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 Stabilisers

0.09% Sodium Azide
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	**UniProt:** Q00238 Related reagents **Entrez Gene:** 25464 Icam1 Related reagents
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	**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. CD54 is a cell surface ligand of the lymphocyte integrin, LFA-1 and plays an important role in various cell-cell interactions in the immune system. Cross-linking of ICAM-1 using clone 1A29 induces calcium signaling (Etienne *et al*. 1998). Mouse anti Rat CD54 antibody, clone 1A29 inhibits homotypic aggregation of cells including PHA blasts (Tamatani & Miyasaka 1990).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Etienne, S. *et al.* (1998) ICAM-1 signaling pathways associated with Rho activation in microvascular brain endothelial cells. J Immunol. 161 (10): 5755-61. 2. Kawai, T. *et al.* (1999) Selective diapedesis of Th1 cells induced by endothelial cell RANTES. J Immunol. 163: 3269-78. 3. Adamson, P. *et al.* (1999) Lymphocyte migration through brain endothelial cell monolayers involves signaling through endothelial ICAM-1 via a rho-dependent pathway. J Immunol. 162: 2964-73. 4. Sato, N. *et al.* (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. 5. Etienne-Manneville, S. *et al.* (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. 6. Arsenović-Ranin, N. *et al.* (2000) A monoclonal antibody to the rat Crry/p65 antigen, a complement regulatory membrane protein, stimulates adhesion and proliferation of thymocytes. Immunology. 100: 334-44. 7. Beck-Schimmer, B. *et al.* (2001) Hypoxia mediates increased neutrophil and macrophage adhesiveness to alveolar epithelial cells. Am J Respir Cell Mol Biol. 25: 780-7.

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	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/MCA773F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA1209F)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

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