expressed by all haematopoietic cells, except erythrocytes.</p> <p>CD45 isoforms play complex roles in T-cell and B-cell antigen receptor signal transduction.</p> <p>This product is routinely tested in flow cytometry on rat splenocytes</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Standring, R. <i>et al.</i> (1978) The predominant heavily glycosylated glycoproteins at the surface of rat lymphoid cells are differentiation antigens. Eur J Immunol. 8 (12): 832-9. 2. Sunderland, C.A. <i>et al.</i> (1979) Purification with monoclonal antibody of a predominant leukocyte-common antigen and glycoprotein from rat thymocytes. Eur J Immunol. 9 (2): 155-9. 3. 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. Eur J Immunol. 15 (2): 168-73. 4. Martín, A. <i>et al.</i> (1995) Passive dual immunization against tumour necrosis factor-alpha (TNF-alpha) and IL-1 beta maximally ameliorates acute aminonucleoside nephrosis. Clin Exp Immunol. 99 (2): 283-8. 5. Giezeman-Smits, K.M. <i>et al.</i> (1999) The regulatory role of CD45 on rat NK cells in target cell lysis. J Immunol. 163 (1): 71-6. 6. Murakami, K. <i>et al.</i> (2000) Regulation of mast cell signaling through high-affinity IgE receptor by CD45 protein tyrosine phosphatase. Int Immunol. 12 (2): 169-76. 7. Ermert, L. <i>et al.</i> (2001) Comparison of different detection methods in quantitative microdensitometry. Am J Pathol. 158: 407-17. 8. Dick, A.D. <i>et al.</i> (2001) Distribution of OX2 antigen and OX2 receptor within retina. Invest Ophthalmol Vis Sci. 42: 170-6.

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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. 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/MCA43FT>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

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