

Datasheet: MCA773F

Description:	MOUSE ANTI RAT CD54:FITC
Specificity:	CD54
Other names:	ICAM-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	1A29
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

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	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Rat Ax cells (a HEV derived cell line).
External Database Links	<p>UniProt: Q00238 Related reagents</p> <p>Entrez Gene: 25464 Icam1 Related reagents</p>
Synonyms	Icam-1
RRID	AB_321790
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells from the PAI mouse myeloma cell line.
Specificity	<p>Mouse anti Rat CD54 antibody, clone 1A29 recognizes the rat CD54 cell surface antigen, also known as intercellular adhesion molecule-1 (ICAM-1), a ~90 kDa adhesion molecule belonging to the immunoglobulin superfamily.</p> <p>CD54 is a cell surface ligand of the lymphocyte integrin, LFA-1 and is known to play an important role in various cell-cell interactions in the immune system. Studies suggest that cross-linking of ICAM-1 using clone 1A29 induces calcium signalling (Etienne <i>et al.</i>).</p> <p>Functionally Mouse anti Rat CD54 antibody, clone 1A29 inhibits homotypic aggregation of PHA blasts.</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. Kawai, T. <i>et al.</i> (1999) Selective diapedesis of Th1 cells induced by endothelial cell RANTES. J Immunol. 163: 3269-78. 2. Sato, N. <i>et al.</i> (2000) Roles of ICAM-1 for abnormal leukocyte recruitment in the microcirculation of bleomycin-induced fibrotic lung injury. Am J Respir Crit Care Med. 161: 1681-8. 3. Etienne, S. <i>et al.</i> (1998) ICAM-1 signaling pathways associated with Rho activation in microvascular brain endothelial cells. J Immunol. 161 (10): 5755-61. 4. Etienne-Manneville, S. <i>et al.</i> (2000) ICAM-1-coupled cytoskeletal rearrangements and transendothelial lymphocyte migration involve intracellular calcium signaling in brain endothelial cell lines. J Immunol. 165 (6): 3375-83. 5. McKechnie, N. M. <i>et al.</i> (2002) Antigenic mimicry: Onchocerca volvulus antigen-specific T cells and ocular inflammation. Invest Ophthalmol Vis Sci. 43:411-8. 6. Banerjee, S. <i>et al.</i> (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. Br J Ophthalmol. 2003 Dec;87(12):1515-22. 7. Kielian, T. <i>et al.</i> (2000) Proinflammatory cytokine, chemokine, and cellular adhesion molecule expression during the acute phase of experimental brain abscess development. Am J Pathol. 157: 647-58. 8. Trinh, L. <i>et al.</i> (2008) The corneal endothelium in an endotoxin-induced uveitis model: correlation between <i>in vivo</i> confocal microscopy and immunohistochemistry. Mol Vis. 14:

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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: 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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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M384633:210513'

Printed on 21 Sep 2021

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