

## Datasheet: MCA773FB

<b>Description:</b>	MOUSE ANTI RAT CD54:FITC
<b>Specificity:</b>	CD54
<b>Other names:</b>	ICAM-1
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	1A29
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.5 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/100

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.

<b>Target Species</b>	Rat		
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.5 mg/ml		

<b>Immunogen</b>	Rat Ax cells (a HEV derived cell line).
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q00238</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">25464</a>    Icam1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Icam-1
<b>RRID</b>	AB_566849
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells from the PAI mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD54 antibody, clone 1A29</b> 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 (<a href="#">Etienne <i>et al.</i></a>).</p> <p>Functionally Mouse anti Rat CD54 antibody, clone 1A29 inhibits homotypic aggregation of PHA blasts.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Kawai, T. <i>et al.</i> (1999) Selective diapedesis of Th1 cells induced by endothelial cell RANTES. <a href="#">J Immunol. 163: 3269-78.</a></li> <li>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. <a href="#">Am J Respir Crit Care Med. 161: 1681-8.</a></li> <li>3. Etienne, S. <i>et al.</i> (1998) ICAM-1 signaling pathways associated with Rho activation in microvascular brain endothelial cells. <a href="#">J Immunol. 161 (10): 5755-61.</a></li> <li>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. <a href="#">J Immunol. 165 (6): 3375-83.</a></li> <li>5. McKechnie, N. M. <i>et al.</i> (2002) Antigenic mimicry: Onchocerca volvulus antigen-specific T cells and ocular inflammation. <a href="#">Invest Ophthalmol Vis Sci. 43:411-8.</a></li> <li>6. Banerjee, S. <i>et al.</i> (2003) Development of organised conjunctival leucocyte aggregates after corneal transplantation in rats. <a href="#">Br J Ophthalmol. 2003 Dec;87(12):1515-22.</a></li> <li>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. <a href="#">Am J Pathol. 157: 647-58.</a></li> <li>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. <a href="#">Mol Vis. 14:</a></li> </ol>

[1149-56.](#)

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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.

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**Guarantee** 12 months from date of despatch

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

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**Regulatory** For research purposes only

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## 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)

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